

The Outdoor and Environmental Bi- Weekly

Friday, November 10, 1972

An open, rolling land virtually untouched by the hand of man characterizes the Wyoming region of oil shale interest. Beneath all these lands are huge deposits of low-grade oil shales. This scene is of the area south of Green River, Wyoming, looking toward the Utah-Colorado line. Behind the first line of hills stretches the upper reaches of Flaming Gorge Reservoir on the Green River.

Oil Shale Development A Colorado Perspective

Oil shale development is one of those problem areas which we wanted to treat in depth earlier in the game. Now, it appears that development could be in the offing. So without tarrying longer, we want to bring you a series of articles and perspectives on what oil shale is and what it portends for the West. The series begins with an article done by Bruce Hamilton of the ECO Oil Shale Study Group at Colorado State University. Interjected into his article are the comments by Mr. Frank B. Friedman of the legal division of Atlantic-Richfield Company. The latter is one of the companies which has been involved in pilot studies of oil shale retorting and refining. (Colony Development Operation in Colorado's Piceance Basin.) And interpolated behind Friedman's comments are the further remarks of Hamilton. Keep in mind that what is written here was done in March, 1972, before the three-volume, 1,150-page environmental impact statement was released, and

before the oil shale hearings.

The editor.

By Bruce Hamilton

Before last June not many people knew about oil shale. Not many people had to. Now, suddenly, we stand before the door of development. Oil shale has become a major issue.

The event that sparked this change was President Nixon's energy message last June. He stated, "I believe the time has come to begin the orderly formulation of an oil shale policy."

shale policy. . ."

These words meant very little to most Americans — with the exception of officials in the Department of the Interior, a few oil men and some residents of the Piceance Creek Basin in Colorado. Yet this declaration should be of concern to all Americans, especially

Coloradoans. Now industry, government, conservationists, and concerned citizens are under a mandate to understand the total ramifications of an "oil shale policy."

If oil shale ever becomes feasible to develop, and as a result, a large scale industry is established, the dimensions of development will be fantastic. We are dealing with what could become the biggest oil field in history. We are dealing with an environmental conflict that could eclipse the Alaska pipeline issue. We are dealing with possible revenues in the trillions of dollars. Clearly we must start informing ourselves.

IFriedman: In your introduction you assume that the oil shale industry will be "fantastic" and "the biggest oil field in history." A study by the National Petroleum Council which will be published in September indicates that in view of water availability problems the maximum size of the industry will probably be

(Please turn to page 4)

HIGH COUNTRY 37 Jone Belle

I write on November 8. Elections have been decided, as well as the general direction our country will take in the next four years. But here in the West, there are some matters not so clear-cut and well defined as to our direction. And those are matters which must be discussed in the next few months, before and during the sessions of the various legislatures.

It seems to me that at no time in the recent past have we been on such a significant watershed of decision-making. We can decide on a planned, controlled growth plan which does the least amount of environmental damage. Or we can default by doing nothing, or taking a superficial approach, which results in helter-skelter growth and environmental degradation. The history of development of California and the East Coast shows the latter course takes a terrible toll, not only of environmental values but also of human and social values. And in the long run, the short-term profits turn to astronomical deficits. You have only to look at the billion-dollar clean water bill for the next three years to see that it would have been far cheaper to keep clean water clean.

Much as many of us might wish, it would be unrealistic to think in terms of stopping absolute growth forthwith. That is a long-range problem which must be solved as quickly as possible — but one step at a time. That means we have to deal seriously but realistically with the world as it is.

It means no fooling, no platitudes, no bombast, no subterfuge. The campaign is over. Those who have been elected to represent us in the various legislatures, and in Congress, should hear from us. In other words, we either raise our voices and direct our destinies, or we timidly let George, whom we elected, do our thinking for us. And if George happens to be a lawyer for the mining companies, or an executive director of one of the special interest groups, we have only to blame ourselves for forfeiting one of our rights as a free citizen. We had our chance to deny him a chance to represent us rather than to those to whom he owes allegiance.

Politicans are always long on innocuous platitudes and short on specifics. Without a doubt every legislative candidate in Montana and Wyoming was for mother-hood, apple pie, and "quality environment." But how many of them do you suppose have even looked at a model strip mining act, or knows the most crucial factors to be considered in any kind of strip mining legislation? And of that number, how many of those prospective legislators, half of whom have now been elected, told their constituents exactly where they stood? Yet, a truly meaningful and effective strip mining act will be one of the most important endeavors for both the Montana and Wyoming Legislatures.

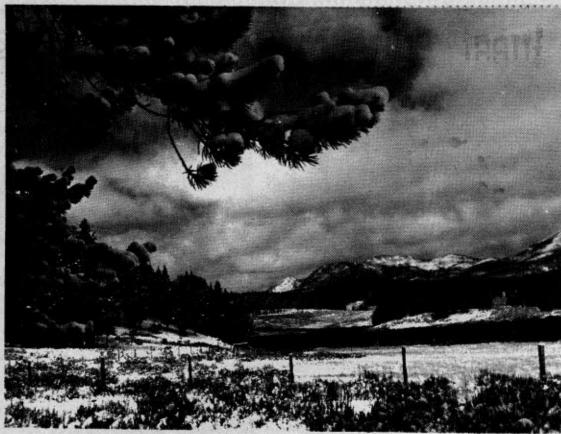
When the U.S. Senate failed to act on a stiff, tough, national strip mining act, Senator Clifford P. Hansen trumpeted across the state of Wyoming that now we had our chance. Now, Wyoming legislators could show how truly committed they were to effective reclamation and protection of air, water, land, and human resources. We shall see!

But sadly, it doesn't end there. We are going to have to have some meaningful land use planning, tighter controls of air and water pollution, and money enough to see that all of these are nothing more than empty promises.

More than that, we need a sense of direction. And here we need leadership from both the executive and legislative branches of our state governments. We need some policies spelled out as to just where we are going and how we mean to try to get there. The states of Oregon and Idaho seem to be fortunate in having chief executives not only far-seeing enough but courageous enough to enunciate such policy. They are fortunate.

God help the rest of us if we don't get such enlightened leadership. One year or two years from now may be too late to make meaningful decisions.

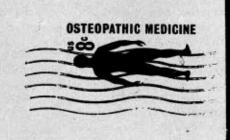




Suddenly, it's winter! But with lapses back into October-like weather, these first days of November can be enchanting in the Mountain West.

Letters To The Editor





Editor

Here is a check for the renewal of our subscription to your great paper. We all read it with great interest and enjoyment. We want to congratulate you on keeping your subscribers so up to date on all issues which affect us so greatly now and in the future. Ours is a great country and you certainly are doing your bit to help keep it so.

Sincerely, The George Simes Family Woodstock, Illinois

Editor:

Keep up the good work. You're doing a great job and keeping those of us in the Midwest informed about "high country" issues.

Wendell Beardsley Dept. of Forestry Iowa State University Ames, Iowa.

Editor:

It was a fine thing that Dr. and Mrs. Slocum did when they made copies of your publication available to individuals who would not know about it. He could not have selected a finer newspaper to put into the schools. I always enjoy the occasional copies that come my way, so in order to be assured of receiving it regularly I am enclosing my check.

My very best wishes for the continuation of the great service you give your readers in your dedication to conservation.

Very sincerely yours, Velma B. Johnston Executive Director, WHOA! (Wild Horse Organized Assistance) Reno, Nevada

Editor's note: Few weeks go by when we don't

receive such heartwarming letters as the above. I can only say that all of us here are most grateful and appreciative. We don't normally get to use all that come to us but we would like to share what we can with our readers and concerned fellows who share Planet Earth with us. Our deepest thanks to all of you who take the time to share your thoughts with us.





HIGH COUNTRY NEWS

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When Citizens Become Silent

Franklin Jones is a past president of the Idaho Wildlife Federation who now serves as president of the Pacific Northwest Conservation Council.

The editor.

By Franklin Jones

Over 2000 years ago the Greek philosopher Pericles said, "We regard a man who takes no interest in public affairs not as harmless, but as a useless character . . . "It is surprising how many things the ancient Greeks said many centuries ago are still appropriate in the modern-day world.

Well-informed and concerned citizens are necessary to keep a nation strong and truly "of the people, for the people, and by the people." When the citizens of a nation become silent and self-satisfied, the forces of evil move in.

The same rule applies in the field of conservation. The sportsman-conservationist never can relax completely. He alone has freedom of thought, speech and action needed to correct errors in conservation programs.

There are many well-trained and dedicated government employes charged with administering our natural resources. These people work for the U.S. Forest Service, Park Service, Bureau of Land Management, and similar state agencies. However, no matter how dedicated they might be, they are handcuffed by governmental policies and directives. Citizens may not be aware of the influence of the administration upon the activities of these public servants. Federal employes are part of the executive branch of the government. The chief executive is the President. He and his advisors and his cabinet exert a strong influence on the course of any government agency. The governor and his staff play a similar role in state bureaucracies.

For example, federal regulations require employes to refrain from promoting or opposing legislation related to their programs without the official sanction of higher authority. High officials frown upon any criticism of department policy by employes. Punishment can occur with no formal hearing or record. The employe may not know he is being punished and may wonder why he hasn't been promoted. He may walk around with a knife sticking in his back and not realize it's there.

It has been said that our democratic form of government is not perfect but it is better

than any other form known on this earth. One of the greatest strengths of our system is that citizens are free to point out its weaknesses. One of the greatest weaknesses of our system is that elections are influenced by money. Candidates need money in order to make themselves known to the people. Campaign funds are fattened by large contributions from business and labor organizations. Why do these organizations contribute? Because they expect to gain benefits if certain candidates are elected. What must the candidate do to repay their support? He must try to adjust policies and actions in the executive branch, as well as influence legislation, in directions that will repay his contributors.

This sly influence on our government affects our conservation agencies. The effects are not often obvious. They are buried away in the government gobble-de-gook of memorandums, directives and administrative manuals. Selections, appointments and transfers of key personnel are influenced. It would be almost impossible to prove any relationship between campaign contributions and the resulting effects in many cases.

Sometimes vast changes are made in the organization of an agency for various high-principled and well-publicized reasons — but the real reasons may be screened from the public. If a government employe criticizes such action, even if speaking simply as a citizen, he is quickly silenced. The congressional delegations are extremely sensitive to exposure which might come from a civil servant's inside knowledge. The employe who has a family to support and who wishes to remain where he is presently employed learns to keep his mouth shut.

Therefore, citizen-conservationists must keep informed and remain forever alert. They must be ready to speak up. The sport who sits in front of his television set at night instead of attending a monthly meeting of his local conservation club is shirking his responsibility. Citizens who wish to sit back and enjoy their TV and their fishing and hunting, satisfied that all's well in the conservation world, are giving up their rights and obligations. The same applies to the neglect of all national problems. These silent citizens may wake up some morning and find their rights have been taken away from

them. They will become puppets and they will deserve what they get.

High Country News-3 Friday, Nov. 10, 1972





Reprinted from the DESERET NEWS, October 26, 1972

There Are Two Ways To Go

There are only two ways to solve the nation's growing energy crisis: By finding and developing more oil, gas, electricity, solar, and other energy sources — or by learning to use those sources we now have more efficiently.

That much is apparent in the recent report from an interagency staff headed by the President's Office of Emergency Preparedness. The report declared that the U.S. could cut its energy requirements by one-fourth in the next 20 years if it is willing to adopt tough conservation practices.

There is little doubt that every conservation avenue must be pursued. By 1980, energy consumption in the U.S. is expected to increase by 39 percent by conservative standards. And

by 1990, fuel requirements will be twice what they were in 1971.

There are several things every home or car owner can do now to help solve this knotty problem. Among them:

— If you don't really need a car, don't buy one. That goes for second and third cars, as well. If you drive to work, arrange a car-pool for commuting, or better yet, ride the bus.

— Burn a fuel rated the most efficient for your car engine in terms of emission reduction. Get an engine tune-up every 10,000 miles or at least once a year, and be sure to change oil and air filters regularly.

— When building a house, be sure it's well insulated and tree-shaded. This will minimize fuel consumption in winter and air-conditioning load in summer.

 In winter, turn your thermostat down a few degrees. Have your home heating checked annually.

— Don't use heavy electrical appliances, such as washers and driers, during hours when the electrical load is at its peak, usually 5 to 7 p.m. Turn out lights not being used, and use low-wattage bulbs in lamps not used for reading.

Remember, you're an energy-consumer and any steps you take to cut down the amount you consume will not only save you money, but add to the nation's store of dwindling resources.

tat

Oil Shale Development

approximately 750,000 to one million barrels a day. This makes the industry far from the largest field even in the United States. For example, it is contemplated that the proposed Alaskan pipeline will at its peak be eventually sending two million barrels a day to market. Nor is the Alaskan field anywhere near the largest field when compared to the immense fields in Saudi Arabia and Kuwait. I am not sure as to the basis of your comment that we "are dealing with possible revenues in the trillions of dollars." Since the size of the industry is limited, these figures need to be at least clarified.]

[Hamilton: I am just stating the possibility. It cannot be denied that this is the largest hydrocarbon deposit known to man.]

[Friedman: Moreover, in view of the size of the industry it is hardly likely that this should create major environmental conflicts. Particularly in dealing with room and pillar mining, only a relatively small portion of the area mined (8%) is disturbed. As indicated in our comments on water and air, the potential environmental problems in this area are not insurmountable. Nor has the revegetation, based on our successful studies, proved to be an insurmountable problem. Again, because of water availability, there simply cannot be that many plants operating at one time.]

IEditor's note: re,revegetation, the draft environmental impact statement says (at I-50, Vol. I): Additional research is required to attain longer range revegetation goals to reestablish the natural plant community, or suitable replacement, to serve as wildlife food and cover. . Particular emphasis is needed on developing additional techniques to create nutrient and top soil structure suitable for re-establishment of permanent vegetations.]

WHAT IS OIL SHALE?

Oil shale is not oil; it is not shale. It is a unique, relatively impermeable sedimentary rock that was deposited on the bottom of lakes that existed fifty to seventy-five million years ago in Eocene times. These lakes once covered much of Utah, Wyoming, and western Colorado, where the richest oil shale beds in the world are now located. Today, this geologic area is called the Green River Formation.

Locked up in oil shale is a solid hydrocarbon deposit known as kerogen. When heated to 900 degrees F., kerogen yields a heavy hydrocarbon similar to petroleum. Kerogen constitutes ten to twenty percent of the total weight of the rock. The remainder as far as oil products are concerned, is waste. Oil yields from this process vary from five gallons per ton for relatively poor grade oil shale, to over 80 gallons per ton for extremely rich deposits. The richest oil-bearing layer varies from 15 feet to 2000 feet in thickness. In some places the oil-bearing layer is exposed at the surface in outcroppings. Most deposits lie under overburden that is as thick as 1200 feet in places.

METHODS OF RECOVERY

There are two proposed methods for recovering oil from oil shale. One is the mining of oil shale by underground or open pit techniques. The mined oil shale is then processed in specially designed retorting systems. Three pilot plants have been built and operated to test three different retorting schemes. The second method is called "in situ." This form of recovery involves heating the oil shale in place without moving the rock. Heat, from compressed steam, is introduced into the oil shale layers and the kerogen yields its oil while still underground. The oil is then pumped to the surface.

Of the two recovery methods, underground mining and surface retorting has undergone the

largest amount of research and development. It is generally thought to be the most likely method to be used during the first generation of oil shale development.

EXTENT & LOCATION OF THE RESOURCE

Oil shale deposits in the Green River Formation underlie 25,000 square miles, but not all of these deposits are commercially exploitable. The highest grade deposits (averaging 25 gallons per ton or more) underlie 17,000 square miles or eleven million acres. This land could yield as much as 600 billion barrels of oil (1 barrel equals 42 gallons), according to the U.S. Department of the Interior. Compare that figure with our present oil consumption of five and one-half billion barrels per year.

I Friedman: The figure of 600 billion barrels is not realistic. At best there are 60 billion barrels of so-called Class I reserves, or reserves which produce sufficient gallonage per ton to make them mineable within the foreseeable future. . . Your discussion of the Green River formation as possibly one of the largest oil fields should be qualified by the fact that in view of water availability it can in no way produce as if it were one of the largest oil fields. l

[Hamilton: If the economics prove favorable, or the "energy crisis" is severe enough, Class I reserves will not be the only ones tapped.]

The Oil and Gas Journal (using a 70 percent recoverable estimate on deposits yielding 15 gallons per ton or more) stated that oil shale from this three-state area "could yield 1031 billion barrels." This is "three times the total (proved) crude-oil reserves of the entire world today; five times greater than those of the U.S. crude reserves." The Green River Formation could very well become the largest oil field in the world.

Most of this resource presently belongs to the American people. Of the recoverable oil, 80-82 percent is on public lands. Western Colorado is by far the richest area in the three-state formation; eighty percent of the oil in high grade deposits is deposited there. Almost all of these high grade Colorado deposits are in the Piceance Creek Basin between the White and Colorado Rivers in northwestern Colorado near the Utah border. Interest has

been shown in Utah and Wyoming and limited activity has taken place there, but by far the greatest interest and the most activity is in the Piceance Creek Basin.

ROLE OF THE FEDERAL GOVERNMENT

Industry has been invited on to the federal lands to develop an oil shale industry through a federal leasing program run by the Department of the Interior. Under the 1920 Mineral Leasing Act, which reserves non-metalliferous minerals (such as oil shale) on the public lands for leasing, the maximum size for a leased tract is 5120 acres for one concern. These maximum-sized tracts are being offered to interested oil companies by the Department of the Interior. The government has proposed leasing two sites in each of the three states. If all six of the leasing sites are let, the total land area directly affected would be about 50,000 acres (this figure includes off-site land requirements). Interior estimates that the leases would affect about 0.5 percent of all commercially exploitable land, but it should be pointed out that this would probably be the 0.5 percent best suited for development.

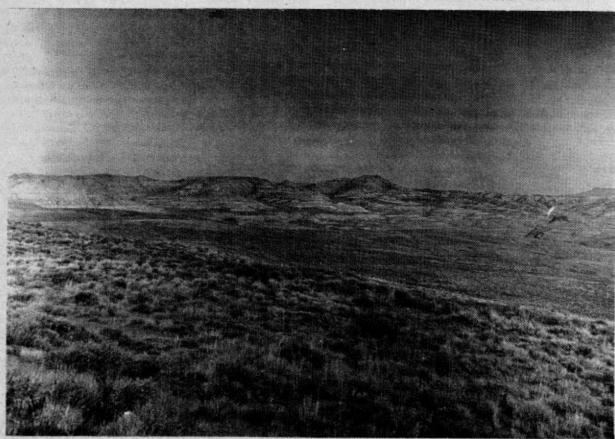
Fifteen oil companies have submitted nominations for twenty-five tracts of land. Seventeen are in the Piceance Basin, five in Utah, and three in Wyoming.

years, more than sufficient land in private ownership to support the development of an oil shale industry. There are 400,000 acres of private land in Colorado containing an estimated 210 billion barrels of oil in place as oil shale. . . The companies who are most likely to bid on the proposed lease sale are the same companies who now hold private land. . .

Paul M. Dougan
Equity Oil Company
Salt Lake City, Utah
Part of statement before the public
hearing on oil shale leasing, Denver.

Because this is a government initiated project affecting public lands, an environmental impact study will be done in accordance with the National Environmental Policy Act. This

(Continued on page 15)



Low-grade oil shale formations outcrop along the face of these hills in southern Wyoming. It is anticipated that in such areas as these some method of "in situ" retorting of the oil shale will be developed. Such "in situ" methods may disturb a vast surface area because of the necessary network of roads, pipelines, and other accessory works.

by Verne Huser

The day I was notified that I'd been selected executive director of the Utah Environment Center (Utah's equivalent to the Wyoming Outdoor Coordinating Council or the Oregon or Idaho Environmental Council or the Colorado Outdoor Coordinating Council), a 16-inch pipeline carrying oil across the Four Corners area split and spilled an unknown quantity of oil into the environment.

It didn't take the oil long to find its way down to the nearby San Juan River, a former tributary of the Colorado when it was still a river. Now the San Juan is a source of Lake Powell, the reservoir that has backed up behind Glen Canyon Dam. As it did it drowned The Place No One Knew. Sadly, no one knew it well enough to save it from inundation.

By the weekend the oil slick that formed on the San Juan River — 25 miles long at times — had reached the upper limits of the San Juan Arm of Lake Powell. It left behind it a 138-mile scar of oil-stained sand and sand-stone. Oil company officials (Texaco) and personnel from half-a-dozen government agencies (at taxpayers' expense) hoped to contain the slick once it reached the lovely lake.

Unable to get away from Salt Lake City until Friday afternoon — more than three days after the break — I drove to Bullfrog Basin on Lake Powell. I'd been advised by Chief Ranger Bob White that my best bet for seeing the slick was to rent a boat at Bullfrog, a Lake Powell Marina, and motor to the slick some seventy miles away.

It was still cool as I headed down the lake at what I'd been told would be 20 mph but which actually turned out to be about 14. It took me more than five hours to reach the slick

It is impressive country: red sand and red sandstone, gray sagebrush and green junipers but mostly blue lake surface and blue sky separated by the angry gash of colorful rock weirdly shaped by the powers of erosion over ten thousand centuries. Cliffs are bright with desert varnish and pale with newly-flaked-off scars and dark with wet-mark draperies.

A few ravens glided about, their shadows flickering along the sandstone walls, and the waters of Lake Powell were thick with western grebes. A great blue heron fished from a barely-covered rock along the lake shore, and a snowy egret winged its way across the lake. A single brown pelican took off and reeled away How would these birds be affected by the oil spill?

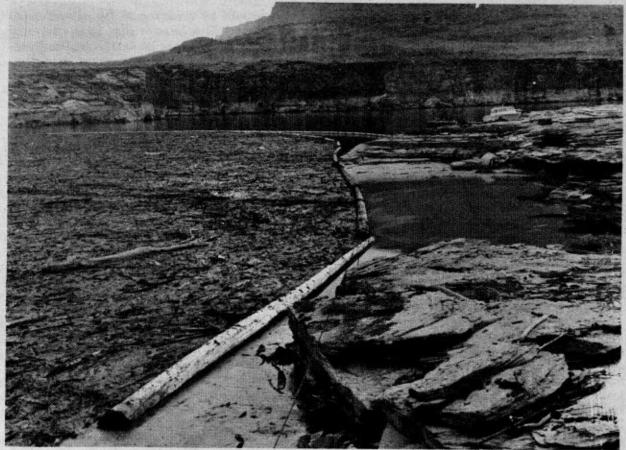
A number of power boats — sight-seers and fishermen and one water skier — kept the lake surface humming, but I couldn't help thinking of all the aesthetic treasures that lay buried beneath those deep waters.

I'd been motoring up the San Juan Arm for more than two hours when I saw a Park Service boat, which I waved down to ask "Where's the oil slick?" About three more miles, I learned, and continuing my trip, I noticed that the waters were now muddy, full of silt and debris from the input of the San Juan — but no oil yet.

Then the huge NPS (National Park Service) LCM (Landing Craft Material) came into sight like an ancient Mississippi River steamboat belching out smoke. I learned later that it had just delivered a bulldozer to the site of the slick.

Soon I could make out activities ahead: a helicopter beating the air, then another, more boats, people on shore, then a boom in the water, and finally, a mass of gunk. I saw no oil, just debris covered with mud and gook.

I landed and tied up on the left-hand shore where one helicopter, a bulldozer, and half-adozen men stood. The helicopter left before I had a chance to talk to any of its occupants—and thereby I missed my aerial view of the slick (it was a Bureau of Reclamation vehicle being



The oil spill, contained by log boom, located on the San Juan Arm of Lake Powell. Some oil later leaked through because of flooding down the San Juan River. This view is downstream toward Lake Powell.

used to show the area to media men, the last of whom were just leaving as I arrived).

Dick Prouty, staff writer, and Bill Wunsch, photographer, with the Denver Post, filled me in on details: an hour or two before the place had been swarming with media representatives, oil company personnel who weren't saying much, and feds of one kind or another (Park Service, Bureau of Reclamation, EPA, Army Corps of Engineers, Coast Guard, etc.). I'd missed the action, but the slick was still there looking gunky.

I moved over to take some pictures. The boom seemed to be containing the slick, and black oil showed through the mud-covered debris in several places. The boom stretched completely across the reservoir arm and backed the slick into the mouth of a small tributary stream, dry above present highwater mark (about 3603).

What would they do with this mess? How would they move it? What would be the long range effect on the area? On the Alaska

I talked with L.P. Schraub of the Texas-New Mexico Pipeline Company, a subsidiary of Texaco: they'd move it up above ultimate highwater mark (3700) after covering the slick with straw to soak up the oil; they'd dig a pit, perhaps burn the oil and bury the residue — it was still a little uncertain, and Schraub, a graduate of Texas A & M, was muzzled by company policy and could say little. He was obviously uncomfortable in the squeeze position in which he found himself — just the day before he'd been in a comfortable office in Houston.

A large boat that had left the slick area just as I'd arrived returned, having completed the setting of a secondary boom a quarter-mile downstream. The Denver Post representatives left to walk to an airstrip a mile away for a flight out. The oil company men seemed to be holding a confab. It was growing late, and there was little more for me to see or learn. I headed back down the lake, skirting the secondary boom, and watching as the afternoon light played on cliff and cloud and the waters of Lake Powell's San Juan Arm.

And I thought about the spill: why do they let such things happen? A similar spill occurred just seven years ago — now here again. And they still want to build a pipeline across the Alaskan tundra? A few more dollars spent on

surveillance might have prevented the spill or at least discovered it earlier, and certainly the oil companies have plenty of money.

Are they so money-mad, so profit hungry that they refuse to take the most basic precautions? That's what happened at Santa Barbara and in the Gulf of Mexico. It happens time and time again, often in direct violation of the laws governing such things. And what comes of it? A slap on the wrist, a fine that hurts less than a mosquito bite?

Who should be held responsible? The oil company seems to take a great deal of the responsibility, attempting to save face, but they really don't get the point. They are so used to paying for their mistakes, they've learned to write off the expense as an operating cost. But that's an internal cost. What about the external costs, the natural features stained, the wildlife destroyed, the aesthetic degradation?

And what about the thousands of dollars of tax-payers' money wasted in all the government agents gathered at the spill like so many hornets to melon in mid-summer? And what about future spills? Oil spills have been happening with marked regularity all over the world, so much so that we have become insensitive to them. We — like the carp that are becoming more plentiful on Lake Powell — have begun to adjust to the situation 'til it no longer bothers us enough to do anything about it.

And so we'll have an Alaskan pipeline in the name of national security or some such trumped-up excuse that doesn't hold water when the real reason is greater profit for the oil companies and often at public expense. So, too, oil companies continue to plunder the planet and put blinders on the politicians and dupe the gasoline-consuming public.

And here was I, motoring down Lake Powell, the watery grave of Glen Canyon—the place no one knew. We know enough now to put an end to this ridiculous power struggle, but we don't have enough sense to stop it. Bigger is still better in too many minds. Technology isn't going to save us from ourselves. It is abused technology that has gotten us where we are.

What we need is a re-ordering of our priorities. The defeat of the SST was a step in the right direction (how did your congress(Please turn to page 12)

e Wild Missouri - A Decision

Should we make the 180 miles of freeflowing Missouri in Montana a part of the "Wild and Scenic Rivers System?" A team of federal and state officials have been studying the river for more than a year to determine if it is eligible for this inclusion. Now they need to know how the people of Montana, and others, feel about the river. To get public response, the Bureau of Outdoor Recreation has scheduled three meetings in Montana: November 14 - Fort Benton (Elementary School Auditorium, 7 p.m.), November 15 Havre (North Montana College, Science-Math Building, 7 p.m.), and November 16 Lewistown (Yogo Inn, 7 p.m.).

If you are interested in giving the river the protection of the "Wild and Scenic River" status, be sure to appear at one of these meetings and express your views. Or if that is impossible, write a letter expressing your

concern for the river.

The Montana Wilderness Association feels that the river should have the complete protection of the "Wild and Scenic Rivers System" and that the boundaries established should be broad enough to include all important historical sites and archeological sites, as well as the famous cliffs and rock formations which were landmarks for the steamboat captains. "Wild and Scenic River" status would ensure that no additional dams could be built on this stretch

The Association feels the portion of river from Fort Benton to the Fred Robinson bridge should be given protection because this is the last unharnessed stretch of the river, remaining largely as undeveloped and wild as it was when Lewis and Clark explored it. Some other people have expressed concern that if we allow this section of river to stay undeveloped, many economic gains for Montana will be lost. The Association feels that an undeveloped river has great economic potential for the state, and acts as a magnet to attract many kinds of people to the river and its surroundings.

Some people have expressed concern that creating a "Wild and Scenic River" would remove from the tax rolls of Fergus County, Chouteau County, Blaine County, Phillips County, and the State of Montana all of the acres on both sides of the river for 180 miles. These people have not studied the land ownership of the acres bordering the river. More than half of the adjoining acres are already in public ownership, and do not now contribute to the tax rolls of the counties or the state.

Tourism is a growing and important business in Montana. The wild river is a favorite float trip, and is now supporting several guide outfits which take many out-of-state visitors down the river each summer. Some people float just to enjoy the scenery and the remoteness of the area, but others come because of the outstanding historical significance. They are thrilled to be able to actually walk on the campsites of Lewis and Clark, to see the remains of old fur trading forts, to feel the pull of the river current through rapids that once were barriers to steamboat travel. In the fall, many hunters roam the Missouri Breaks, and some ranchers supplement their cash income by acting as guides to hunters. Some hunters float the river in search of ducks and geese. All of these uses of the river would continue if the river were part of the "Wild and Scenic Rivers system."

The ranchers who depend upon the river bottoms for grazing, and the river itself for livestock watering would not lose these benefits under the proposed legislation. Grazing districts now established would not be destroyed by this proposal. If a broad boundary is adopted for the river, the view from the river would be protected from additional road building, or from additional agricultural or industrial installations, so that all of the

view would be preserved in its natural state. The Association believes that it is vital that this "line of sight" be protected by the boundaries established, and that the most important and scenic side canyons also be included in the proposal.

There is some concern among businessmen and ranchers that putting the Missouri into this special status would prevent the building of a bridge at the mouth of the Judith River. This is not so. The area at the mouth of the Judith is already developed and now offers a ferry crossing of the river. This site is one of several suggested by the Montana Fish and Game Department for development as a camp and boat-launch site. A bridge here would aid the ranchers without detracting from the recreational value of the river.

We need to think in terms of protecting the fragile ecology of the whole river and the adjacent lands from people pressure, too. It is inevitable that more and more people will be using the river, even if no legislation is passed. We need protection against commercial development that would destroy the quietude, and we need protection just from the human erosion resulting from use. Both of these protections would be part of the plan for "Wild and Scenic Rivers" status.

We see many threats to this remnant of the long Missouri. Everyone seems to have plans for the water! The plans for huge steamgenerated electric plants, utilizing the strippable coal in Wyoming and Montana, require enormous amounts of water. The power companies have already announced that they'll need all of the water storage of the Beartooth Mountains and all of the Yellowstone River, They also have plans for aqueducts from the Missouri to the Yellowstone, to increase the available water!

For years, the Corps of Engineers has been anxious to build two more dams on the Missouri in the name of flood control, one just below Fort Benton, and the second at Cow Island, near the Fred Robinson bridge.

A new threat is the land-boom in Montana resulting from recreational home-site development. Unless the broadest boundaries are established for the Missouri as a wild and

scenic river, we may save the river itself only to see all the famous cliffs and historical sites erupting with recreational homes.

If you believe in the wild Missouri, your voice must be heard now! If you can, appear at one of the hearings in Montana and express your views. It is helpful if you can bring with you copies of the statement you wish to make, but if you can't prepare copies, come anyway and speak! If you cannot appear, write at once asking that your testimony be added to the hearing record. Send your letter to: Mr. Harold R. Green, Acting Regional Director, Bureau of Outdoor Recreation, Box 25387, Denver Federal Center, Denver, Colorado

It would be very helpful if you could send copies of your statement to your own congressman so that he'll be informed when the proposal reaches congress.

When you testify or write, remember these key points:

1) We are talking only about that stretch of river between Fort Benton and the Fred Robinson Bridge;

2) The Montana Wilderness Association believes that a wild river will be an economic plus for Montana;

3) More than half of the acres involved are already in public ownership;

4) The Montana Chamber of Commerce has endorsed the concept of a wild and scenic status for this section of the river;

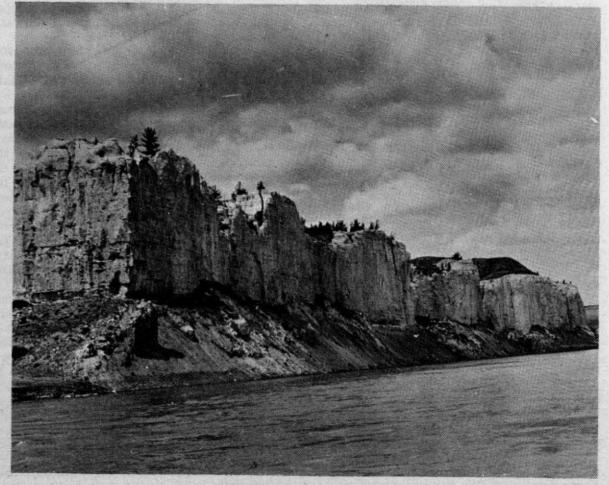
5) The Montana Wilderness Association believes that the boundaries of the "Wild and Scenic River" should extend from the river itself to "line of sight," including major cliffs, and the most significant side canyons;

6) All important historical sites and archeological sites should be given the protection of

this legislation;

Establishing a "wild and scenic river" would not prevent continued agricultural use, it would only regulate changes that could be made within "line of sight."

The Bureau of Outdoor Recreation will hold the public meeting record open ten days after November 16 for additional statements and letters on its "Wild and Scenic River" plans for the Missouri.



Steamboat Rock on Montana's Wild Missouri River is one of the historic sites which needs protection under the Wild and Scenic Rivers Act. This scenic landmark is near the May 30, 1805, campsite of the Lewis and Clark Expedition.

Poisons on the Comeback?

High Country News-7 Friday, Nov. 10, 1972

esself generally daily a

As most conservationists have now sadly realized, one of the major environmental illusions of 1972 has been that predator poisoning - with cyanide, strychnine, thallium and 1080 - is a thing of the past.

Despite the landmark poison bans of February and March of this year - first by President Nixon (outlawing poisons for predators on public lands) and then by the Environmental Protection Agency (halting interstate commerce of certain predator poisons) - the killing has continued, though more discretely.

One apparently common practice has been to order poisons for use against rodents (a use not covered by either federal order), and then covertly re-route the chemicals into the field against predators. It is also believed that both counties and private associations in several western states stockpiled large supplies of poison prior to the effective dates of the two government bans.

Now it has been learned that the National Wool Growers Association, fresh from a successful lobbying effort against sounder anti-poison laws during the 92nd Congress, is actively planning an all-out blitz against both EPA and the President. The Association's overriding purpose is to have the poison bans lifted.

The following is the text of a letter dated September 22, 1972, and signed by Edwin E. Marsh, Executive Secretary of the National Wool Growers Association. It was sent to various members of the sheep industry, and is reprinted here in its substantive entirety without further comment.

High Country News readers having different views are urged to express them directly to appropriate U.S. Senators and Representatives, to Mr. William Ruckelshaus of EPA, and to President Nixon.

Vern Vivion (President, National Wool Growers Assn.) has asked me to advise you of a special meeting of vital importance to the entire sheep raising industry of the United States. It will be held in Denver on October 16th and 17th. Both Vern and I urge you, and any other appropriate officials of your Association to do all you can to attend.

The purpose of the meeting will be to draw up a petition to William D. Ruckelshaus, Administrator of the Environmental Protection Agency, requesting the use of chemical toxicants for predator control - in other words, modification of the order of March 9, 1972, which prohibited the shipment and sale in interstate commerce of certain poisons used as predicides. Hopefully, all member associations will join as parties to the petition.

The Washington law firm retained by the National Association, Dawson, Quinn, Riddell, Taylor & Davis, and in particular Messrs. Arthur Lee Quinn and M. Joseph Stoutenburgh, have advised us that in their view the time has come to take the offensive and press the position of a united industry on E.P.A. in order to reach a workable compromise for the use of

chemical poisons. The proposal to E.P.A. would be regarded as the opening salvo in the battle to assert and protect the rights of the nation's sheep farmers. It should be coordinated with a "political action campaign," designed to muster all possible support of Senators and Congressmen from sheep producing states. It is to be hoped that heavy pressure on E.P.A., and acceptance in principle of our position, would also culminate in fresh thinking within the Nixon Administration, and bring about more effective animal damage control on Federal lands than is now permitted. Ultimately, our goal may be the introduction in Congress of favorable legislation which, if enacted, would assure the sheep industry of proper safeguards

from predators.

As initially conceived, the petition to E.P.A. would call for the "registering" of "user groups" in individual States under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), which would be responsible for the dispensing of specified poisons for predator control under strictly supervised conditions. It is essential for every potential user group to participate in the discussions next month.

APPROXIMATE AND A CONTRACT OF THE PARTY AND ADDRESS.



During the first week of October you may expect to receive a preliminary outline of the thinking of our attorneys and also suggestions on what materials should be brought to the meeting and advice on conducting a "political action campaign" in your State. The latter would entail a program of personal meetings with Congressional and Senatorial candidates, in addition to State party organizations, to enlist their assistance with the E.P.A. action.

The time has come for the sheep farmers of the United States to unite in common action to preserve a vital American industry. Vern and I hope you will join us and our attorneys in Denver next month to prepare for this very

important step.

Would you kindly return the enclosed form to our Salt Lake City office as soon as possible so that we will be certain to reserve sufficient hotel space. You will be advised of the conference location and meeting schedule as soon as it has been finalized.

Letter Reviewed

Because of its pertinence, the following letter to the editor is reprinted from the Casper Star-Tribune, February 13, 1972.

Editor:

I would like to comment on your Feb. 10 editorial under the heading: "The Plight of Sheepmen."

I don't think that President Nixon's order banning poisons to control predators will force any sheepmen out of business.

The free enterprise system is the best regulator for any business. If you can't sell your product for enough to cover your overhead, losses, or at least break even you quit business. Less products make the price go up. The remaining people in that business make a profit, simple supply and demand.

Wool subsidies, cheap grazing leases, help in predator control through the years has made the sheep industry too weak to stand on its own two feet. Get rid of all coyotes in the country and it would be bad winter, bad spring, high grazing fees, need for more sub-

Limits Set

Limits on the number of horses and mules to be used by any one party visiting the back country and wilderness areas have been proposed jointly by supervisors and superintendents of five national forests and two national parks in Wyoming, Idaho and Montana.

Supervisors of the Gallatin, Custer, Shoshone, Teton and Targhee National Forests and Superintendents of Yellowstone and Grand Teton National Parks are jointly proposing a maximum limit of 25 horses or mules in any one party visiting the above-named areas. Limits might vary locally depending on vegetative productivity, watershed protection problems, trail conditions, time of year and other factors. This management practice is proposed to be implemented at the start of the 1973

Parties wishing to travel through more than one forest or park under this proposal would need advance clearance from the administrator of each unit. Numbers of stock in such parties would be governed by the fewest number of animals allowed within any unit along the proposed route.

Overuse of vegetative cover by grazing and severe damage to trails by large numbers of stock are the primary reasons for proposing this limit. Those who use these areas are invited to submit comments and suggestions to their local forest supervisor or park superintendent.

sidies further making the sheep industry lean harder on someone elses shoulder.

The small sheepman will make it because he keeps a close watch on his flock shooting or driving off predators. The large sheepmen will make it because his loss to predators is less than the maintenance on his city penthouse apartment or his townhouse acres.

Remove the crutches that are holding up the sheep industry and some will fall, but the remaining will be a stronger industry.

I think the biggest problem with the sheep industry today is that they have (pardon the pun) - "Cried Wolf Once Too Often!"

Lowell Anderson Box 536 Mills, Wyoming

Osprey Killed

COLUMBUS, Nebr. - Four ospreys, uncommon and beautiful fish hawks that have been drastically reduced in numbers by pesticides, spent several weeks on a lake near Columbus before one was shot and the rest moved out.

Ospreys have been showing up at the Wagner Lake area at the southwest corner of Columbus for the past several years, but usually only one or two appeared. This year, however, four birds moved into the area in mid-September and stayed on into October.

The Wagner Lake area is comprised of several old sandpits dotted with homes and summer cottages. For several weeks, area residents were treated to the sight of the birds diving into the water from heights of 60 to 80 feet and flying off with eight to ten-inch fish in their talons. When not performing their aerobatics, the birds could often be seer on their favorite perches, television antenna on the homes and cottages, according to Jim Ernst, a Wagner Lake resident.

A few days before the birds moved out, tragedy struck one of them in the form of a thoughtless and law-breaking gunner, apparently brandishing a .22 caliber rifle. One of the ospreys was found dead, where he had apparently fallen from one of his favorite antennas. According to the Game and Parks Commission, the osprey is protected by both state and federal law. Anyone convicted of killing an osprey could face fines up to \$500, a prison sentence of one year, or both, under the federal law.

The osprey is a large bird, with a wingspread up to six feet. It is black, with white underside and head. It feeds almost exclusively on fish and is quite proficient at snaring them with its talons.





The Diggin'est Critte

We tend to think of the wildlife of our great American west in terms brings to mind pictures of a majestic elk bugling in a mountain meadow waterplants in a lily covered pond.

All too often we forget about the smaller dwellers of our wildlands, the badger for instance, play an extremely beneficial role in maintaining necessary for a healthy environment.

Let's take a closer look at the badger. Just what kind of an animal creature? Unlikely as it may seem, the badger is ope of the largest America Naturalists tell us that he carefully guards his privacy. We also know, hower quite aggressive when disturbed. That age old phrase of "whipping his with badger's temperament.

You're liable to encounter the badger just about anywhere you find g predator and his prey includes most of the burrowing rodents which in fond of ground squirrels, rabbits, pocket gophers, and mice. His long shar are well designed for the constant digging he engages in while in pursuit of

worked hard to eradicate the prairie dog and now the badger must search eradication of the prairie dog has also, unfortunately, greatly restricted the Ecologists refer to the badger as an "intermediate consumer." He occup

Prairie dogs once comprised a great portion of the badgers' diet. Man ho

Ecologists refer to the badger as an "intermediate consumer." He occup scheme by providing, along with other small predators, a check on the poseed eating "primary consumers" such as the rodents.

Perhaps, someday, you'll have the good fortune to cross paths wit probably chuckle at this small furry creature. After all, he does look a little cross a skunk with a racoon. But while you're smiling to yourself rement wild vorld.



This unique photographic sequence was filmed with a totally 'woof west-central Nevada. A Mamiya/Sekor 1000 DTL 35mm ca Vivitar 135mm lens was utilized to film the sequence on Kodal

Photos and text by Tom Baugh

st Critter Around

great American west in terms of the big game animals. Wildlife bugling in a mountain meadow, or of a moose browsing on the

iller dwellers of our wildlands. Many of these smaller animals, beneficial role in maintaining the precarious balance of nature

r. Just what kind of an animal is this pigeon-toed, bowlegged ger is ope of the largest American members of the weasel family. his privacy. We also know, however, that he can and does become old phrase of "whipping his weight in wildcats" aptly describes

ast about anywhere you find grass or sage covered lands. He's a he burrowing rodents which inhabit his range. He's particularly ophers, and mice. His long sharp claws and squat, muscular body e engages in while in pursuit of his prey.

ion of the badgers' diet. Man however, in his limited wisdom, has and now the badger must search elsewhere for a square meal. The ortunately, greatly restricted the range of the badger.

ermediate consumer." He occupies an important place in nature's all predators, a check on the population growth of the grass and ne rodents.

od fortune to cross paths with our friend the badger. You'll re. After all, he does look a little like nature's grumpy attempt to ou're smiling to yourself remember the vital role he plays in our



re was filmed with a totally 'wild' badger on the desert ra/Sekor 1000 DTL 35mm camera accompanied by a to film the sequence on Kodak Plus-X Pan film.

os and text by Tom Baugh





A Rebuttal And An Answer

Editor:

I'm enclosing my check for \$10 as you requested in your recent letter plus a copy of the newspaper and its pictures, etc. of desecration by corporations, vicious hunters, and other unlovely creatures who wish to desecrate the beautiful Wyoming country.

Perhaps you won't want to send me any additional copies of High Country News after,

"hopefully" you read what I have to say!!
Indeed I greatly appreciate your (?) lovely, beautiful Wyoming. I've spent many hours in and around Dubois visiting friends there and hunting deer and elk. I still hope to continue the annual vacation, hopefully with a permit to hunt deer and elk.

Now for the critical part of this letter.

You decry the decimation of the elk herd because of the avaricious corporations consuming the forests for profit!!

Pray tell - Who issues the permits for harvesting all game in Wyoming?

Is it the avaricious corporation or the greedy hunters from all over the United States who only wish to kill off those beautiful antelope, deer, and elk??

You know as well as I do that the answer s NO!!

So, why do you preach about no place for elk and deer to hide. Is it possible that the residents of Wyoming

plus the Wyoming Game and Fish Commission combine to create the atmosphere that will result in the elimination of deer, elk, antelope in Wyoming??

Did I not read in a recent Wyoming Wildlife that there were 2000 permits to hunt elk yet available to Wyoming residents and please why don't you come in and plunk down \$5 so you can go out among the desecrated forest land and hunt down an elk!! Just so I will be completely honest, I'm not sure if it was 2000 or 200 or 20,000, but I am positive that the invitation was there!!

While I'm spouting off I want to add my disgust at the requirement that a non resident must have a guide to hunt in a national forest. If anything is governed by greed this one is. I was free to travel the road to the Ramshorn trail this summer but lo and behold - come winter, I must have a guide, qualified or not!!!

I really do hope that the Wyoming I am acquainted with will continue and that greedy humanity, not exclusive with corporations but present even in Wyoming residents, will take a second or third look at what is probable if we continue to gobble up our natural resources.

Thank you for reading this, if perchance you have.

Sincerely, V. P. Allbert Hoyt, Kansas



Editor's note: Indeed I do read letters Mr. Allbert, and I do appreciate your comments.

I think you may have misunderstood some of the information in the October 13 issue which you received. I don't think you will find any reference to "vicious hunters," although knowing the human animal, I am sure there must be some.

I preach about no place for deer and elk to hide because that is part of their home. Take that away and with or without hunters,

Photo by Tom Bell



Roads and timbering in elk country - it's a mighty impact on an important natural resource - the wildlife. But beyond that consideration is the long-range effect on watershed, range and the aesthetic values. This scene is on the South Fork of Fish Creek, tributary to the Gros Ventre River and eventually the Snake River in Jackson Hole. Along the skyline in the background is the Continental Divide. This timbered area on the Teton National Forest is only a few miles from the area depicted in the October 13 issue of High Country News.

you will have no game. It is called "habitat" in the parlance of the game biologist.

The idea of good game and fish management is to provide hunting and fishing opportunity without destroying the resource. There are those who take quite the opposite position you do and maintain there are still too many elk for the Jackson Hole - that the animals are slowly destroying critical parts of their range. That would indicate that the Wyoming Game and Fish Department was justified in selling and distributing the number of hunting permits that they do. I am in no position to argue the point because I do not have the facts and figures before me. But I can point out to you that game management generally has not been too bad in Wyoming. The state is still considered by many to have superlative hunting opportunity.

You missed the main point of my contention, and that is that opening up former wilderness-type areas to marginal timbering operations does far more than just provide 2x4's and increments to the gross national product. Clearcutting, and the roading necessary to accomplish it, destroys the very web of life. Forest fires are natural disasters that were a part of the natural scene for eons of time before man came on the scene. Clearcutting is a man-made disaster which Nature has not yet found a way to cope with. And the roads which man makes to get the timber also allows man to drive a vehicle into the heart of prime elk habitat.

Not only does the Wyoming Game and Fish Department have to carefully weigh numbers of hunters against numbers of animals available, but it also has to weigh the consequences of greater access to the animals. As a result of greater access, hunting opportunity is reduced. Sound contradictory? Well consider this: Ten years ago much of the prime elk habitat in Jackson Hole (and elsewhere) was accessible only to hunters on foot and horseback. The elk had unlimited areas in which to run and hide. The game managers could set long seasons and practically unlimited permits.

Watch what happens to seasons and permits in the next few years. Hunters in unlimited numbers can now drive comfortably into what was once prime elk country. What standing timber is left can be methodically "driven" to kill every elk that moves. In order to protect the basic game herds, the game managers will be forced to shorten seasons and restrict the numbers of hunters. Even so, there will be fewer elk to hunt and ironically, more hunters who wish to have the opportunity to hunt them.

Yes, I do point the finger at the avaricious corporations and the overweening profit motive. Only there is no profit for the American public in the long run. The cost in loss of game animals, fishing streams, forest nutrients, and other unquantified resources is never assessed against the corporation's profit ledger. Neither is the cost to the public of trying to get forest trees to once again grow where Nature had them growing.

You may have missed seeing the Bolle Report, issued by a distinguished group of scientists from the University of Montana. They termed clearcutting in most areas of the Mountain West "timber mining." In essence, it is just a nice term for rape of a resource.

The subject is far more complex than can be explained here in just a few words. I am not saying that the State of Wyoming is without fault in issuing hunting permits. Nor do I agree with our state law requiring guides. But let us not lose sight of the fact that human greed for dollars; whether they be from timber, coal, oil or oil shale, is going to do far more to game populations than uncounted numbers of hunters.

Thanks for your subscription. Will try to keep you informed.



The need for an energy policy is nowhere better illustrated than on the lands of the West. Strip mining for coal, uranium, and oil shale on a gigantic scale may be just in the offing. Strippable deposits of these energy resources exist all the way from Canada to New Mexico and Texas. These mined-out uranium pits in central Wyoming remain for the ages. They attest to a further need for strong stripmining legislation.

Reprinted from Sierra Club NATIONAL NEWS REPORT

Energy Policy Adopted

Directors of the Sierra Club adopted the first part of what is to become a comprehensive, unified energy policy. They called for national energy and land use planning to conserve the nation's energy resources and avert environmental disaster. The policy is intended to provide a basis for action on problems related to production and use of all types of energy. Club President Raymond J. Sherwin introduced discussion on the policy by calling it one of the most important actions ever taken by the directors.

The two major goals of the policy are: (1) conserving energy resources by eliminating inefficient, wasteful, and unnecessary production and usage in order to damage the environment as little as possible; and (2) restoring and maintaining environmental quality by imposing on energy producers, carriers and users constraints on air, water, and land pollution, and conformance to broad regional or national land use plans.

The policy also confirmed Sierra Club support of regulations on: extraction, transport, and storage of all fuels; location, design and operation of power plants; discharge of wastes and by-products into air, water, and on land, and the disposal of solid wastes; coordination of the uses of energy; and advertising and promotion of energy use. The directors called for laws requiring prompt public disclosure on all energy production matters, for public participation in planning and decision-making, and for appeal and judicial review.

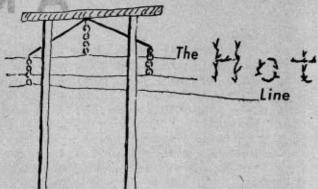
They urged adoption of economic incentives, including new taxes and price structures, that would promote: conservation of fuels and energy; development of more efficient and less harmful energy sources and facilities; and pollution control. Existing economic incentives that tend to promote energy use and waste should be curbed.

Research and development, the directors said, should be undertaken to: determine the nature and extent of environmental impacts of fuel extraction and energy transport, conversion and use; improve efficiency; reduce emissions from present forms of power production; improve safety and reliability; and work out ways for safe and environmentally acceptable disposal of all wastes.

To implement these policies, the directors called for new institutions and changes in existing ones for the making and enforcing of energy policy and land use planning, for the regulation and administration of energy production and use, and for research and development. As a matter of principle, no government agency should be responsible for both regulation and promotion of any energy-related activity. The directors advocated educational and promotional campaigns encouraging energy conservation, and urged international coordination and planning of energy policy.

On specific energy-related issues, the directors voted that the Sierra Club is not now opposed to research on fast-breeder nuclear reactors or to development of test plants, or prototypes, so long as: (1) an environmental impact analysis of known or suspected effects is prepared before construction of the test plants, not only for them but also for the largescale programs that may result; (2) sufficient safety research to answer the outstanding safety questions is done before a go/no-go decision is made for an extensive program; (3) the number of test plants is limited to only those necessary to determine feasibility and safety; (4) existing legal requirements for limiting radiation exposure are not eased; (5) the question of funding breeder reactor research is considered in the context of alternative costs and benefits projected for other energy sources and the total resources available for energy research.

Drawing on information from recent hearings in Bethesda, Md., on emergency nuclear power plant core cooling measures in the event of accidents, the directors proposed improving existingsafety margins for water-cooled nuclear energy plants. They also agreed to support repeal of the limited liability provisions of the Price-Anderson Act, which limits liability in a nuclear plant accident to \$80 million payable by the utility's insurer, then up to \$560 million payable by the U.S. government. Repeal of these provisions, the directors said, would increase insurance rates paid by the nuclear power companies, and thus more nearly "internalize" the cost of energy - raise its price to more nearly reflect its true costs, including environmental and social costs as far as posand whereal spill require relative set High Country News-11 Friday, Nov. 10, 1972



Two University of Southern California scientists are investigating the extraction of oil from oil shale by bacteria. The experiments, supported by a \$120,000 National Science Foundation grant, are the first phase of a long-range program for on-site bacterial refining of oil shale.

One of the biggest foreign trade agreements ever to be consummated involves a swap of liquefied natural gas for U.S. goods and services. The billion dollar deal has the Soviet Union on one side and U.S. energy companies on the other. The 25-year agreement would provide two billion cubic feet of natural gas a day to the East Coast. The companies are also talking to Japan and the Soviets about importing gas to the West Coast. If both deals are concluded, the entire project could cost from \$30 billion to \$45 billion. All the gas would come from Siberia and be hauled to the U.S. in supertankers.

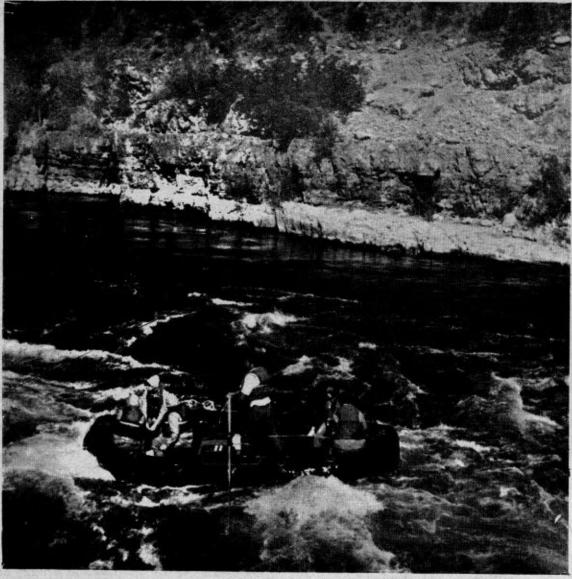
The President's Office of Fuels and Energy has sobering news for American consumers of energy. It says that in the face of a growing world energy crisis, the United States can no longer supply its own needs in oil or natural gas. The U.S. is now the world's largest importer of oil and our dependence gets worse each year, says the director of the office, James E. Akins. Because of this, the federal government may ask automakers to produce more efficient cars. (Our autos consume about 100 trillion gallons of gasoline a year.)

Suit Upheld

The Sierra Club suit to prevent deterioration of high quality air in the United States has been upheld by a federal appeals court. An earlier decision by Federal District Judge John H. Pratt sustained the injunction against EPA. The Sierra Club said the Environmental Protection Agency had not set strict enough regulations to prevent deterioration. The Club said the Clean Air Act of 1970 specifically said there should be no degradation of existing clean air. EPA says it will now appeal the case to the U.S. Supreme Court.

In commenting on the importance of the victory, Sierra Club Vice President Laurence I. Moss said: "Over most of the United States, away from heavy concentrations of industry and population, the air is cleaner than the mediocre quality established in the National Secondary Air Quality Standards. The clean air in these regions must be protected against polluting activities which would cause significant deterioration. We maintain, and the courts have agreed, that the Clean Air Act of 1970 requires this to be done.

"This does not mean that there can be no new development in such areas," Moss said. "Development can occur when the resultant emissions are expected to be below the amounts which would cause significant deterioration, or when compensating reductions in emissions from existing sources are made. However, it is obvious that the construction and operation of large coal-burning power plants using present technology, as well as a number of other types of major industrial facilities, cannot be allowed in these areas if the law is to be obeyed."



Denny Becker of Parkland Expeditions takes sight-seers down a scenic stretch of the Snake River south of Jackson, Wyoming. Some believe that this stretch of the river should be given scenic river status.

A Look At The Spill

men vote on that issue?). The end of the Vietnam War would be another - we no longer have any face to save. The Federal Water Pollution Control Act Amendments of 1972 are another. (Note that President Nixon vetoed those amendments but they were passed over his veto, over his dead body - so to speak - as an environmentally concerned national leader, he was never alive).

This \$24.6 billion project to clean up our waterways will provide jobs for the unemployed, sewage processing for our polluted and polluting cities, and continual embarrassment to the Nixon Administration, which seems to put the environment behind every other value. The same administration was prepared to spend billions on the SST; now it refuses to spend billions on cleaning up our waterways.

Well, Congress - more responsible to the people than the Nixon administration - reordered the nation's priorities even if the President refused to do so; on the SST as well as on cleaning up our waterways.

The open expanses of Lake Powell are great for thinking. The drone of the outboard motor does not lull me but rather stimulates my thinking here in this once-wild place that has been so changed by man's greed. Why bring politics into the picture? Because politics decides. Politicians propose roads and dams and porkbarrels and boondoggles, usually at public expense. And often the public doesn't want them (like the SST which came within a hair of passing, thanks to many Rocky Mountain States politicos).

Too far afield from the oil spill? Not so. The SST would have increased demands for more fuel, would have created another excuse for the pipeline. And the motor of my boat burns gas at roughly 6 miles to the gallon; my trip to see the oil slick increases the need for gasoline (both my car and the rented boat). I, too, am a consumer.

So who is responsible? Am I not responsible myself? To a certain extent I am, but how much more so are those who create the need by building more and more powerful engines and selling them to the consuming public just as Glen Canyon Dam was sold to a powerhungry public, power-hungry because power companies spend 7 times as much on advertising as they do on research.

And remembering that Glen Canyon was built to produce power, you must ask, what are all those fossil-fueled power plants doing in the Four Corners Area where the oil spill occurred? What are they doing besides polluting the once-clean air? Why, of course, providing power to light the neon signs of Las Vegas, providing clean power for Southern California while the desert sun is blocked out by fly ash in the Four Corners

I arrived at the Bullfrog Basin Marina sick at heart but hopeful. Maybe this spill will make people question the Alaskan pipeline enough to eventually stop it. Maybe the multiple-users of Lake Powell will get interested in the environment enough to get involved and put a stop to the proliferation of power plants. Maybe enough people will change their life styles to make a difference. Maybe!



tection Agency.



by Verne Huser

A new push seems to be afoot for protecting American rivers as several federal agencies and numerous state legislatures have been working toward the inclusion of dozens, even hundreds of rivers in the Wild and Scenic Rivers System.

When the Alaska Native Claims Settlement Act (Public Law 92-203) passed in Congress and became part of the land, it called for the withdrawal from all forms of appropriations under public land laws of up to 80,000,000 acres of unreserved public lands in the State of Alaska for possible parks, forests, wildlife refuges, and wild and scenic rivers.

This past June the Bureau of Outdoor Recreation in conjunction with the BLM, the Park Service and the Forest Service, and the Bureau of Sport Fisheries and Wildlife surveyed 69 Alaskan rivers (out of some 166 that had been recommended by various agencies) for possible consideration under the National Wild and Scenic Rivers System.

On July 20, 1972, the Bureau recommended to the Secretary of the Interior 35 rivers for study after some 7,000 miles of aerial reconnaissance by the agencies mentioned above.

In addition to the general criteria for wild or scenic rivers - a free-flowing stream in natural condition, at least 25 miles long, sufficient volume of water, outstandingly remarkable features pleasing to the eye, and high quality water - the Alaskan rivers were further judged by the following criteria:

-capable of being managed to protect people and the resource, accessible by air unless within potential wilderness areas, at least 75 miles long, or if shorter, the entire drainage.

A recent article in National Wildlife magazine (October-November) by Dr. Frank C. Craighead further highlights the current push for wild and scenic rivers. The

Craighead article also appears in condensed form in The Reader's Digest (November).

The well-known Jackson Hole wildlife biologist mentions that twenty states have passed Wild and Scenic Rivers laws - though not Wyoming or Utah or Idaho where some of the potentially greatest rivers run. Oregon has been a leader and even Louisiana and Oklahoma have wild and scenic rivers at the state level.

A river may be designated wild or scenic either by an act of Congress with federal administration or by act of a state legislature with approval by the Secretary of the Interior. The basic values considered are aesthetic, scenic, historic, archeologic and scientific.

The original eight rivers included in the Wild and Scenic Rivers Act were the Feather in California, the Clearwater and Salmon in Idaho, the Upper St. Croix in Minnesota-Wisconsin, the Eleven Point in Missouri, the Rio Grande in New Mexico, the Rogue in Oregon, and the Wolf in Wisconsin - according to The Reader's Digest article. The Middle Fork of the Salmon and the Selway, both in Idaho, have since been added along with the Buffalo in Arkansas and others.

Les Jones of Utah, river runner and map-maker and a member of the Western River Guides Association, has been surveying rivers and sections of rivers in Utah for inclusion in a state scenic waterways bill he hopes to get introduced in the next session of the legislature.

Wyoming's Clark's Fork of the Yellowstone is currently Wyoming's major river under consideration, according to Craighead. Parts of the Green and the New Fork; of the Snake and the entire Gros Ventre have also been recommended for study.

What rivers in your state might be worthy of consideration? Craighead suggests contacting the Bureau of Outdoor Recreation, Department of the Interior, Washington, D.C. 20240 if you have any recommendations.

As Craighead points out, "Now we have a pro-

tective law. It's up to us to use it."

Wyoming Congressman Teno Roncalio has initiated legislation to have both the Green and the Clark's Fork included in the Wild and Scenic River System. Who is pushing wild and scenic river status for rivers in your state?

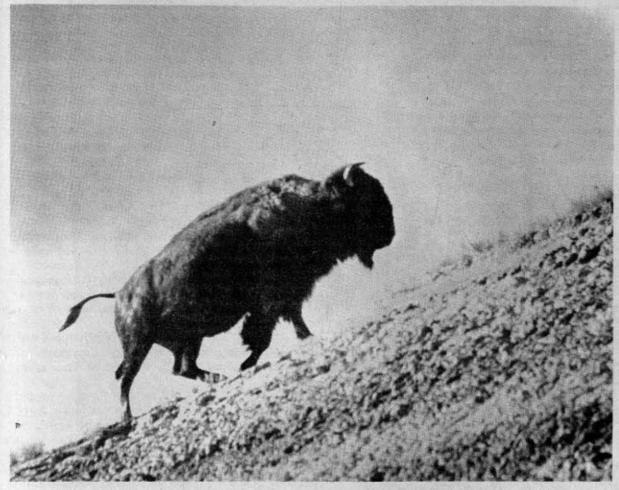
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Western.... Roundup

High Country News-13 Friday, Nov. 10, 1972

Photo by Gary Leppart



Buffalo Slaughter Condemned

By Norma R. Hentges

A fenced field, approximately one square mile in size, near Flagstaff is the scene of Arizona's annual buffalo hunt, a 5-day sporting event sponsored by the Arizona Fish and Game Department. Buffalo, each weighing from 1,000 to 1,500 pounds and measuring about 9 feet in length from chin to tail, topped by an enormous wooly head, are herded two at a time by cowboys into the firing zone. The cowboys drive the buffalo along the fence as they are released from the holding pen, while other riders circle the area to assure that they stay within the firing zone.

With no chance to escape, two by two, the American buffalo are slaughtered ly, without dignity or compassion.

Each buffalo usually makes one or two passes through the firing zone before it slows down to a sporting speed. If the "hunter" is a good marksman, the mighty animal will slump to its knees and fall to the ground on the first shot - there is a spasmodic quiver, then death.

However, most of these so-called "hunters" are not good marksmen and the animal is hit in the flank. With a second shot to the midsection, the animal stumbles aimlessly and is forced back into the firing zone where a third shot at last brings a merciful death.

Following the kill, the sharpshooter proudly strikes the "great white hunter" pose for family pictures. There are congratulations and much back-slapping all around.

This year 125 buffalo met their fate in this

most unsporting manner.

The Arizona Wildlife Federation supports the hunt as necessary "game management." According to regulations set by the Arizona Fish and Game Department, the shooter pays \$45 for a permit which entitles him to the head, heart, hide, tongue, and one quarter of the meat. The remaining three quarters of meat is sold to the public for \$40 a quarter.

The Arizona Society for the Prevention of Cruelty to Animals is currently seeking legislation to outlaw the hunt. Several suggestions have followed this year's sorry spectacle, including the sale of surplus animals to parks and refuges capable of accommodating the herds, and the sending of animals to a commercial slaughter house for a more humane killing. The meat could then be auctioned off to the public and the majestic heads sold to trophy seekers.



Study Underway

LINCOLN, Nebr. - Field work is nearly complete on the first phase of a study of the Missouri River and the ecological effect of two nuclear power plants now under construction on its banks, reports the Game and Parks Commission.

Plants involved are the Nebraska Public Power District's Cooper Nuclear Station at Brownville and Omaha Public Power District's Fort Calhoun Nuclear Power Plant at Blair.

The larger of the two, the plant at Brownville, requires a maximum of 1,440 cubic feet of river water per second to cool the steam, and the water would be returned to the Missouri 18 degrees warmer than when it entered the plant. During winter months, when the Missouri is at its lowest stages, the plant's maximum demand would take more than 10 percent of the river's flow.

Researchers are attempting to get a picture of the river's ecology before the plants begin operation next year. They will then duplicate the tests after the plants begin discharge of heated water into the river. The study involves 11 state and federal agencies, with the Game and Parks Commission's Research Division acting as the coordinator.

Only field work remaining in the preoperational phase is sampling of immature insect life and certain algae forms, which is being conducted by the Environmental Protection Agency.

Briefly Noted

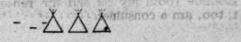
Conservationists are moving to head off an end run by the Soil Conservation Service around the National Environmental Policy Act. SCS stream channelization projects are destroying thousands of miles of natural streams and rivers and draining tens of thousands of acres of marsh, wetland and swamp. SCS state conservationists are trying to avoid producing environmental impact statements for these projects by convincing state and federal fish and game officials to agree to reclassify channelization projects to group 1 status (minimal environmental damage). More than two thirds of the 12,000 miles of authorized stream channelization projects are in groups 2 and 3. Letters to state fish and game agencies should urge them to press the SCS for environmental impact statements on all projects. (From Sierra Club National News Report).

The ecological impact of snowmobiles is coming under study in Glacier National Park. Park Service officials say that although snowmobile use is not yet significant, increased use in the future may put some values in jeopardy. Snowmobiles are now restricted to about 75 miles of unplowed roadways.

Mrs. Velma B. Johnston, better known as Wild Horse Annie, was instrumental in stopping the removal of 10-12 wild horses from a national forest area in Nevada. The horses are in the Lee Canyon area of the Toiyabe National Forest, about 50 miles north of Las Vegas. In telegrams to the Secretary of Agriculture and the Chief of the Forest Service, Mrs. Johnston called attention to the federal act protecting wild horses. That act says the federal agencies have to consult with an advisory board before removing or destroying wild, free-roaming horses. Mrs. Johnston pointed out that the advisory board has not even been appointed yet.

The American Petroleum Institute has awarded a contract to the Department of Biological Sciences at the University of California in Santa Barbara to study the effects and means of prevention of oil spill damage to birds. Two other API research programs on the threat of oil spills to marine fowl are currently in progress. The Wildlife Rehabilitation Center in Farmingham, Mass., is conducting studies on more efficient methods of cleaning and rehabilitating oiled birds. At Mountain View, Calif., the AvAlarm Corporation is researching a harmless audible method of deflecting seabirds away from an oil spill area.

The president of the Wyoming Stockgrowers Association, Bruce von Forell, says the livestock industry is in "serious trouble" on public land issues. The reason, he says, is the defeat of Congressmen Wayne Aspinall of Colorado and Walter S. Baring of Nevada. Von Forell says, "We leaned heavily on these two gentlemen to implement and work toward legislation relative to our survival (sic) on the public lands." His sentiments were echoed by American National Cattlemen's Association President John Trotman.





Each issue of High Country News goes to many schools in all parts of the country. Some of these subscriptions are ordered by the schools but most of them are gift subscriptions, donated by concerned citizens who feel that environmental matters deserve a place in the education of our young people. (It is for just this reason that we will gladly send three copies to any subscribing school which requests them - and will even direct them to separate departments if so instructed!)

Generally, the donor names a school of his or her choice, but sometimes we are asked to pick any school which is not already on our mailing list. Occasionally, this creates a sense of bewilderment on the part of the recipient. Let me quote a letter we received a few days ago from the editor of a high school newspaper, the Buffalo (Wyoming) High School Pemmican.

Dear Mr. Bell:

Thank you for our subscription to High Country News. However, we are still wondering why we were the recepient of a gift subscription.

The students of the Journalism class are all interested in the protection of our environment. It is good to receive an entire paper devoted to that subject.

Our first issue, Friday, September 29, was enjoyed by everyone. The paper is depressing in ways because pollution is depressing. But it is very informative. Thanks again.

Sincerely, Connie Camino, Editor

Well, Connie, perhaps I can explain why your school received a gift subscription. Many people who are interested in the preservation and improvement of our environment realize that the hope of our future is up to young people like yourself. More and more of our readers want young people to be made aware of what is being done, and what can be done.

WHY? Because (after a painful interlude of campus riots, burned buildings, and closed educational facilities) the youth of today is emerging as a group of independent, unbiased individuals. Unbiased by loyalty to outworn concepts or past procedures, and unimpressed by the false importance of the GNP and the outmoded dogma of "progress at any price." Individuals with a sense of values honest enough to weigh all the facts and consider them in their proper proportions.

In your last paragraph you say, "the paper is depressing in many ways." You're right — it is! Pollution and environmental degradation are indeed depressing. But your generation wants us to "tell it like it is," and that's what we are trying to do here at High Country News. Seems to me that's a pretty good place to start if we're going to make things less depressing. Yours is the generation which will soon be making the decisions on where we go from here.

And that, Connie, is the reason why your school, and many others, receive gift subscriptions to an environmental newspaper. The conservationists of our generation know that the future is in your hands.

It's sort of like passing the torch. It's going to be up to you to KEEP IT BURNING!





The love of bare November days Before the coming of the snow;

Robert Frost: My November Guest

Smoking Dangers Outlined

A new publication designed especially for the increasing numbers of women - and teenage girls - who smoke cigarettes now is available from the more than 600 Christmas Seal Associations affiliated with the National Tuberculosis and Respiratory Disease Asso-

Including tips on quitting smoking without gaining weight, special recipes from weight watchers, and advice about smoking from Joyce Brothers, Ann Landers and Eleanor Holmes Norton, the tabloid-size publication also provides information on the effect of cigarette smoke on children in the home and on unborn infants. Comedienne Carol Burnett, an outspoken ex-smoker, is featured on the

"The number of women dying from chronic bronchitis and emphysema has doubled in the last decade," says Donald C. Kent, M.D., Medical director of the nationwide voluntary health agency, "and these lung diseases are three times as prevalent among women smokers as among those who have never smoked.

"Cigarette usage rates for women have climbed during the past 15 years, while those for men have dropped," Dr. Kent added. "Every year more than a million teenagers, nearly half of them girls, begin to use cigarettes. At the same time, all evidence indicates that women have a harder time kicking the habit."

More than half a million copies of the publication entitled "Ten Million Women Have Quit Smoking," are being distributed throughout the U.S. by the Christmas Seal Association. Single copies are available, without charge, from the various state Tuberculosis and Respiratory Disease Associations.



An unusual trial is scheduled to be held in Houston during November 10-22. The U.S. National Commission for UNESCO will convene as the World Court Of Human Behavior to hear the case of The Environment: Man On Trial. The plaintiff? Mother Earth vs. the defendant, Homo Sapiens. The complaint? "The Quantity of Growth" vs. "the Quality of Growth." The jury? An impressive list of 400-450 delegates chosen from numerous professional organizations.

Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

The balance of nature is frail
In the lands where there's oil in the shale.
That balance will totter
If they use all the water
That development of oil will entail.

Non-political international cooperation is the keynote for two new world economic-environmental organizations. The 9-country Common Market Environment Council is preparing a joint-European environmental action program to be ready by July 31, 1973. Currently proposed is a cooperative fight against Rhine River pollution, pinning control costs directly on polluters.

A Russian and an American are to head a 12nation study of world economic and ecological
problems impressively entitled the International
Institute of Applied Systems of Annalysis. The
first non-governmental organization of its kind, the
Austria-based Institute is comprised of 100 scientists
from the Soviet Union, the U.S., Canada, Britian,
Japan, Czechoslovakia, France, East and West
Germany, Italy, Bulgaria, and Poland. It plans to
operate for the next 3 years on a \$3½ million
budget, \$1 million each contributed by the Soviet
Union and the U.S. The Institute's first study will
be on the environmental effects of world energy
sources and demands.

Recent polls indicate a marked decline in industry's ecology concern and a decrease in environmentally-allocated public relations funds for 1973. A scant third of 4,162 industrial public relations directors polled listed environmental activities as important in their programs. This is a significant decline from last year's 61% affirmative responses.

Congress recently allocated \$16 million for a pilot-model desalting plant to be built in Southern California. As much as 100,000 acre feet of water is to be drawn from a brine reservoir in the Imperial Valley. The desalted water would be used to augment the waters of the Colorado River, sending an increased flow to Mexico in response to that country's increasing pollution complaints. The plant is a model for a 420 million watt generating plant and a 100,000 acre foot desalting plant to be built in the Imperial Valley and completed by 1983. The complex project is a joint proposal of the Bureau of Reclamation and the Office of Saline Water in the Interior Department.

Conscientious objectors in California say they don't get to work on the long-range environmental problems which they signed up to do. Members of the California Ecology Corps say that instead they are assigned to garbage details and fire prevention.

Canadian authorities have vetoed a proposed \$30-million development in Banff Park. They said the project, to include ski runs, lodges and subsidiary developments was too large. Conservationists had opposed the project.



Huser Appointed

Verne Huser, columnist and regular contributor to High Country News, has taken on new duties. He has been appointed executive director of the Utah Environment Center. He will work out of the offices of the Center at 1247 Wilmington Avenue, Salt Lake City, Utah 84106; phone 801-467-0433.

Huser brings to his new job a dedication to environmental matters matched by few in the West. He is outspoken, yet credible. He is usually well-informed (but makes mistakes like some of the rest of us). He is a talented writer and good speaker. and together with these gifts, he has a vast knowledge of the West. He has the courage of his convictions and is not

afraid to stand up and be counted for what he

believes is right.

The Center, a relatively new organization on the Utah environmental scene, is a non-profit, tax-exempt organization established to serve the state. The Center will gather and disseminate information, and participate in hearings. It exists as a base for environmental dialogue and service. The Center maintains a reference library, keeps a calendar of environmental events, and provides a roster of public speakers.

public speakers.

The Center has already become involved in sponsoring a workshop on clean air and another on conservation education.

Sponsors of the Center are the League of

Oil Shale...

study will be reviewed before development is allowed to proceed.

ECONOMICS

It should be emphasized that the economics of full-scale development may show that oil shale is not the bonanza that some predictions and estimates lead the public to believe. Even though tracts have been nominated for leasing, no decision has been made toward commercializing oil shale operations by any major concern. The depletion allowance (presently 15%), oil import quota, availability of national crude reserves, cost of environmental considerations, improvement of technology, and aid or resistance rendered by the government and the public will all figure in to this economic picture. Sporadic drives for oil shale development have occurred for over fifty years in this country, and yet no major industry has emerged to date.

[Friedman: At line 2, you may wish to include a national energy policy as an extremely important factor in determining the development of oil shale reserves. . . You may want to add figures in the last sentence of the first full paragraph on page 5. This sentence could read as follows, "Once the Colony plant is built (3 years) and its operation performance is observed (1-2 years), additional plants by other interests might be considered."]

[Hamilton: How practical is an energy policy when oil companies control the Congress? What if oil shale wasn't even in the picture? Who makes the energy policy and what assumptions underlie it?]

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Verne Huser

Women Voters of Salt Lake, the Uinta Chapter of the Sierra Club, the Wasatch Mountain Club, local Audubon groups, Utah Nature Study, and Recycling.

However, if the Center is to succeed, it will require more groups and many more people. As Huser points out, the Center needs financial assistance and volunteer help. Here is a chance for Utah people to pitch in and help protect their own environment.

presently operating a 1000 ton per day capacity pilot plant in the Piceance Basin. It would be a major move from Colony's pilot to a 50,000 to 100,000 ton per day commercial plant. If Colony does go ahead, it could be the only first generation plant. Once the Colony plant is built and its operating performance is observed, additional plants by other interests might be considered.

The economic picture is still hazy at best. Some foresee shale oil as costing four to five dollars a barrel, which is not competitive on the present oil market (\$3.60 a barrel). Others foresee outlandish profits in the billions of dollars for private interests from our public lands. The problems is that all these visions are only specualtion. Nobody knows for sure, because no commercial plant has revealed the answers.

Next issue, Bruce Hamilton will discuss oil shale development in terms of specific areas of the environment, with the interjected comments of Mr. Friedman.



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The pleasant valley in the land behind the Tetons was once known as Pierre's Hole. Here the trappers rendezvoused, Indians held council, and notorious outlaws sought hideaways. Here, Driggs, Idaho, is shown beyond the gently flowing Teton River. A few miles below this point, the Teton River enters a beautiful canyon, now being dammed by a Bureau of Reclamation project. Conservationists can prove a good case that the dam is unacceptable both from an economic and an environmental standpoint.

The Teton Valley-Land of Legacy

Island Park is the western door to Yellowstone, and a land wrapped in mysterious Indian legacy. Chief Joseph of the Nez Perce is said to have marveled at the "supernatural" powers controlling strange, disappearing islands of Henrys Lake.

Largely composed of a spongy substance covered with grass, the islands supposedly vanished "six sleeps in each moon," and according to legend, became the most unusual Indian burial grounds in the world.

With forty-five picture-perfect fishing streams and fifteen lakes and reservoirs, it's not too hard to understand why summer enthusiasts are as excited about the Island Park area as history buffs. This is trout country — a paradise for anglers, and for wildlife watchers, as well.

It wasn't too many years ago that trumpeter swans were almost extinct. Now, Island Park, Red Rocks Refuge to the north, and parts of Yellowstone Park are the only major breeding grounds of the swans in the nation. At last count, trumpeter swans numbered 1,500 strong.

Nearby Sand Creek Wildlife Area is a haven for many species of winged and four-footed creatures on a year-round basis. A drive along Scenic Loop 47 leads into the heart of moose bedding grounds, while not far from the road, cascading waters tumble over Upper and Lower Mesa Falls on Henrys Fork of the Snake River.

Teton Basin, just south of Island Park, was once a famous rendezvous point for early-day trappers and traders and crossroads for roving Indian tribes. Tall tales remain of the lusty adventurers who carved their names in Idaho history with a flair for notoriety.

Today, the Hoary-Headed Fathers (as the Indians dubed the Tetons) shine their western faces over spreading meadows, modern farms and ranches. It is still a slow-paced world, where even the trout in Teton River wait until mid-morning to "wipe away the shut-eye" and start jumping for dry flies.

Old-fashioned melodramas of yesteryear are produced with pride and gusto during July and August in Pierre's Playhouse at Victor. Characters like Sweet Polly Pureline manage to stay one step ahead of disaster while being pursued by the villainous Harry Heartless. Delighted audiences need no prompting to boo or cheer their feelings.

Grand Targhee Resort, perched high above the valley in a natural bowl on Fred's Mountain, offers the finest in eating and sleeping accommodations and unparalleled scenery all year long. The area is steeped in Indian heritage, with the name "Targhee" derived from a famous Bannock chieftain and Indian logo used on every ski run, lift and lodge in the complex. Anyone can take a lift ride up Fred's Mountain to enjoy the breathtaking grandeur of stark, granite peaks of the Tetons on one side, and jaded meadows and

the lazy river far below on the other.

To gaze across the spreading panorama and invision chapters of history coming to life is a surprising and memorable dividend. All can be found within an hour's drive of Yellowstone or Teton National Parks — through Idaho's western door, a place to relax and enjoy a change of pace.

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