

The Outdoor and Environmental Bi- Weekly

Friday, January 5, 1973



Photo by Marc Gaede

The defiance of this young Navajo Indian at the Black Mesa coal mining operation of Peabody Coal Co. in Arizona epitomizes the struggle to protect the land from the ravages of strip mining. The struggle has only begun in Montana and Wyoming where Indians and ranchers alike look with growing horror on the cancerous growth of stripping.

The Crisis in Energy

by Tom Bell

Sarpy Creek is one of those western geographical place names that normally would have been little noted nor long remembered. Powder River is better known as a wry description of a western stream — "a mile wide and an inch deep." But not anymore.

Coal "hucksters" as lean and savage as the prairie wolves that once pulled down buffalo in the same areas have discovered something more fascinating than western place names. They pull down coal leases and water options worth multi-millions.

Exploiting The West

What has occasioned all of this interest in the West is the current situation with energy. Having been conditioned to a euphoric state of "happiness" in all-electric homes, bigger and faster automobiles, and a supposedly unlimited supply of fuels to keep our Cloud 9 going, we now have come upon the truth. The quick, easy mineral wealth of our North American continent has just about been expended. Add to that the environmental concerns for clean air which has forced the use of low-sulfur coals, and the reasons become obvious.

Across the West, stretching from Canada to Arizona and New Mexico, are vast deposits of fossil fuels. Literally trillions of tons of coal and equally stupendous amounts of oil shale appear to be the answers to our problems. They need only to be extracted and put to our profligate uses.

THE ENERGY CRISIS

Few people can yet appreciate the simple statistic that six percent of the world's total (Please turn to page 6)

HIGH COUNTRY By Jone Belle

The warm little brown hand was in mine. And as I sat on the edge of his bed for a goodnight, I suddenly felt all the warmth and compassion of the whole human race flowing into mine. My little son is not of my flesh but he is of my heart. At that moment, my heart filled to bursting.

I don't know why I should suddenly have such a feeling. I have had them before on rare occasions. Possibly it is one of the unique (and mystic) experiences of Man, with a human spirit and soul; a flash of insight back through the eons of time which ties all human

souls together.

It is possible also that my emotions were triggered by a touch of sadness and melancholy for my fellow man. During the past year, my whole outlook on life has undergone dramatic change. It may not be apparent to my friends and acquaintances, or even my family. But at night, I squirm within my shell and by day I am sometimes seized by the same feeling I used to have as a young teenager. I look to the mountains and wish I were there, alone in that magnificent, brooding solitude. There, there could be no worries of what is to become of my small son and two daughters, of my big sons and their sons. But there is no escape except in fantasy.

Some there will be who will class me a Schopenhauer, the classic pessimist. But I cannot escape my pessimism. And others will think I am surely a little touched in the head — which may be correct. Only time will tell and my life may not be long enough to bear me witness.

I suppose it goes back basically to my love for the land, and the flowers and the creatures of it. Somehow as a kid, I got imbued with the idea I was a small part of it. And though I have had lapses which caused my conscience to squirm, I have never lost my closeness to that which is God's.

If we were really created in God's image, how is it that we could so treat that which is God's? For by doing so, we are committing the sins upon ourselves. What we do to the surface of the earth, the waters, the air, the other living things, we are doing to ourselves. I could not help thinking that as I wrote the lead story—of the squandering and wasting of finite natural resources until we have nearly used them all. And when they are gone, what then for the human race?

I am sure that as a kid my family never knew that when I crawled through the back fence and escaped into the Wyoming hills, I walked in the footsteps of Indians. We lived only a few miles from the Reservation and though I had no close association with them, I was kindred to them. I can readily see why young people now, knowing what they know, want to return to the more simple, primitive life of people who looked on

things around them as a part of their deity.

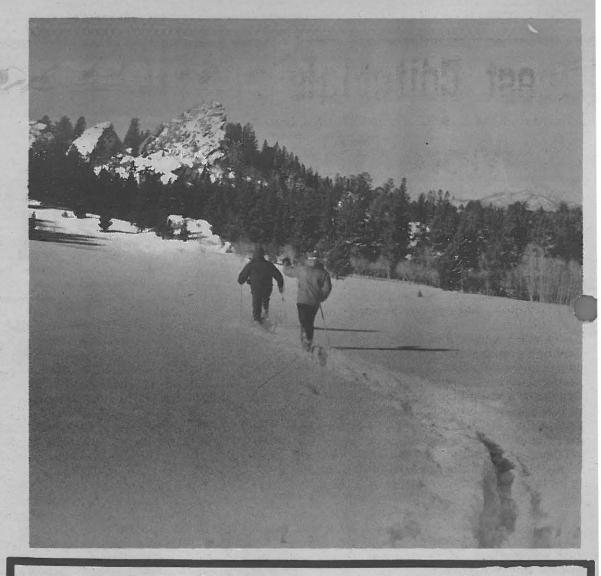
That background, my training as a biologist, and now my present experience has brought me to where I am. I believe that only by a revolution in our own lives will there be a future for our sons and daughters. If my writings in the next year seem to become more radical and revolutionary, it will be because I am. I am going to preach radical environmentalism (to be enlarged upon in future writings). It may make me a pariah even amongst my own friends and neighbors. But I can see no hope for my children and their children if the system continues as it is. I hope to have a part in changing it.

I lift mine eyes to the hills from whence cometh my

strength.

I only hope I can spend more time in the hills this coming year so that I can renew the strength of my convictions. And there, too, compose my thoughts so that I might express them clearly to the world. With the warmth and power of a little hand in mine it is possible.





Letters To The Editor

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Editor:

This weekend I saw a bill board advertisement in Salt Lake City by Utah Power & Light saying, "Electricity — Key to a Quality Environment."

Can you believe it??

Such flagrant propaganda should not be tolerated. I urge all concerned, from any of the 'coal states,' to write the power company, Galaxy Bill Board Company, and the Utah newspapers. Since power companies often cross state lines to meet their 'needs,' misleading advertising such as this could ultimately affect all surrounding states. This is therefore of concern to all of us.

Sincerely, Larry Edwards Rock Springs, Wyoming

Editor's note: Mr. Edwards is indeed correct. In addition to billboard advertising, Utah Power & Light Co. also carries on extensive newspaper advertising. And so does Idaho Power Company. Both still extol the virtues of all-electric homes and "flameless" heating by electricity.

I have before me an ad by Utah Power & Light no later than September 14, 1972, in which the company boastfully proclaims, "There are now approximately 10,000 homes and apartments in our area heated electrically!" And then adds, "Just phone the Power Company office nearest you. No obligation," for a free estimate.

Idaho Power Company's ad of December 5, 1972, features an elderly couple who are quoted, "We found the comfort switch — it's the switch to our electric heat pump!" The ad then asks, "Ready to switch? You can get full information and planning assistance by calling your local Idaho Power Office." And in sweeping grandiloquence, Idaho Power sums

it all up for you — "Flameless electric living for a neater, cleaner world."

Idaho Power, along with Pacific Power & Light Co., is building the 1,500-megawatt, Jim Bridger steam generating plant in the faraway wastelands of central Wyoming. There, out of sight and mind of the "neater, cleaner world" of Idaho Power land, the consequences of degraded air and consumed Colorado River water cannot be measured against the great American quality life.

Utah Power & Light Co. operates the 710,000 kilowatt Naughton plant near Kemmerer, using Wyoming coal and water and degrading Wyoming air for its all-electric homes in Utah. It is now considering a huge enlargement of the plant because of all the heat

(Continued on page 15)

HIGH COUNTRY NEWS

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Guest Editorials

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Reprinted from the CASPER STAR-TRIBUNE, Dec. 23, 1972.

More Than A Crunch

Call it a crunch or call it a crisis, energy supplies are running short in many areas of the country in the beginning of this long, cold winter

Governor J.J. Exon of Nebraska called on all "Cornhuskers" last week to turn down the thermostats on their furnaces by three degrees to conserve fuel. He set the example at the tate capitol and governor's mansion in Lincoln.

We don't know who dreamed up the term "energy crunch," which apparently is one step short of energy crisis. Webster defines crunch as sort of a noisy grinding, or a sound one might make walking on crackers.

It's a crisis, however, when it hits you personally. At least that would be the view taken by 8,000 families in Omaha when their supplies of heating oil were curtailed this week. One Omaha dealer cut off a parochial school, shopping center, packing houses and restaurants to stretch out the supply for home heating customers.

The governor of Iowa noted shrinking supplies of natural and propane gas, plus a fuel oil shortage of more than 30 million gallons this winter.

A strange sight was witnessed in Texas City, Tex., when a big oil tanker docked with 234,000 barrels of Libyan crude oil for the American Oil Co. refinery. For the first time in its history, the big refinery had become partially dependent on foreign crude sources.

The Amoco Refinery at Whiting, Ind.,

which uses a lot of Wyoming crude oil, is also processing foreign crude for the first time. It comes by tanker from Algeria.

The government has eased import controls to allow the industry to refine more foreign crude oil. This is at best a short-term solution. As we grow more and more dependent on imported oil, our balance of payments becomes more unfavorable.

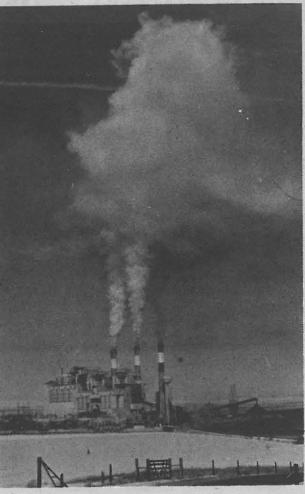
We should be grateful that American refineries can even process the crude oil. At least this keeps more capital at home and helps the balance of payments to that extent. Already there are rumblings that some oil rich Arab states with huge cash reserves are planning to build their own refineries and ship refined products, instead of crude oil. If they don't have the native expertise, they can always buy it, and train their own people to run the plants.

There is no energy crisis in Wyoming, the "energy state." But here and there are a few straws in the wind that suggest a trend to the "sellers' market" for all forms of energy.

American Oil Co., for instance, withdrew its bid of 12.1 cents per gallon to furnish propane for the city of Riverton. Amoco noted a shortage of propane.

The contract went to Empire Oil Co. at 12.9 cents per gallon. Only other bid was from V-1 Oil Co. for 15.8 cents.

Only a few years ago oil companies were scrambling to supply municipal governments with oil, gas and other petroleum needs at



cut-rate prices.

All of these developments and potentials should provide ample warning that this nation needs a coherent, national energy policy. This policy should encourage rapid development of all energy sources at home to bridge the gap, or else we will have to develop new exports to pay for the swelling imports of crude oil.

eprinted from THE DENVER POST, Dec. 22, 1972.

No Energy Equals A Crimp

For four days recently 700 employees of a large Denver manufacturing firm were without work or salary. The reason was simple: in face of the unusual cold spell the firm didn't have enough fuel to keep its machinery running. The firm shut down.

Christmas for these people is going to have

a crimp in it.

The point we want to make is that regardless of viewpoint — employee, management or consumer — the energy crisis is getting serious and deserves more attention than many are giving it.

There are so many facets to the problem

one can start almost anywhere.

Basic to the present problem is the fact that natural gas simply isn't plentiful enough to meet all the demands placed upon it.

So it is proper to ask firms to rely increasingly on standby sources — fuel oil in many cases. Natural gas then can go exclusively to home heating and other essential uses during old weather.

This practice is fairly widespread; it just nappens that the record cold spell threw more burden on some Denver firms' reserves of fuel oil than they had budgeted.

The ten days below freezing (unmatched since 1875 when there were 11 consecutive days during which temperatures stayed below freezing) may not occur again soon.

But the recent incident is a good example of conditions all of us are likely to face one way or another if the nation's energy crisis broadens — as it seems almost certain to do.

The United States and other Western nations have lost control of cheap Mideast crude oil; it isn't cheap anymore. Our own reserves are becoming relatively scarce and expensive to produce. Environmental concerns — while necessary — have unsettled the energy picture. Large generating plants else-

where in the country are burdening natural gas supplies to avoid excess pollution from coal. The Alaska pipeline has been hung up by court action. Delays in building nuclear power plants, while not serious in the near future, will mean a larger dependence on hydrocarbons for a longer period of time.

The Nixon administration has an energy Reprinted from the DESERET NEWS, Dec. 21, 1972.

policy. It is a long-term blueprint assuming heavy reliance on nuclear power in the next century. It also calls for support of research into other sources, which is wise. But we have a feeling that the administration's policies are diffused over too many governmental agencies, ranging from the Atomic Energy Commission (AEC) to the Department of Interior.

A Tough Compromise

In deciding whether or not to allow the construction of coal-burning power plants in the Southwest, Interior Secretary Rogers Morton faces an unenviable task of surpassing complexity.

That task was not made easier by the release this week from a special task force of a study that was more than a year in the making.

The study's finding that it would cost no more to ship coal to power plants near the cities they serve than it would to transmit electricity from near the mines runs contrary to a substantial body of experience.

The recommendation that power plants be built near cities instead of in remote areas rests on the shaky assumption that future plants won't add to pollution in regions that already are most heavily polluted.

As the report itself acknowledges, there seems to be no practical alternative to the construction of coal-burning power plants if the power needs of the next two decades are to be met.

In a situation where everyone wants energy but no one wants its pollution, there are no ideal solutions, only imperfect compromises.

One of those compromises involves the fact that little is gained by developing one industry if it means impeding others. The Wasatch Front, for example, is already industrialized and fairly congested, so industry ought to be dispersed to other areas. But tourism and recreation are important to the economy, too. Yet these activities can be impaired if the air and water of the Southwest become polluted.

Another compromise involves the fact that while putting the plants elsewhere would mean cleaner air in the Southwest, the trains and trucks transporting the coal would mean air and land pollution in the mining area and all the way to the plant.

Still another compromise involves balancing the impact of air pollution in an open but scenic area against pollution in an area like Salt Lake Valley where temperature inversions trap pollutants in a natural bowl.

The Interior Department study hints at one possible compromise when it notes that the power plants, as now planned, are too close together. What about greater dispersal for the plants, then, but keeping them in the Southwest? What, too, about the possibility of more atomic power plants in place of coal-burning facilities with all their soot and fumes?

The day may come when power can be produced without also producing pollution. But until technology advances that far, there's no substitute for common sense and sensible compromise.

Wild Horse

The following article is a continuation of the interview of Mrs. Velma B. Johnston, "Wild Horse Annie," by Josh Jennings. The interview was done before the announcement was made that Mrs. Johnston had been appointed to the Wild Horse and Burro Advisory Board.

by Josh Jennings

Jennings: On April 19, 1971, you appeared before the Public Lands Subcommittee of the Interior and Insular Affairs Committee. At that time you expressed your opposition to certain aspects of the present management of public lands. I assume that you were taking to task the Taylor Grazing Act. What is your opposition to the administration of this Act?

Annie: I cannot say that my opposition to certain aspects of the present management of public lands was specifically related to the Taylor Grazing Act. I do, however, take exception to the fact that the Boards who act as advisors to the Bureau of Land Management are omprised, almost exclusively, of cattle operators. As an example, in my own State, I recently addressed a State Advisory Board numbering 17 members. Represented, on this Board, were 14 cattlemen, 1 wildlife man, 1 Forest Service official and one additional member; I don't recall whom he represented. It's obvious that members representing commercial vested interests were in the great majority.

I feel that not enough emphasis has been placed on the fact that domestic livestock and other commercial operations are being carried out on land which does not belong to them exclusively. Their right to the use of this public land is obtained by permit. Some method must be devised to more carefully regulate such land use. Grazing fees are ridiculously low and certainly should be brought into a more reasonable agreement with rates which would be charged for privately owned land. Abuses have been allowed to continue, particularly the grazing of numbers of livestock far in excess of that for which the

permit was initially issued. An apparently continuous myth is that which allows a particular family that has held a grazing permit for several generations to believe it actually owns the land. These families do not own this land. It is time to shake the traditional dominant interest myth. The public must become aware of the true status of these lands. The land does, after all, belong to the public and the dominant users are merely tenants. Perhaps the interest generated by the efforts to provide a niche for wild horses and burros, on public lands, has provided a breakthrough in the public understanding of its right to have a strong say in the management of these lands. The public must assume its proper role as landlord and pressure Federal Land management agencies to provide greater care and concern for the land.

Jennings: To my knowledge we now have several reserves for wild horses. One of these reserves is located on Nellis Air Force Base in Nevada; another in the Cedar Mountains of Utah and, of course, the Pryor Mountain reserve in Wyoming and Montana. Are reserves such as these the answer to the preservation of wild horses and burros?

Annie: Actually the Cedar Mountain reserve is, as I understand it, a relatively small area which apparently came about through an arrangement between private parties and the county. I'm not entirely sure about the background development of this reserve nor the degree of protection afforded the wild horses. It does not have the official status of the Pryor Mountain or the southern Nevada preserves. I have been told that the number of horses at Cedar Mountain continues to decrease.

Due to man's steady encroachment on wild-

life habitat it is possible that, in years to come, the only way animals can be assured of a future, would be by confining them on designated ranges. This would, however, destroy the free roaming concept and produce a zoo-type of operation. Such confinement would, in addition, open season on wild horses and burros not within the confines of a designated range. I will continue to oppose the concept that preserves are the only option and continue to support the premise that these animals should be free to roam the open range. In some areas where there are wild horses and burros of historical significance to that particular area, a designated range might be desirable from the standpoint of accessibility for viewing purposes. I'm thinking, in this case, of the Pryor Mountain Range. I must repeat, however, that there must be continued consideration provided for the animals in the overall pattern of open range use.

Jennings: Annie, you were a member of the special Pryor Mountain Wild Horse Advisory Board. After having served in such a capacity, what is your reaction to the Advisory Board concept as a tool in the management of wild

horses and burros?

Annie: I wholeheartedly endorse Advisory Board participation in the management of wild horses and burros! The Advisory Board provides the public with true representation. It is a structured forum for the exchange of ideas and for increasing cognizance of all aspects of multiple use land management. Perhaps more important is the fact that Advisory Boards break the strangle hold of the dominant commercial interests on public lands. The Pryor Mountain Advisory Board has abundantly proved that level-headed consideration of all factors can lead to acceptable solutions. More importantly such a board avoids the tragedy of head-on collision between public over-reaction and private greed which has previously only produced stalemate after stalemate.

Jennings: I'd like to discuss a question which we have already briefly touched upon. From time to time, claims have been raised that it will be, or already is, necessary to control the numbers of wild horses and burros roaming public lands. What measures do you advocate concerning the control of the size of bands and herds?

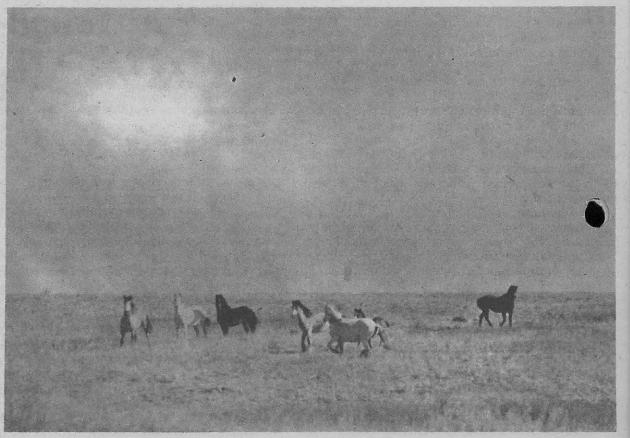
Annie: I believe that it is premature to establish a format for control of numbers until such time as an inventory of presently existing animals can be made. It also appears, from the researches of Pelligrini in the Wassuk Range in Nevada and Feist in the Pryor Mountain Range, that there is a self-regulatory mechanism operating in the reproduction of wild horses. Research is the key here. A great deal more research is needed to take the place of the indictment, conviction and execution which has been the modus operandi of the past. The continued release of domestic horses, to run with the wild bands, is another factor which must be seriously consid any area where population increase is a ged. Removal of these trespass animals, and a complete halt of further releases will, it is believed by many, result in a population compatible with other range usage.

Should population controls be necessary, after unbiased and unprejudiced observation, I would hope that the Advisory Board can agree upon a humane method of reduction; a method that will create the least disturbance in the distribution patterns of the wild horses and a minimum of disruption in their social behavior. The herd reduction in the Pryors in late 1971 might be a guideline to follow in other areas. The removal of excess stallions and endangered colts appears to have worked out well. The stallions were given to the Crow Indians and, as you know, the colts were adopted through the assistance of our newly formed group Wild Horse Organized Assistance, Inc. (WHOA!). WHOA!'s files still contain the names of applicants who have asked for consideration should further reduction programs make colts available. However, continuous removal of colts is not recommended in each area involved. Such removal would leave only older animals and consequently threat wild horse population Doubtlessly, a ble contribution can be made by the Advisory Board in respect to population control. At this time I would recommend a policy of "let's wait and see."

Jennings: From our prior discussions it appears that even with present Federal legislation, illegal activities continue to occur which place the wild horses and burros in jeopardy. What is actually happening to the free roaming

(Continued on page 5)

Photo by Gary Leppart



Wild horse bands are found in many areas stretching from the grasslands of North Dakota (shown here) to the deserts of Arizona and Nevada. Throughout this great range, Wild Horse Annie has been instrumental in getting ever greater protection for the dwindling herds.

animals on our public lands?

Annie: I frequently receive reports that ranchers have given instructions to their cowhands to shoot the wild horses they see. From eastern Nevada I have photographic evidence of the destruction and diversion of watering places. What happens in cases like this is that a few watering places are left in production, but are surrounded by corral traps. The animals are forced to use these few remaining water holes making their capture much easier. Two months ago a load of horses was removed from this same eastern Nevada area. The river of this truckload of horses was conronted by a BLM agent. He was able to display a livestock inspection certificate which under the very lax estray laws of Nevada constitutes "proof of ownership." This same man has been capturing wild horses for years and is currently planning to continue removal of additional animals up until bad weather sets in. It appears that some deputy livestock inspectors have been negligent, to say the least, in the issuance of inspection certificates. Operations of this nature can be expected to continue as long as law enforcement remains lax or non-existent. I can only hope that this type of illegal operation can be halted before all of the wild bands are eliminated.

It is difficult for me to understand why State Fish and Game Commissions are so adamantly opposed to allowing wild horses to remain on the open ranges while at the same time "overlooking" the destruction of important wildlife watering sources.

Jennings: How will your new organization, Wild Horse Organized Assistance, Inc. function

to help wild horses and burros?

Annie: Through WHOA! we plan to help inspire additional interest among the young people of our country. Interest in all aspects f their important national heritage. We hope to encourage them to become even more active in matters affecting their communities, States and their Nation. Of course, much of this program will be tied to the wild horse and burro issue. Young people have been very active in the effort to save our wild horses and burros and it would be unfortunate to let this interest fade. I constantly receive letters from youth asking what they can do to help. Typical of these letters is one I just received which stated, "Annie, we have saved the wild horses. What do you want us to do next?" By learning early in their lives the effectiveness of united efforts, within the guidelines set by our founding fathers, these young people can make a tremendous contribution to our country's future. It has been my lifetime belief that our country was built, literally, from the back of a horse and that its heritage can be saved, figuratively, from the back of this same animal. The horse is an animal to which young people can easily relate, it's the symbol of freedom upon which this country was built. Through WHOA! we hope to communicate this concept to the youth of our Nation.

Jennings: We've talked a little bit about your own youth and some of the people who have helped you in your mission. What advice have you received which you would consider the most important in your continuing struggle?

Annie: I owe a lifelong debt to my father and husband. They both advised me to always "Act like a lady, speak like a lady, dress like a lady, but think like a man." I have remembered this advice and have tried to follow it. When tempted to over-react in an emotional or, what some would call, a 'feminine' manner I would remember this advice. I'd haul myself up short and try to consider how a man would handle the situation.

Another bit of sage advice I received was "never go into battle without adequate ammunition." I've used this advice to guide me

in my efforts to gain all the information possible concerning wild horses and their exploiters.

Jennings: Annie, what can people do to aid in the struggle to protect the wild

horses and burros?

Annie: Continue to care! Work together! Realize that the lands upon which these horses roam are your lands and my lands. . . not the property of any one individual who has taken upon himself the authority to banish from our lands all that is not commercially profitable to him or his neighbor. Confer with the land management agencies. Let them know that your land is precious to you. That its resources were only loaned to us, not to be expended or raped to barrenness, but to be carefully and wisely administered so that its esthetics and its life-giving potential will be there in full measure for future generations to enjoy and to benefit from just as we, and the generations before us have enjoyed and benefited from them. AND - help The International Society for the Protection of Mustangs and Burros to help the Wild Ones.

POST SCRIPT

Prior to and during the preparation of this article several events occurred which have a direct bearing on the critical struggle for the survival of the remaining wild horses and burros. As you might expect, these events center around Annie. During June of 1972 she was the recipient of the United States Department of the Interior Public Service Award. On the evening of September 17, in her home town of Reno, Nevada, Annie received the Outstanding Citizen Award from the Reno Chamber of Commerce and the Distinguished Citizens Award from the City of Reno as well as an award from Executive Secretaries, Inc. for her "Dedication to the Preservation of our American Heritage." On October 21, 1972, in a stirring ceremony in Salt Lake City, Annie received the coveted Joseph Wood Krutch Medal for "Significant Contribution Towards the Improvement of Life and Environment."

Awards and recognition notwithstanding the battle continues. An Associated Press article dated November 11, 1972, reports the following ". . . officials in the heart of one of the Southwest's prime mustang sanctuaries have called for repeal of the federal law protecting the remnants of wild horse herds. The measure recently was adopted by the County Commissioners in Lincoln, Nev." The article went on to name three major Lincoln County stockmen who were behind the resolution. Annie's reaction was prompt and to the point. When questioned concerning the developments in Lincoln County she replied, "The International Society for the Protection of Mustangs and Burros will keep a close watch on developments. If an effort is actually made to repeal the law, we will call upon our members and supporters to contact their lawmakers in Washington and register strong opposition to any action supporting a repeal.

"It is time that the vested interest users of the public lands be made to realize that curtailment of their dominant use is long overdue, and that other interests must be considered... if not by mutual agreement (which has never been brought about), then by Congressional mandate."

The wild dwellers of the desert lands will never know that this slender woman has spent every available moment for well over twenty years working for their welfare. They will never hear her appeal to the humanity of group after group. The miles of typewriter ribbon expended in endless letters and the almost unceasing phone calls have no reconizable meaning to horses and burros. But because of these letters, phone calls and

lectures, and because of the struggle borne by this woman, a few more of them might escape the meat hunters. A few more of them might live to roam the wild lands. This woman was christened Velma Bronn but millions now call her Annie — "Wild Horse Annie" — and she is legend.



Bulletin Board

"A Selected Bibliography of Recommended Environmental/Conservation Reading and Guide to Environmental/Conservation Organizations, Teaching Aids and Periodicals" is available free from the Nebraska Game and Parks Commission, 2200 N. 33rd St., P.O. Box 30370, Lincoln, Nebraska 68503.

For a free booklet listing and briefly describing various environmental organizations which offer information and advice to individuals write for "Groups That Can Help," from the Environmental Protection Agency, Waterside Mall, 401 M St., S.W., Washington, D.C. 20460. Most of the organizations in the directory are national, although many have state or local chapters. All are non-profit. EPA's regional offices (listed) may be contacted for additional information.

Free films on the environment can be borrowed by schools and community groups. The films are 16-mm sound, mostly color, and run from 15 to 28 minutes. Detailed listings can be obtained from Modern Talking Picture Service, 2323 New Hyde Park Rd., New Hyde Park, New York 11040.

Those concerned with energy may be interested in obtaining The Potential for Energy Conservation, a publication of the Office of Emergency Preparedness. It may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Request document number 4102-00009. The cost is \$2.00.

Agriculture Department's Economic Research Service has completed a report on federal water resources administration dating from 1800 to 1960. Free, from the Department of Agriculture Information Office, Washington, D.C. 20250.

Energy conservation through better housing insulation is the topic of a 50-page study by the Nat'l Mineral Wool Insulation Association. Free from association headquarters, 211 E. 51st, New York, N.Y. 10022.

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The Crisis in Energy:

population (that's us) now consumes 35 percent of all the energy used. The agents from Madison Avenue sold us on bigger cars and more of them. They told us we could not be truly happy unless we lived in "clean," all-electric homes. And that meant being outfitted down to electric tooth brushes and other small "necessities."

The idea was to provide markets for products. Production and sales of goods pushes up the gross national product. That is known as growth, and the larger the growth, the more beneficial to our economic state — and, of course, our total well-being in affluent

America, circa 1973.

Too late, we have discovered that our whole system of production, leading to growth, leading to increased production, ad infinitum, was based on finite resources. No matter how rich our country was in natural resources before the industrial revolution, it could not sustain unlimited growth. We have nearly reached the end. And because our voracious appetite for energy keeps increasing disproportionately faster than our population, the end is much closer than the general public has been led to believe. It could be reached in the decade of the 1970's, and no later than the 1980's.

Consumers of all forms of energy have been living in a fool's paradise. But time has now run out.

Outlook for Energy in the United States to 1985 Study by Chase Manhattan Bank of New York

In a report by the Atomic Energy Commission, the U.S. is predicted to have gasoline rationing by next year, along with significant increases in prices. The same report says if consumption continues to increase at projected rates, the last molecule of natural gas

will be burned by 1986.

John H. Nassikas, chairman of the Federal Power Commission, shortly before Christmas, sent a telegram to the chairmen of each state agency. He asked them to review year-end supplies of energy sources, especially natural gas, and to cooperate in meeting emergency supply problems. At the same time, he said "there should be a vigorous effort by all to conserve the limited supplies — homeowners can be asked to reduce night-time thermostat settings; industries can be asked to eliminate wasteful fuel uses and reduce factory heating levels during off hours."

Denver's public schools did not open on schedule in January, 1973, because there wasn't any fuel to heat them. Northern Natural Gas Co. of Omaha curtailed gas delivery after December 1, 1972, to some customers in a 10-state area. In Des Moines, colleges, apartment houses and retirement homes were notified that there could be no further deliveries of fuel oil until further notice. That was on December 13. In the Midwest a wet fall and early winter has caused crop losses running into the millions of dollars, partly because there is no fuel to dry them. Top officials from six federal agencies said there was no way to solve the crisis and salvage the crops.

Secretary of the Interior Rogers C. B. Morton recently stated that the crisis in energy resources was the greatest problem facing the Interior Department. Senator Henry M. Jackson, Chairman of the Senate Interior and Insular Affairs Committee and one of the most influential men in Congress, says he considers the energy crisis to be one of the major areas of concern in the new Congress.

Kenneth Lay, executive director of the Interior Department's new energy board, says the energy-supply problem has worsened so badly in the past 18 months that some emergency short-term actions are needed. He said

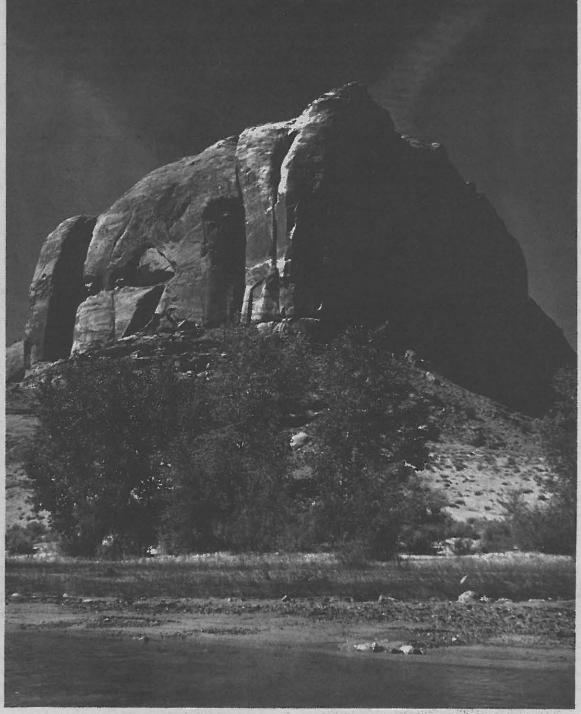


Photo by Jack E. McLellan

Sparkling clear air in the canyons of the Escalante in Utah may be doomed by the commitment of the Four Corners area to power generation. This butte is at the junction of Harris Wash and Silver Falls Creek, near the site of a proposed dam.

President Nixon's forthcoming energy message may propose measures to pass steep price increases on natural gas along to large industrial users.

But when companies are forced to pay higher costs, they will pass those costs on to consumers. And some will also be forced to turn to other fuels. That will increase pressures on oil and coal.

The crisis is no better world-wide. While the United States was increasing its consumption of energy astronomically, so were other developed countries. Japan and a United Europe are expected to be heavy competitors for Mideast oil and newly discovered deposits around the world. The Alaska pipeline, if and when it is

Four aspects of mineral interdependence stand out: the consumption of virtually all critical minerals, both metallic and non-metallic, is rising rapidly; known reserves are often concentrated in a few locations around the world; the global distribution of minerals bears little relationship to areas of consumption; and rich countries are becoming increasingly dependent upon poor ones for mineral supplies.

Lester R. Brown Senior Fellow Overseas Development Council Washington, D.C. ever built, will deliver substantial amounts of oil to Japanese oil tankers.

Monroe E. Spaght, a director of the Royal Dutch Petroleum Co. headquartered in London and The Netherlands, says countries will have to create national energy policies concerning use of resources. He said he was concerned about the supply of petroleum reserves in the world. He estimates a 20 to 30-year supply in known reserves.

WHAT IS IT GOING TO COST?

Most predictions peg the cost of energy in the next ten years at double the costs of 1972. That is just the economic cost to individual families. It will result in about a one percent annual rise in cost of living for families at all income levels. (See chart for projections to 1985.)

It is estimated that between now and 1985, energy industries are going to have to invest between \$400 billion and \$500 billion in new generation and distribution facilities. The Chase Manhattan Bank estimates that by 1985 the balance of payments deficit could run to \$25 billion a year for petroleum alone.

The cost to the environment cannot be equated in monetary terms.

(Continued on page 7)

WHAT IS THE ANSWER?

The pat answer to the energy crisis by spokesmen for the energy industry is to look for more oil and gas. Deregulate the price of natural gas, they say, and reinstitute the 27 percent depletion allowance, and like the genie in the bottle, our wish is their command.

A recent report by the National Petroleum Council is significant. It said the major options beyond 1975 are to encourage greater development of domestic supplies, greater reliance on imports, or restraining the growth of demand. On the latter, it then had this to say:

Restrictions on energy demand growth could prove expensive and undesirable. Among other things, they would alter lifestyles and adversely affect employment, economic growth and consumer choice. Despite possibilities for extreme changes or revisions in existing social, political and economic institutions, substantial changes in life-style between now and 1985 are precluded by existing mores and habits, and by the enormous difficulties of changing the existing energy consumption system. More efficient use of energy becomes more costly. However, there are some inherent limitations in how much energy demand growth can be reduced during the next 15 years through efficiency improvements. These include the difficulties and high costs associated with altering existing equipment and the long lead times necessary before more efficient equipment can be developed and put into use.

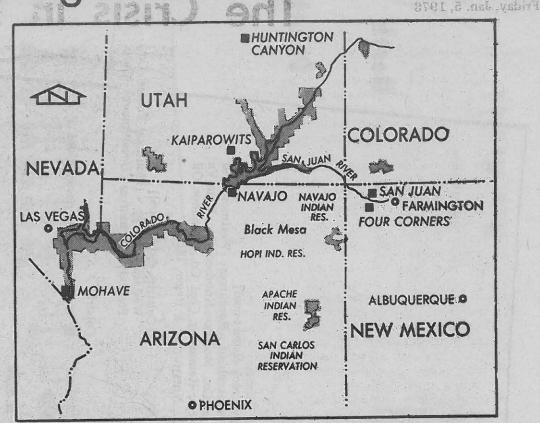
The Council can be excused for playing down the restraints on growth. An industry which has relied on increased production and growth to create blue chip stocks would indeed find it difficult to change life-style. But neither can the industry wave away the affects on employment and economic growth by a lack of energy to sustain employment or growth.

The hard facts of life as energy becomes more scarce will force a decided change in life-styles, will alter consumption patterns across the board to maintain employment, and will curtail choices of products to consumers.

In the past year, the energy industry has begun at least to pay lip service to the need to end habits of wasteful extravagance, and some government agencies have actually begun to stress this need. Of course, the problem goes deeper than merely tidying up a bit. Wasteful habits stimulate over-consumption and result from the underpricing of energy and a web of federal subsidies and incentives that leads to unrestrained demand. And as a result of cultural conditioning, we confuse these distorted market demands with needs.

Michael McCloskey Executive Director Sierra Club

If an energy crisis of disastrous proportions is not to ensue, an energy policy incorporating



a large dose of all three options is likely to emerge. There seems to be no way out of reliance on imports, no matter what the strain on balance of payments nor risk to national prestige and security.

national prestige and security.

The latest Department of Interior Conservation Yearbook, Indivisibly One (Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, price \$2, stock number 2400-0751), points out our growing dependency on oil imports. Where daily imports amounted to only 24 percent of use in 1970, the use is projected to go to 57 percent daily by 1985, if Alaskan North Slope oil is added to production. If Alaskan oil is not added, the foreign imports go to 65 percent of daily requirements. But at projected rates of consumption, Alaskan oil will last only ten years.

Besides oil, plans have been announced for multi-billion dollar proposals to liquefy natural gas from Siberia and Libya. The investment in plants, pipelines, supertankers, superports, and additional refineries is staggering. And such dependence on foreign countries, especially a cold-war antagonist as Communist Russia, must have diplomats, foreign service people, and political hawks shaking their heads in disbelief.

Other than Alaskan oil, the only other significant possibilities for short-term domestic development lie in the off-shore areas. During the closing weeks of 1972, the Department of the Interior accepted bids for off-shore oil and gas leases totalling some \$1.7 billion. The record bids were for 113 tracts in the Gulf of Mexico. Oil companies are now eyeing East Coast off-shore areas.

John O'Leary, former director of the Bureau of Mines and now a member of the Atomic Energy Commission, says nuclear power will only contribute about 25 percent of the total U.S. energy requirements in the year 2000. He says we will have to depend on coal.

As he puts it, despite the negative environmental impact, this country will be driven by a combination of economics and lack of alternatives to the widespread burning of coal. Relying on coal gasification, importing liquid petroleum gas, and piping oil from Alaska will all be at least five to ten times as expensive as using coal.

During the next three to five years a further deterioration of the domestic energy supply position is anticipated, and as a result fuel imports will have to be increased sharply. The nation's dependence on imports of oil and gas increased to 12 percent of total energy requirements in 1970 and is likely to be 20 to 25 percent by 1975.

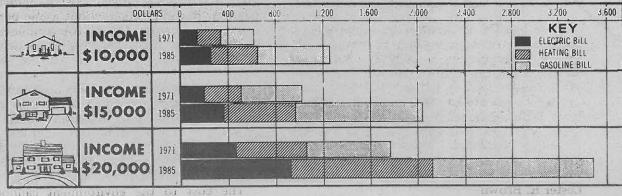
Report on the U.S. Energy Outlook National Petroleum Council

And that seems to be the conclusion of the Department of the Interior. In a year-end Summary Report of the Southwest Energy Study, it said that despite lack of existing technology to control air pollution, that despite "significant quantities of trace pollutants, such as lead mercury and cadmium being emitted from the power plants," that despite attempts to reclaim strip mined land, all had been unsuccessful, and that despite the proliferation of powerlines having an obvious and undesirable impact on the esthetic quality of the relatively uncluttered Southwest, the decision was to proceed with more power plants.

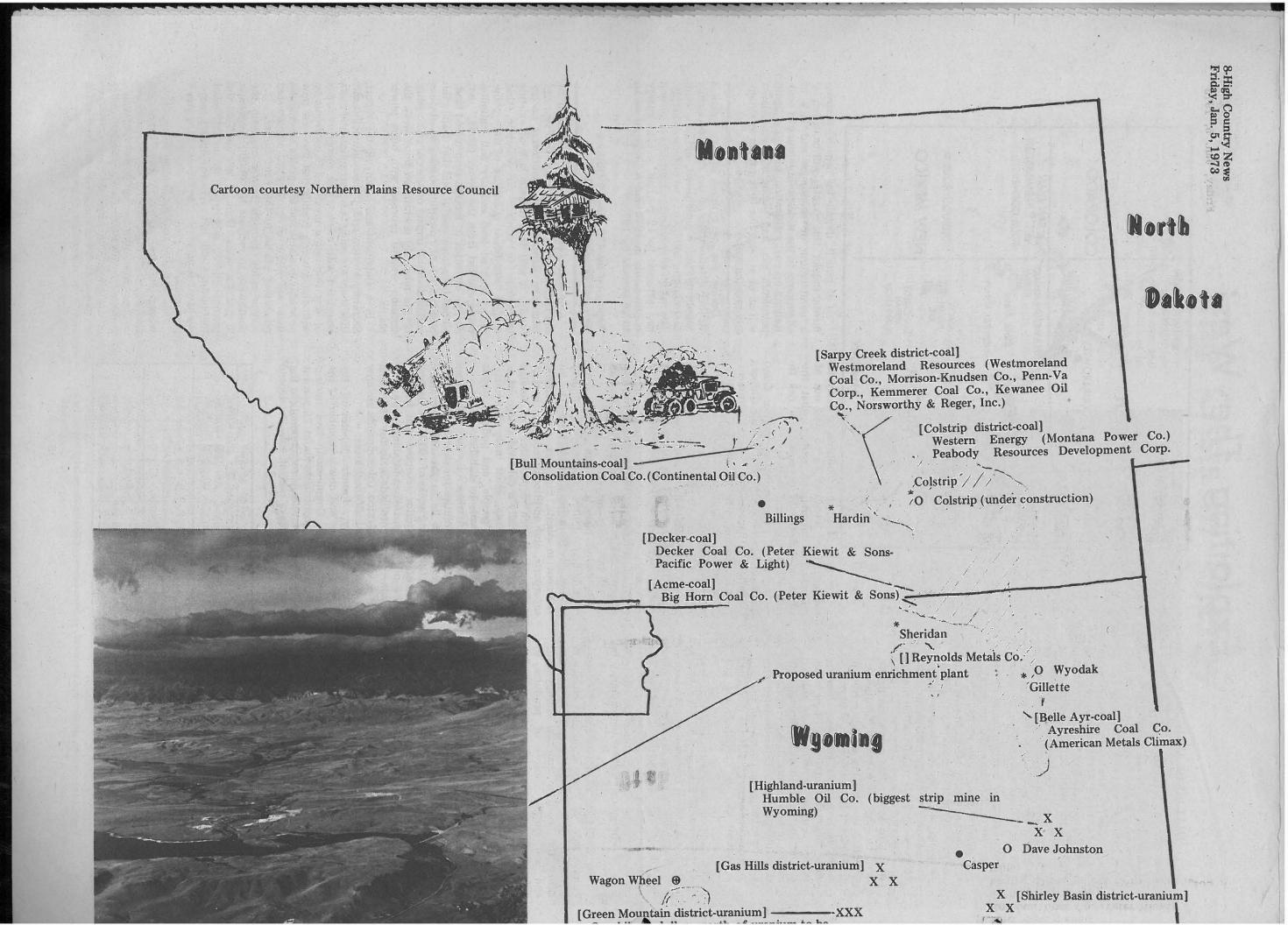
In a statement accompanying the report, Secretary Morton said, "The study points out that there are going to be environmental costs associated with meeting the energy demands of this seven-state area; and it confronts us with the sobering finding that there are now no readily available and acceptable alternatives that will allow us to forego coal-powered generating plants in the near future."

The study projects power usage in the Southwest to increase by 30,000 megawatts in just six years. Demand will go from the present 28,000 megawatts to an estimated 58,000 by 1980. But even that 30,000 megawatts will supply only 28 percent of the area's power needs by 1990.

The complex of generating facilities to supply an area stretching from Denver to Los Angeles would call for huge new power centers. Some like the San Juan, the Navajo, and the Huntington Canyon are already under construction. The proposed giant at Kaiparowits near Glen Canyon is now on the drawing (Continued on page 11)



Typical energy bills, present and projected, of homeowners in three income categories.



Storm clouds over Wyoming's Big Horn Mountains are an ominous foreboding of what is about to happen to this quiet and peaceful scene. They knew the coal was there for at least twenty years. Beds 200 feet thick, containing millions of tons of the black stuff, lie there beneath the hills in the lower center of this aerial photo. The announcement could come any day that Reynolds Metals Co. will begin construction of one of the world's largest energy complexes. Somewhere within the scope of this photo there may someday be a \$2.5 billion uranium enrichment plant. If of the gaseous diffusion type, it will require a 3,600-megawatt coal-fired, steam generating plant. And the ranch houses there along Piney Creek will be sacrificed on the altar of an American god named Energy.

What is to happen here at Lake DeSmet is indicative of mammoth projects to exploit coal, oil shale, uranium, and possibly natural gas in so-called "tight" formations. This exhibit of where it's all at is not meant to be all inclusive of the action now taking place in what must surely be one of the greatest rip-offs of all time. It merely points out some of the

major areas where attention is now focused.

No attempt has been made to accurately delineate the vast coal deposits of Wyoming, Montana and North Dakota. The exhibit makes no attempt to show rivers, dams, potential dam sites, aqueducts or other facilities which are going to be the key to much of the energy development. It does not show the Northern Cheyenne or Crow Indian Reservations which cover the heart of the coal lands in Montana. All the plans for railroads to haul the coal away or transmission lines to carry power away to distant population centers are not even known.

But the tacts are mescapable. These lands of rolling prairie and magnificent vistas, of unsullied skies and uncrowded open spaces will never be the same again.

Rock Springs

[1__ina district-coal] Rosebud Coal Co. (Peter Kiewit & Sons) Arch Mineral Corp. Energy Development Corp. (underground

Salt Lake City

* O Hayden

Rio Blanco &

Denver

O Huntington Canyon (under construction)

Colorado

the Game is ENERGY!

O Kaiparowits (proposed)

Flagstaff

O Navajo (under construction)

O San Juan (under construction)

O Four Corners

Key

Approximate areas of major strippable coal deposits



Oil shale deposits, 25 gals./ton or richer, shale 10 feet or more thick.

O Coal-fired, steam-generating electric plants

[Mines or mining areas] Except where noted all are open pit or strip mines.

XXX Uranium mining areas

Blasting by nuclear devices for natural gas •

Arizona

[Black Mesa-coal] Peabody Coal Co.



Albuquerque

Oil Shale: A Problem of Waste

1 81 6 ... by David Sumner

The town of Rangely lies in a remote, semi-arid area of northwestern Colorado where a small college, hordes of sheep, a mass of oil wells, and a bountiful deer population combine to keep 1,500 inhabitants from drifting off into oblivion.

Dinosaur National Monument is a ways to the north and to the south is a forbidding, seldom visited expanse of humped and rumpled plains known as the Rabbit Hills. On the southeast is another uninviting region known as the Piceance Basin; until recently, this broken country has been known simply as the place "where ever" body goes huntin'."

But if all goes as planned by the US Department of Interior, the western fringe of the "Peeahnts" (as Piceance is pronounced) will sport a new look by the end of this century. Here, a series of broad, sloping, boulder-lined canyons will become grim, black landfills — buried to depths up to 250 feet with hard-caked solid waste.

For now, instead of supporting a scattering of cattle ranches and a superb population of deer and other wildlife, the Piceance Basin is fast on its way to becoming the center of America's newest energy industry: oil shale.

And among the multiple and torturous problems of this incipient "boom," none bulks larger than solid waste. There could be literally cubic miles of it — black and powdery until watered, then almost as hard as Portland Cement — and no one is quite sure what is the best way to get rid of it. At least no one was sure, until some demented wag of an engineer came up with an incredible scheme of dumping the unwanted substance into the natural canyons of the Piceance.

Producing commercial crude oil from the dull gray shale underlaying the Piceance Basin is (with the best technology now available) a four step process: 1) mining (either underground or open pit), 2) crushing, 3) retorting or heating to 900 degrees F. to release the vaporized oil from the shale, and 4) upgrading the product thus obtained to a commercially refineable level.

The waste comes after step three; it is called "spent shale" which is to say that the oil has been cooked out of it. Incredibly, it occupies 12% more space, even after compacting, than the original, in-place rock.

the original, in-place rock.

The US Department of Interior's Draft Environmental Impact Statement on the Proposed Prototype Oil Shale Leasing Program (September, 1972) does not explain how or why it was decided to dump the spent shale into the canyons. Along about page 39 of that massive, 1,150-page document, the authors simply assert that "it is assumed."

In the past, some limited research went into possible uses for this soot-like waste. For a while it was thought some spent shale might be of service in highway construction and surfacing. But that less than optimum use didn't prove out. Thereafter, apparently the canyons where chosen out of expedience.

Just how many of these natural cuts in the Piceance Basin will be filled remains a matter of conjecture. As one drives south from Rangely along State Highway 30, he passes one canyon after another in a 15-mile stretch - two forks of Fourmile Draw, State Bridge Draw, Vandamore Draw, Philadelphia Creek Canyon, Cow Canyon, others. All of these named could be interred with the spent shale from just a single oil shale processing plant the open pit operation that probably will go in on Colorado Prototype Lease Tract "C-a." More likely, only one — or perhaps two of the canyons will go under, with the rest of the waste going back into the pit. Something in the neighborhood of 3,000 acres will be buried.

However, that isn't the only problem. Lease Tract "C-a" is eight miles east of the canyons as the crow flies. To get the spent shale from the mine site to the canyon, it will be mixed with water and piped the entire distance as slurry. The pipeline will require a right-of-way, and it will also have to be punched through the scenic Cathedral Bluffs which are in the way. If more than one canyon is filled, additional pipelines will have to be constructed, additional rights of way carved, and additional holes punched in the bluffs.

A curious sideline to all of this is that the entire waste disposal scheme could prove illegal anyway. Oil shale on public (Bureau of Land Management — BLM) lands is leased for private development under the Minerals Leasing Act of 1920. One of the stipulations of that law is that each mine site be no larger than 5,120 acres. Interior Department planners have interpreted that figure to apply to the actual mining operations only. Waste disposal will be handled "off site" and regulated by special use permits to be issued by the BLM. It is a neat means of circumventing the maximum acreage provision of the law (and also, incidentally, an excuse for omitting any discussion of the effects of canyon burial in the Impact Statement.)

However, Interior seems aware of this legal difficulty. In the recently released Departmental Conservation Yearbook (it is entitled "Indivisibly One" and is heavily development-oriented), a paragraph under oil shale reads:

". . . it may be necessary to amend the Minerals Leasing Act to erase or remove leasing limitations. Currently, a person, company or consortium is limited to one lease not in excess of 5,120 acres. This limitation may prove incompatible with the land requirements of commercial oil shale development. . ." (page 45).

In other words, "We aren't going to let a silly, old law stand in the way of our major, new energy program!" Interior's Oil Shale Task Force Coordinator, Reid T. Stone has already implied as much in personal discussion with conservationists.

Finally, there is the question of the canyons to be buried — if not in the initial, prototype



Oil shale development will mean land disturbance on a vast scale. Whole canyons filled with overburden and spent shale will accomplish wholesale destruction of habitat for many species of birds and animals.

more urgent than ever to negotiate

program, then later on. What are they worth in the first place? The canyons of the Piceance (two prototype operations there) and also of Utah's Uintah Basin (where the same disposal method is planned for two more mines) are not dramatic, scenic defiles — nothing like the classic red sandstone canyons of southern Utah. But they are scenic, attractive and important.

The National Audubon Society, in its comment on the Draft Impact Statement on Oil Shale, explains a major reason why this is so.

"What," asks the Society, "are the potential wildlife losses (for deer, coyotes, mountain lions, eagles, hawks and numerous smaller birds and mammals) when a natural canyon is converted to an artificially contoured landfill?"

The answer follows:

"At its various elevations a canyon contains differing plant communities suitable to different wildlife species. The same is true of north and south facing slopes, also east and west. In many cases, the high walls shelter wildlife from the harsher elements. Often the varied topography includes ideal bedding, denning and nesting sites critical to the existence of certain species in a given area. When any canyon is filled with spent shale, all these values to wildlife are irrevocably lost.

"While species may use the resources provided by canyons for limited portions of their life cycles, their survival may directly depend on access to these resources. Elimination of canyons can therefore have a destructive impact on the animal populations of a much wider area."

For those who enjoy hunting, exploring, camping, rock-hounding and jeeping the loss will also be great.

In the end, the problem of spent shale disposal may well force the oil shale planners back into their think tanks. Most conservationists (along with those unlabeled folk who simply happen to perfer the natural landscape) agree that burying canyons out of sheer, slap-dash expedience is flatly unacceptable. An alternative is needed. And one can only hope that the next disposal procedure will be sounder, more humane, more sane.

(The next article in this series will discuss the sister problem of what Interior plans to do with the spent shale once it's dumped in the canyons — and the troubles that have been encountered.)

"High" Junk

Not content with polluting our air, water, and land in more populated areas, we must even defile the once pristine and scarcely-visited haunts of a growing number of mountain climbers. Our nation's peaks are rapidly becoming mountaineers' junkyards.

At Grand Teton National Park in Wyoming this summer, rangers returned regularly from the peaks with "rucksacks full of junk." The number of Teton climbers has doubled to 4,000 within a decade.

Helicopters are being used to fly out human waste in 55-gallon drums from New Hampshire's White Mountains. The number of climbers in the White Mountains has been increasing 30 per cent each year.

Not even North America's highest peak is free from refuse. Alaska's Mt. McKinley presents a more serious clean-up problem. At an altitude of 20,320 feet, where air is thin and freezing, even normally biodegradable wastes will not decay. And helicopters cannot go up that high to remove them.

If this present rate of high pollution continues, limits may have to be set on mountain climbing expeditions. Already, climbers in the White Mountains are asked not to camp above 4,500 feet in elevation.

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Can We Declare The Old Way Dead?

by Ronald J. Schleyer, Gazette Staff Writer

Complete "development" of Montana's coal resources — now passing their 65-millionth birthday under the golden grasses east of Billings — likely will be the last rape of the earth before a clean energy source is found.

All around us — the air, under the earth, in the oceans, and falling from the sunlit sky — is more clean energy than can be imagined.

As coal, oil and gas run out (they are certainly running out) research to tap clean energy, to end the constant burning of bits of the earth for power, is accelerating.

Research in geothermal energy — Old Faithful's reliable energizer — has already been translated to large, working power plants.

Breeder reactors that make more fuel than they consume are a national goal by 1980. Fusion reactors — whose eternal supply of fuel lies within every drop of earth's water — will end forever the need to burn for power.

"It's a question of when, not if," says the Atomic Energy Commission. Some say between 20 and 50 years.

Tidal power, solar energy, the energy of the wind, the heat of the oceans — all are viable, real alternatives just over that 2000 A. D. horizon.

That leaves just enough time to strip-mine and burn Eastern Montana's coal, coal enough (almost exactly) for 30 years' supply of American energy.

Even now, about half the nation's coal is burned for electricity and most of the rest goes to industry for other purposes: mostly heat to boil things, but some for fibers and plastics. Two per cent is exported.

When it is gone — and much of it lies within the borders of Montana and Wyoming — a clean source of energy will be found. It must, of course.

Then will be the end of the coal-fired steam engine, the one that produces the kilowatts you use every day.

The burning and polluting will stop, apparently, when the supply of burnables is

Whether they might have some important use to your children's children appears unim-

Energy Crisis.

Enterprising and aggressive companies such as El Paso Natural Gas Co. and the Kemmerer Coal Co. are looking beyond power generation. El Paso has asked for approval to develop a coal mine and build a coal gasification plant near the Four Corners power plant in New Mexico. The half-billion dollar complex would be built on a 40,000-acre lease.

Further north, in the southwestern corner of Colorado, Kemmerer Coal Co. has an option on 24,000-acre feet of water to go with a 21,000-acre coal lease. When contacted by UPI at Kemmerer, Wyoming, the coal company president, Roy Coulson, said he had contacted several utilities and companies interested in coal gasification.

The operation would be south of Montrose in some of the outstandingly scenic area for which Colorado is noted. When Sen. Peter Dominick protested, the coal company said it had not decided whether to strip mine the area

Greater development of domestic supplies may force the development of some oil shale. That facet is being explored by HCN correspondent David Sumner. And of course the reliance upon coal and coal-fired steam generating plants is not only going to exert momentous change on the Southwest but also the Northern Great Plains. The magnitude of developments and proposals already underway there can only be covered in a continuing series of articles as we progress through 1973.

portant to power companies, whose heavy investment in the old way is at stake.



But if Montanans declared the old way dead, right now, here: how soon would clean energy appear?

Perhaps much sooner. Utilities spend eight times as much money advertising for increased electrical consumption as they do on research into non-polluting alternatives.

Montana's Declaration of Environmental Independence would say no to strip-mining, no to massive coal-burning generators, and yes to the conservation of an irreplaceable resource, yes to the last-ditch preservation of Montana's refreshing physical beauty and health.

Perverted economic priorities are leading Montana down a coal-black alley of environmental rape.

It's been the story of her violent life since those who couldn't hack the trip to Oregon jumped wagon in Anaconda.

But it's time to declare Montana the national, natural park that it mostly still is.

It's the conservative thing to do. We might even be thanked for it, someday.

Excerpted from a series on the energy crisis by Thomas O'Toole of THE WASHING-TON POST:

Whichever name we give it, the (energy) crisis is probably the biggest long-term problem we have. So serious is the energy dilemma that the Republicans never brought it up and the Democrats never pressed them on it during the recent political campaign, either because there are no immediate answers to our energy problems or because the answers are politically unacceptable. . .

By one estimate, the U.S. wastes 25% of the energy it produces. In effect, 205 million Americans squander as much energy as 105 million Japanese consume. . .

Six percent (96 million kilowatts) of all the electricity produced in the U.S. in 1970 was used to heat homes, despite the fact that electric heat leaves 70 percent of its energy in the fuel that was burned to generate the electricity.

Critics contend that one reason there is energy waste is that there is no energy policy, no single federal agency riding herd on energy supply, demand, use, and consumption. . .

Sixty-one federal agencies have something to say about energy, which says something about federal direction of energy policy. . .

There are no more potent reasons for the energy crisis in the United States than our mushrooming wants for oil and our inability to satisfy those wants with a domestic product. American oil wells produce almost 10 million barrels of oil every day, which is one fourth what the world produces. The trouble is that it's only two thirds of what America needs. . .

"No matter how much domestic oil we develop you still come up short about 50%," Interior Secretary Rogers C. B. Morton told the House Interior Committee, "and that 50% will have to be made up from imports from other countries. . ."

By 1985, oil observers believe we'll be importing 15 million barrels of Middle Eastern oil every day, which at \$5 a barrel turns out to be \$75 million a day and \$27 billion a

It's true the Arabs will be swimming in dollars, so the rest of it goes, but we'll get the dollars back selling them American technology for the pipelines, the refineries, the petrochemical plants they'll build. Besides, 90% of the world's recoverable oil is in the Middle East. There's nowhere else to go, which makes it more urgent than ever to negotiate an

Arab-Israeli peace. . .

By 1980, the Arab world will have as many dollars as the World Bank and the Export-Import Bank and by 1985, it will have triple the funds of these two banks plus the International Monetary Fund.

"They can very easily accumulate a few hundred billion dollars in 10 years time and use that reserve to control the market any way they want," one observer said. "They could either shut off our supplies or raise the price to 6,7,8, 10 dollars a barrel if they want to. . ."

The 15 million barrels of oil that America uses every day are expected to swell to 30 million in the next 10 years. This is a growth rate that can be counted on to strain the world's oil fields, its tanker fleet, its banks and its patience.

Oil will be spilled, pipelines will break, coal will be strip mined, refineries will despoil the land and burning fuels will go right on fuming the air. The U.S. needs 1 billion kilowatts of new power in the next 20 years, which means 400 new power plants taking up more than 1 million acres of land and water.

It also means that the 300,000 miles of overhead lines that today cover an area larger than Connecticut will take over new land the size of New Jersey, providing they use existing transmission corridors. An inescapable fact of the energy crisis is that the drilling, mining, the burning and the shipping of energy cause an estimated 70% of the environmental anguish suffered in the U.S. today. . .

Whatever happened to solar energy, geothermal energy, tidal energy or even the generation of power from the winds? None of these energy forms got any attention or received any financial support until the country got into an energy crisis, which even today goes unrecognized in many agencies of government and the electric power industry.

A few of these energy possibilities are now being financed, though not in any urgent way. The two most promising options are solar and geothermal energy, the production of electricity from the heat of the sun and the earth. Each of these options will get about \$1 million in federal funds this year. . .

One of the toughest (questions) is whether to enforce controls to slow down or even reverse the growth in demand for gas, oil, and electricity.

Wild Horse Annie Replies

Mrs. Velma B. Johnston, member of the recently appointed Wild Horse and Burro Advisory Board, felt constrained to answer a Utah brand inspector who commented on the new federal law protecting wild horses. Her commentary is printed in full.

by Velma B. Johnston

During the twelve months since the signing into law of the legislation passed by Congress in 1971 to provide a protection, management and control program for wild horses and burros, a number of negative news items have appeared throughout the country, originating

with the opposition.

I have refrained from commenting on them publicly for three reasons: First — Having not once, but three times, successfully defended our position in behalf of the Wild Ones before the highest tribunal of our land (a course that was likewise open to the opposition), I have not felt it necessary to repeat the defense at each separate attack. Second - The law provides for appointment of an advisory board consisting of nine members, and until such time as the advisory board was established and activated, I believed it was premature to comment. Third - My actions and opinions are those of a free agent, as I am an executive secretary in private industry and therefore not dependent upon special interests for my livelihood; I can therefore avoid being pressured into comment.

I do now feel, however, that a recent wire service release originating with opposition to the control, protection and management law for wild horses and burros warrants a response in the interests of clarification of position and purpose from those who have rallied to their defense. And because I have been at the forefront of that effort for many years, I wish to comment upon the most recent statements of John A. Chugg of Ogden, Utah, some of which clearly indicate misinterpretation or

misunderstanding of the law.

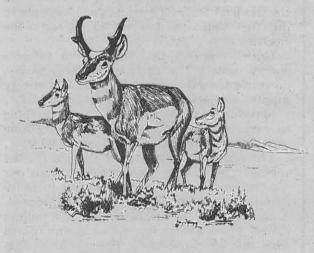
It is understandable that Mr. Chugg, as supervisor of state brand inspectors in Utah must, in good conscience, defend those whom the brand inspection officials serve, namely the stockmen. I only wish he had read the wild horse act before giving the interview in which he admitted he had not done so. A statement is made that wild horses can still be eliminated if they are done away with humanely and not harassed, leaving the reader with the impression that they are fair game for anyone, provided humane methods are carried out. Not so. A \$2000.00 fine or imprisonment for not more than one year, or both, can result from just anyone "doing away" with them. The law provides for the destruction of old, sick or lame animals, or should there be excess animals and no other course is open to reduce overpopulation they may be humanely destroyed. Additional excess wild free-roaming horses and burros may be captured and removed for private maintenance under humane conditions and care by order of the Secretaries of the Interior or Agriculture after consultation with the Advisory Board.

Selection of the nine members of the Advisory Board set forth in the provision as a requirement of the law has recently been announced. Among them is Dean Prosser, Jr. of Cheyenne, Wyoming, past President of the National Livestock Brand Conference, who is eminently qualified to represent the brand inspectors of the various states that will be affected by the deliberations of the Advisory Board. The position of the domestic livestock industry will als , be supported by Roy Young of Elko, Nevada, past President of the Nevada Cattlemen's Association. Other interests represented on the board are management of wild life, animal husbandry, humanitarians, natural resource management and protection of wild horses and burros.

The article quotes Mr. Chugg: "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." Here again, I call attention to provisions of the law which include management of wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands.

As far as reserving the grasslands so that "beef and mutton can be produced for the survival of mankind" is concerned, the following information was taken from a statement of the Director of the Bureau of Land Management before the House of Representatives Subcommittee on Public Lands on March 4, 1969: "On a nation-wide basis, 1% of food cattle and 6% of food sheep are grazed on the public lands." (The remainder are raised in pastures and feed lots.) I would take these figures to indicate that the beef and mutton raised on public lands is not that great a factor in the survival of mankind. Official figures also indicate that 52% of Bureau of Land Management forage (public lands) is allotted to fewer than 700 permittees, hardly the giant of an industry that we are led to believe.

According to the article, the position is taken that to encourage any animal to reproduce at the expense of all others is environmentally unwise and a waste of tax dollars. At this point, on the subject of waste, may I point out that use of the public domain for private profit has amounted to a generous subsidy of the livestock industry by the public for decades! The adsurdly small grazing fee of 66 cents per head per month now charged (until fairly recently it was around 33 cents per head per month) hardly constitutes a reasonable financial return to the public for the use, and in many instances depletion through overuse, of its grazing land resource, a resource in many instances more valuable than dollars and cents. Who, then, has benefited privately for decades from a public asset?



A question is asked in the article: "Isn't the picture of herds of cattle and flocks of sheep as typically western as bands of scrawny wild horses?" Well, it all depends upon the viewpoint. To those to whom the picture of s of cattle and flocks of sheep represent dollars and cents in their pockets, I daresay those species do look more typically Western, enhancing as it does the old traditional concept of the vast cattle and sheep operations that are credited for the settlement of the West. Seldom is it pointed out, however, that these vast spreads are comprised, for the most part, of a relatively small number of acres privately owned, with the balance made up of public land (your land and mine) on lease or under permit to use. As for the "bands of scrawny wild horses," it is a wonder they have survived at all, pushed as they have been almost from the face of the earth through

encroachment of man and his profit-producing animals.

Apparently there is an area in Utah whose lushness has been restored "with the horses eliminated and with the land reseeded and intelligently managed herds of wildlife and domestic cattle. . . brought in for controlled grazing." Is the provision in the law emphasizing management and control being deliberately overlooked by its detractors in an effort to put the worst possible light on the legislation? My testimony before a Congressional Committee thirteen years ago contained the request that controls be established so that never again could there be an excuse for the bloody extermination program that had its inception following World War II. That recommendation was not followed. In drafting the new bill, great care was taken to include the control and management provision so that a thriving natural ecological balance on the public lands could be achieved and maintained. Any so-called controls exercised in the past have been imposed by the vested interest users, and of course have resulted in virtually wiping out the wild horses through widespread and indiscriminate roundups for commercial slaughter, or simply by shooting. There will be controls under the new law, but they will differ from the past in that they will be selective, equitable, humane, without profit to anyone lest there be a tendency to overcontrol. And for the first time in history, the welfare of the wild horses will be given consideration along with other values, be they commercial or esthetic.

I had hoped that the school children, in their efforts to be of help to this colorful segment of their heritage, would escape belittlement by those opposed to such efforts, but they and "busybody women's clubs" were pointed out as having "pushed through Congress" a law that "is ridiculous, unrealistic and dangerous to our environment and economy." I would say that this is jumping at a conclusion without a basis in fact, since it originated with someone who had admittedly not read the law. It hardly sets a good example of "establishment behavior" for the coming generations to whom we will look for leadership one day. These young people were awakened to their responsibility to become involved in matters affecting their community, their country, their environment as no issue in our country has ever awakened them, which is a healthy indication that we may have some generations in the future who will not succumb to the apathy that has engulfed many Americans

A quick look at the Tables of Contents that preface the transcripts of the hearings before the House and Senate Sub-Committees on Public Lands of the Interior and Insular Affairs Committees quickly reveals that oral and written testimony given by men of stature in our country in support of the legislation is far in excess of that given by the distaff members of society and the school children who have been criticized. In addition, I would be remiss if I did not mention, and give a full measure of credit to, those of the news media who have helped the cause of the

wild horses and burros through astute and

sensitive reporting and editorializing. . ninety nine percent of them men!

My answer to the request often made of me to comment on the bill as to its effectiveness from all points of view is that any evaluation of possible results at this time are premature. It would be presumptuous of me to predict what will or will not result from the input of knowledge of the eight other members of the Advisory Board, and I firmly believe that comments for or against the measure should be deferred until after the Board has had the opportunity to meet and evaluate all factors involved.

Photo by National Park Service

Wildlife "Out"

Recent storms have moved large numbers of animals onto the northern winter range along the Lamar and Yellowstone Rivers in Yellowstone National Park, resulting in outstanding opportunities for park visitors to view wildlife from the park road between Gardiner and Cooke City, Montana.

This winter range supports six species of large grazing animals — including elk, mule deer, bighorn sheep, moose, pronghorn antelope, and bison — as well as their predators and scavengers. Elk and bighorn may be observed throughout the area. Mule deer and pronghorn are best observed between Mammoth and Gardiner; moose and bison, between Tower Junction and Cooke City.

Predators and scavengers such as coyotes, ravens and magpies which are commonly observed throughout the winter range are very important links of the park's ecosystem. Other animals which also play an important role but are not commonly observed include: golden eagles, bald eagles, cougars, wolverines and wolves. Grazing animals which are killed or weakened by winter storms provide food for the predators and scavengers. In securing this food, the scavengers and predators do a service by keeping the countryside cleaned up and keep the herds of grazing animals strong by eliminating the weaker individuals. This necessary and desirable relationship between the grazers and their predators has existed for thousands of years and is supported in Yellowstone, where the park's objective in land use is to maintain the natural environment.

Nowhere else in the world can one find these particular species coexisting under the free-ranging wild conditions of a natural community.

Early morning or late afternoon, just before sundown, are usually the most desirable times to enjoy the park's wildlife show. Binoculars and a camera are certainly musts for full enjoyment of a safari in search of wildlife.

Visitors are warned against approaching the wildlife too closely. Such an act is not only dangerous, but may also frighten the animals away, thereby depriving the next visitor of the opportunity to enjoy them.

Briefly Noted . . .

Dean Prosser, member of the newly named Wild Horse and Burro Advisory Board, said he thought the proposed fines of \$2,000 and penalty of one year in jail for wilfully capturing, removing, killing or selling wild horses or burros was "rather stiff."

Prosser said, "I'm sure these wild horses are going to be protected just like the eagles. I mean they are not fooling around about it."

Prosser is a Wyoming state representative as well as executive secretary of the powerful Wyoming Stockgrowers Association.

Rex Cleary, district manager for the Bureau of Land Management, said wild horse colts on the Pryor Mountain Wild Horse Range in Montana and Wyoming have a good chance of surviving the winter. There are about 20 in the herd of 120 to 130.

Last year 16 colts and about twice as many horses were removed from the herd. They were given away to the Crow Indians and others who requested colts.





The once-proud monarch of the plains, the bison, is threatened once again in one of its last strongholds — Yellowstone National Park. Because of the threat of livestock disease, cattlemen want the herd culled for any disease carriers.

Disease A Threat To Bison

Brucellosis is an infectious disease of many cloven-hoofed animals. It causes the female to abort the calf and in livestock causes economic losses. It can be transmitted to humans, mainly through drinking raw milk, and causes undulant fever but does not affect the reproductive system.

Now a controversy has broken out over whether the wild bison herd in Yellowstone National Park is a reservoir of the disease. Stockmen who run cattle on the national forests surrounding Yellowstone say it is. Park biologists contend it is not. Strangely, although Park bison are known to harbor the disease organism, it doesn't seem to affect them as it does cattle.

Recently, the American Veterinary Medical Association wrote Secretary of Agriculture Earl Butz and Secretary of Interior Rogers Morton and urged that immediate steps be

taken to eradicate all carriers of the disease from the Yellowstone herd.

Mary Meagher, research biologist for Yellowstone, replies that the herd presents no threat of contamination to livestock. Such an eradication program would require destroying 80 percent of the herd, she says.

Yellowstone Park Superintendent Jack Anderson also points out that the disease is carried by wild elk, and that a high incidence occurs on the Jackson Hole feedground.

Idaho Governor Cecil Andrus says he will ask Congress to deauthorize Asotin Dam proposed for the Snake River near Lewiston, Idaho. He said the request represents a commitment to no more dams on the Lower Snake. The dam was authorized by Congress in 1963 but was never funded.

Winter Tough On Birds

LINCOLN, Nebr. — Winter is a particularly tough time of year for the state's songbirds, but Nebraskans can make it easier for them to withstand the cold and snow by supplementing their diet, according to the Game and Parks Commission.

Natural bird foods have become increasingly scarce over the years, as man has eliminated most of the weeds and other plants which produce the seeds, nuts, and berries that they eat. More efficient cultivation of farm crops, plus use of weed burners and chemicals account for much of the decline in natural

A simple birdfeeder and some inexpensive food are all that is needed to bring the birds into anyone's backyard. Selection of different types of feeders and bird food can attract certain species, while deterring others.

For example, cardinals, finches, and juncos are among species preferring grain. The

method of feeding will also determine which species the food will draw. Scattering food on the ground attracts nearly all species, but a swinging-type feeder made from a small bowl and suspended from a branch will discourage bluejays and sparrows, but draw cardinals, chicadees, and finches.

Good bird foods and the species they attract include:

Nut meats — cardinal, chickadee, finch, goldfinch, grosbeak, jay, junco, nuthatch, towhee, and woodpecker;

Dry seeds and grains — blackbird, bunting, cardinal, dove, finch, junco, jay, longspur, sparrows (all species);

Berries and fruits — bluebird, cardinal, finch, flicker, goldfinch, grosbeak, junco, robin, sapsucker, sparrows, (fox, song, house, whitethroated), starlings, waxwings, and most species of woodpeckers.

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Thoughts from the Distaff Corner By Anne Turner Distaff Corner

Returning to Jackson Hole after a four month absence, one of my first activities was a much anticipated visit to Jenny Lake, my favorite spot for viewing the Tetons. I stood gazing out across the lake, once again feeling the enchanting spell of the familiar stegosaurusback peak of Mt. Teewinot. . . Suddenly my peaceful absorption in this lovely setting was disrupted by an unfamiliar and persistent droning sound.

An infernal snowmobile? Fortunately, too early. A trespassing trail bike? Nope. Not a chain saw either. Damn, I thought looking up, it must be a low-flying plane. To my horror I caught sight of a new and unwelcome addition to the growing number of motorized and mechanized affronts to the wilderness and solitude seeker. A helicopter yet!

I turned in indignant disgust and stomped down the trail towards String Lake, muttering appropriate remarks to no one in sight. The rapturous mood of my homecoming was shattered.

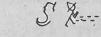
A few days later during the fall closing festivities at Teton Village, I saw the cattle in an adjacent field running frantically about. They were obviously frightened, but by no immediately apparent source that I could see. Then I heard the cause of our mutual disturbance overhead. It was coming in for a landing, ready to take another load of flatfooted, broad-beamed gawkers for an air-borne tour of the valley.

borne tour of the valley.

"Thrills and chills." "Get above it all."

"Experience The Great Out-Of-Doors with no physical effort." "See it all in just a few short minutes." The ads neglect to mention the fact of physical quarantine, the total lack of first-hand stimuli and sensation, the deafening roar, the terrified, stampeding wildlife, and above all, the complete absence of that unmatchable state of euphoria one experiences in close physical and spiritual harmony with nature. Even the destructive trail bikers and snowmobilers at least physically encounter the elements.

Watching the effect of this looney-bird on domestic livestock, I shuddered to think of the terror it would inspire in wild animals less accustomed to the idiocies of man. I tried to imagine the future of this beloved valley if jets were added to the numerous commercial and private planes — and now helicopters — defiling the area. Instinctively shutting off this dread thought, I went silently home.



Trash Is Costly

The nation's trash is piling up in terms of bulk and management costs. According to a recent study sponsored by the Environmental Protection Agency, Americans spend approximately \$4.5 billion to dispose of some 300 million tons of trash a year. The survey says collection costs account for about 75% of total waste management expenditures. It recommends reducing manpower on collection crews as the most economic solution.

Nor is waste disposal an exclusively urban headache. A problem yet to be solved is the removal of asto nding amounts of refuse on our nation's mountains. A recent article in the Smithsonian magazine reported that climbing expeditions had left their marks in litter and discarded equipment even on North America's highest peak, Alaska's 20,320-foot Mt. McKinley.



Full knee-deep lies the winter snow, And the winter winds are wearily sighing.

Tennyson: The Death of the Old Year

A People Powered Vehicle?

Four former General Motors men have developed a motorless vehicle which could eventually replace the automobile — at least for short-range transport.

The PPV (people powered vehicle) looks like an improbable cross-section between a car, a bicycle, and a motor boat. Weighing 100 pounds, the open, compact PPV has a carrying capacity of two adults in the adjustable front bucket seats and four shopping bags or two kids in the rear. It has three wheels, three speeds, a stick shift, a hand-brake, and can be pedaled by one or two riders. Average cruising speed is 12 to 15 mph, with short bursts as high as 35 mph attainable by two strong pedalers.

Conference Set

A "Conference on Spiritual Values in Leisure" will be held at LaForet Camp, Black Forest, Colorado, Monday afternoon through Wednesday noon, March 12-14, 1973, sponsored by the Department of Religious Activities at The Woodmoor Corporation.

The conference will address itself to the place of spiritual relationships in community development, recreation planning and leisure-time activities.

Keynote speaker will be the Rev. Gordon J. Dahl, senior pastor in the Lutheran Campus Ministry at the University of Minnesota. Dahl is the author of a recent book, Work, Play and Worship in a Leisure Oriented Society (Augsburg).

Attendance will be limited to eighty persons with allocations to clergy, government agencies working in leisure realms, community developers, private recreation organizations, Woodmoor community residents and Woodmoor staff members.

Cost of the conference for registration, meals and lodging will be \$30.00 per person. Interested persons should contact Douglas Wasson, Coordinator of Religious Activities for Woodmoor, Monument, Colorado 80132.

The designers are setting up three assembly lines in a small factory in a Detroit suburb and plan to turn out 4,000 PPV's every month. They are to be sold first in bicycle shops, then through other outlets at the suggested retail price of \$329.

Executives from both Ford and General Motors have expressed an interest in this potential rival. Public interest in the PPV's is predicted to be high on college campuses, in retirement areas, and by both families and young people alike.

The PPV's are expected to have basically the same appeal as the ever-popular bicycle. For the owner this means convenience, economy and ease of operation, good exercise and just plain fun. For the environment the benefits are big and obvious — no air pollution; no noise.

According to the designers' research, the PPV's will be subject to the same laws as those regulating the use of bicycles. They foresee the eventual construction of special PPV roads running parallel to most major roads. (While desirable for safety's sake, this would pose the unwanted problem of more asphalt and less space.) Also planned for the future is a deluxe model PPV which will sport an all-weather top and a radio.



Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

To keep cool in warm weather, we're told Air-conditioning is widely extolled. If we use all that power When summer's in flower, Then how'll we keep warm when it's cold?

Nathaniel Reed, Assistant Secretary of the Interior for Fish and Wildlife and Parks, has called for a moratorium on the hunting of eastern timber wolves. The animals are an endangered species. "There are only 500-1,000 eastern timber wolves left in the United States," said Reed. Most of the remaining wolves are in Minnesota with a few in Wisconsin and Michigan. The moratorium would be in effect until the completion of a nationwide recovery plan, now being prepared by the Fish and Wildlife Service's Office of Endangered Species.

Idaho Governor Cecil D. Andrus recently made a plea for homes for 13 bald and golden eagles wounded by hunters. More than 100 individuals and two dozen zoos responded to his request. Although the birds have all been pledged to zoos, home offers from private citizens keep coming in. The Department of the Interior will decide which zoos will receive the birds.

The Reno-Lake Tahoe, Nevada area has made an official bid to host the 1976 Winter Olympics. The proposed site would include the area from Squaw Valley, site of the 1960 Olympics at the north end of Lake Tahoe, to Reno. Lake Placid, New York, is the only other U.S. site formally bidding for the Olympics. The U.S. Olympic Committee is expected to make a choice sometime in January, 1973.

The world's largest city, Tokyo, Japan, has announced that it will pay all costs of medical treatment for pollution victims. Determining factors were not stated.

A federal court decision in Cheyenne, Wyoming, voided more than 1,500 mining claims held by Merle I. Zweifel and over 250 co-locators to mineral rights on federal lands in Wyoming. The court charged Zweifel and the co-locators with failure to comply with federal law in filing their claims. The suit alleged that most of the claims were filed simply by mailing a certificate to the county clerk, without staking out the land or investigating to determine the existence of valuable mineral deposits as required by law.

One of the world's most ancient cities has come up with a modern solution to its growing traffic problem. Rome's traffic manager plans to ban all private cars in the city center except those owned by residents of the areas concerned which will be identified by special stickers. Compensatory measures include increasing present bus lanes and subway train systems, and initiating a "park and ride" bus system. Motorists will be required to park outside the city center and, for approximately 11 cents, can ride on buses for an entire day throughout the city.



Letters

generated by its proposed Huntington Canyon plant and other good polluters in Utah.

I certainly agree with Mr. Edwards. False and misleading advertising is of concern to all of us. High Country News urges its readers to write the Federal Power Commission, 441 G St., N.W., Washington, D.C., and request that it forbid such misleading, promotional advertising by the power companies, and instead require advertising which promotes conservation of electric energy. Readers can also write their power companies and request that the companies follow the lead of Consolidated Edison of New York. That company's "Savea-Watt" Campaign has diverted all promotional advertising money to power conservation ads.

The Council on Economic Priorities Report on The Price of Power points out "...electric heat is efficient only at the point of use. Precisely because of the average 30 to 35 percent efficiency of electric generation and transmission, electric heating consumes twice as much fuel and therefore has twice the pollution potential as the 60 to 80 percent efficient 'old-fashioned' on-the-site oil or gas heating. . The claim that electric heating will enhance the environment in a community may be true only if the power plant is in some other community."

Dr. Dean E. Abrahamson, president of the Minnesota Committee for Environmental Information, writing in the Environmental Cost of Electric Power, has this to say about electric heating:

The use of electric space heating presents a singularly clear example of an increase in pollution associated with efforts of the utilities to maximize consumption. Because of the low efficiency of electric generation, for each unit of heat put into a house through electric space heating, two units of heat are added to the environment at the site of the power plant. Also, fossil-generated electricity used for space heating leads to three times as much carbon dioxide production, a several-fold increase in production of the oxides of nitrogen, and a several-thousand fold increase in sulfur oxide releases to the environment over those which would result were natural gas space heating employed. Electric home heating may appear to be clean and economical to the housewife, but it greatly compounds the total pollution problem. It seems reasonable to ask whether electric space heating should be permitted at all to say nothing of being touted as being "clean"!

Mr. Richard Kleindeinst Attorney General Department of Justice Washington, D.C. 20530

Dear Sir:

This correspondence refers to the attached excerpt taken from the environmental newspaper entitled "High Country News," which is published in Lander, Wyoming.

This particular reader of "High Country News" finds it most ironic that the editor uses his "power of the press" to encourage public pressure as a means to accelerate "justice," especially when the "justice" implied is nothing short of suggesting the lynching of Mr. Herman Werner.

I certainly question the integrity of this editor or any editor that attempts to portray the role of the jury and judge, resulting in possible prejudice of a forthcoming trial. Evidently, such an editor has some how forgotten that in our Democratic system a man is innocent until proven guilty. I simply cannot comprehend how the press can demonstrate belligerence to an individual who has not yet been privileged to a fair and impartial trial.

In my opinion, if this editor was fortunate enough to be only one tenth as senile as the eighty year old senior citizen that he sarcastically redicules, he would have more sense than to slander a proud native of Wyoming,

A The character presented incompany to

who has contributed so much to the state. The editors' criticism of our good governor is evidently not shared by the large majority of Wyoming citizens who elected Governor Hathaway to office.

In his radical approach and quest to demand "justice," the editor does not mention the initial questionable action of Wyoming's Senator McGee. How, for example, was a single public elected official so empowered as to grant immunity to Mr. Vogan, who after seeing "the handwriting on the wall" presented exaggerated testimony to save his own selfish skin. Admittedly, this testimony did assist in the conviction of some of Mr. Vogan's relatives along with foes, but the immunity permitted Mr. Vogan's numerous personal offenses to go unpunished and additionally, resulted in national slander upon our state and the Wyoming stockgrowers.

While I do not share the belief that we should hold the value of the eagle and other predators above that of the domestic animals of our state, I certainly do encourage justice. In doing so, I sincerely hope that Mr. Vogan's granted immunity, the careless editorial prejudice, the fact that sentences for admitted eagle killings to date have been minimal, possible political motivation, and adverse public sediment (sic) does not influence the trial of a man whom the people of Wyoming should be praising rather than ridiculing.

Very truly yours, Howard L. Apel Story, Wyoming 82842

cc: Senator Gale McGee
Senator Cliff Hansen
Governor Stan Hathaway
Mr. William H. Brown
Mr. Tom Bell, Editor
"High Country News"

Editor:

Your November 24 issue contained an uncritical report on the so-called "Outdoor Nation," instigated by Ford Motor Company. There is more to this than meets the eye. John Fialka wrote an expose' of "Outdoor Nation" which appeared in the Washington Star-News late in November, pointing out that the recreational-vehicles industry is counting on the new group to fight against controls over snowmobiles and off-road vehicles.

Both Friends of the Earth and the Sierra Club have declined to participate in "Outdoor Nation." As I told the organizers, Friends of the Earth would be glad to take part in discussions of outdoor recreation issues with diverse citizen and industry groups, but not in a forum that is organized and dominated by spokesmen for financial interests in the outdoor recreation industry.

Sincerely, George Alderson Legislative Director Friends of the Earth Washington, D.C.

".. Noted & Quoted .."

"Just as management should not run for cover when emission standards for the control of pollution sources are mandated for the protection of the health of the community, so also the citizens and workers should not give up the fight because it may be said that to have industry and jobs means we must have pollution. Pollution can be controlled. It is a practical, obtainable objective well within the realms of reasonable technology and economic cost."

Mi-MoKinist

I. W. Abel
President, United Steel
Workers of America

16-High Country News Friday, Jan. 5, 1973

Teton Wilderness Reviewed

Review and comments by Anne Turner

A revised environmental impact statement for the proposed Trois Teton Wilderness Area in Grand Teton National Park has been prepared by the National Park Service. The revised statement, which was presented to the public September 19, 1972, is the result of recommendations made during a public discussion of the preliminary wilderness proposal held in Jackson. Wyoming, on March 10, 1972.

held in Jackson, Wyoming, on March 10, 1972. The impact statement foresees some conflict, but indicates large favorability for the wilderness proposal which includes 115,807 acres of the total 310,350 park acreage, or 37% of Grand Teton National Park. Included in the proposal is almost the entire Teton range excluding only 4 acres on Rendezvous Mountain at the upper terminus of the aerial tramway. Also included are most of the lakes gracing the base of the range with the significant exclusion of Jackson, Jenny and String Lakes.

Jenny Lake, one of the most scenic areas in the park, was denied wilderness designation because of motorboat use on it. As it and its neighboring String Lake lie just outside the proposed wilderness boundary, increased use of this non-restricted area is apt to result in its more rapid degradation unless it is protected by inclusion in the wilderness proposal.

Some 5,100 acres were added to the original proposal as a result of the public hearing. Included were management zones and enclaves with the minimum facilities "necessary for the health and safety of the wilderness traveler, or the protection of the wilderness area."

An additional 20,850 acres subject to existing grazing rights have been recommended for potential wilderness inclusion by means of special designation by the Interior Secretary. These are a 1,650-acre portion of Phelps Lake and 19,200 acres in the Potholes and Signal Mountain area. The report states that "the Potholes area is of outstanding geologic importance and a crucial element of the scenic foreground of the Teton range. The highest priority is to be given to the protection of this area. At the present time the area contains about nine miles of ranch roads, a telephone line, and a 40-acre tract of State land which is to be acquired."

Large sections of the park are still subject to private grazing which existed prior to the establishment of Jackson Hole National Monument, incorporated into the park in 1950. Wyoming Senator Clifford P. Hansen is one of the stockmen using the area set aside by Congress to remain "unimpaired for the enjoyment of future generations." Hansen cattle occupy 11,000 acres of prime park land at a 10-year cost of \$300,000 to the taxpayer, according to a report in The Progressive.

Park wilderness policy, stated explicitly in the report says, "grazing is not an acceptable use in national park wilderness." The report continues, "None of the areas affected by grazing and stock driveways are to be free of grazing in the near future." Most of the ranchers involved hold life-tenure grazing rights.

The implication is clear: not until private grazing has been eliminated from the park will these areas be designated as wilderness. Until this can be accomplished, the "highest priority" Potholes area will just have to wait.

The report states that environmental, social and economic impacts of the wilderness proposal will be primarily beneficial. The preservation of this area in its primeval state will ensure a quality wilderness experience for many anxious to escape the pressures of urban life. It will provide educational benefits as an inviolate outdoor laboratory for scientific study. Wilderness designation will assure tighter controls over the types and degree of human use allowed, and the kinds of distinctive eco-systems existent.

Long-range economic benefits are also foreseen by the report. "In the long run, the area's inspirational benefits as wilderness can be expected to have a positive effect on the regional economy, as the relative scarcity of unspoiled wilderness and public demands for its unique pleasures, continue to increase."

Unfavorable effects of the proposal include the probable necessity of rationing back-country use. However, the report indicates rationing is likely to be necessary regardless of wilderness designation due to increased public demand for wilderness experience. While this may result in heavier use of non-wilderness park areas and eventually in additional restrictions, the report also states that less than 5% of park visitors venture more than ½ mile from their vehicles.

Construction of permanent structures for scientific research and additional public convenience facilities will be barred. Forbidding the use of motorized equipment is expected to result in short-range maintenance and rehabilitation cost increase.

A significant conflict is foreseen with the proposed expansion of the Jackson Hole airport within the park. Adverse effects of the runway expansion for jet accommodation would include noise and air traffic, considerably degrading the quality of the wilderness area. It could further hasten over-population of both wilderness and non-wilderness park areas.

Commercial interests favor airport expansion because of increased tourist trade anticipated in the Jackson Hole area. Despite such expectations, the report states that "the vast majority of visitors arrive by private automobile." It also says that the full range of environmental and economic impacts of the expansion are not yet known but that detailed studies are in progress.

Another adverse environmental factor may be involved in the management of backcountry campgrounds. According to the report, heavily used backcountry "often requires the use of helicopters for the removal of human waste." Such helicopter use, unless greatly restricted, would violate the nature of a wilderness area. If a pack-in, pack-out policy cannot be effectively implemented, more stringent restrictions should be imposed on backcountry use.

The report states that "elimination of the elk management program from the park is desirable." While discouraging hunting within the park as inconsistent with park policy, the report recommends intensified hunting adjoining areas for control purposes.

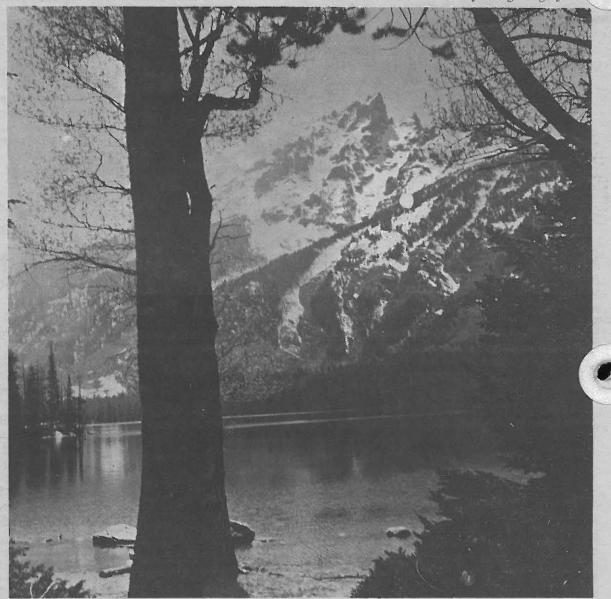
According to the report, the Forest Scis considering gaining wilderness status lands east of the proposed John D. Rockefeller Memorial Parkway to form a contiguous wilderness with the present Teton Wilderness. This would increase the proposed wilderness area by approximately 29,000 acres.



Harm Discounted

A "pall of secrecy" has been cast over the information needed to assess health effects of air pollution. That is the assessment of Canadian scientist, Dr. Theodore D. Sterling. In an address to the American Association for the Advancement of Science meeting in Washington, Dr. Sterling also pointed an accusing finger at the U.S. Public Health Service. He said the Service has tended, without proof, to discount air pollution as a major cause of lung cancer and chronic bronchopulmonary disease, while putting virtually the blame on cigarette smoking.

Photo by Marge Higley



Jenny Lake, one of the beauty spots of Grand Teton National Park, has not been included in park wilderness designation. The incompatible use of motorboats was the deciding factor.