

Has the Second Home Peak Passed?



For the past few years officials in Routt County, Colo. have been struggling to handle a recreation boom in their rural community. National attention received by the county seat, Steamboat Springs, as "Ski Town U.S.A." has made it the ware of real estate salesmen from Chicago to Dallas.

But a second home and recreation boom isn't the only major land use conflict facing the county today. Land use planning has entered a new phase of complexity. What looked like development now resembles shakey speculation.

By June of 1974 the prime interest rate topped 11% and investment in real estate faltered with uncertainty. "Money is too tight," said one salesman. Condominium and second home sales declined. The pace of subdividing slowed.

"The days of putting a down payment on a lot with a Bank Americard are over," said one Steamboat Springs resident.

Already one major developer has declared bankruptcy. Other financial failures look imminent. The specter of empty lots and halffinished homes and condominiums now looms over the county, creating new problems and challenges. The Yampa River winds its way through Pleasant Valley near the resort town of Steamboat Springs, Colo. Developers hope to create "Lake Catamount" here and lure people to second homes on the shore. Tight money may change those plans, however. There are plenty of platted subdivisions in the area, but few people are building or buying.

Building New Ghost Towns

About 15 miles up the Yampa River from Steamboat Springs is the Stagecoach Recreational Community, known to some local residents as "Colorado's newest ghost town." Stagecoach was designed to house 33,000 second home recreationalists who would have come to enjoy two corporation-built ski areas, tennis courts, a recreational reservoir for swimming and boating, and an 18-hole golf course. The spectacular scenery of the Upper Yampa area and the adjacent Routt National Forest were two other attractions.

Today the bulldozers and carpenter's saws are silent. Row after row of half-finished town houses and condominiums stand empty and still. The "information center" (land sales office) is unoccupied too. You can't buy a lot or a condominium here. The developer, Woodmoor Corporation, is bankrupt.

Woodmoor is the developer of residential and recreational housing throughout Colorado at Monument, Breckenridge and Roxborough Park near Denver, as well as an artisans' marketplace near Golden known as Heritage Square. The 12,000 acre Stagecoach development was larger than all the other developments put together and was the company's first attempt at a year-round recreational community. The property was acquired in the summer of 1971 and plans were drawn up for the resort with the hope of selling lots that winter.

Stagecoach Project Manager Rod Stevens estimates 30-35% of the final sales price of the lot

(Continued on page 4)

HIGH COUNTRY By Jone Ball

Land — good land — is one of the most precious assets a man may possess. It may be the more so in the years ahead as food prices go ever higher and food shortages become ever more critical. It is reason enough for me to feel richly blessed with even our small acreage in this lush mountain valley of eastern Oregon. I look out across the productive field to the pines and cottonwoods which border our land, and up to the mountain setting beyond and marvel at our good fortune.

I suppose you have to have an inborn feeling for the land to truly appreciate all its qualities. To some, land is only dirt underfoot. To others, it is the open end of cornucopia spilling forth its treasures of foodstuffs and beauties. Some there are who rob the land of its treasures for their own selfish ends. There are many more who love the land and cherish it as a living, throbbing, vibrant part of the ecosystem into which man fits only as an insignificant part.

Yesterday, I dug into our rich land for the first time. It was such a simple but necessary act — digging postholes for the gateposts at the entrance into the land. There was rich black soil to the very bottom of a three foot hole. To be sure there are rocks and waste places. But these will be worked into sanctuaries for the little beasts and birds with whom we share our God-given treasure.

It is exciting to look at a piece of land as you would a piece of clay, ready to be shaped and formed. (Yet, that comparison is not quite true for some of the land in trees and stream is much too valuable to make over as man sees fit. Too much of this has already happened.) Here, you can see where the house will go, and down in front, the little pond. There will go the garden, and in back will be room for the orchard.

It should be man's will that he rest lightly upon the land. That he be a good steward, compatible in every way with all other creatures.

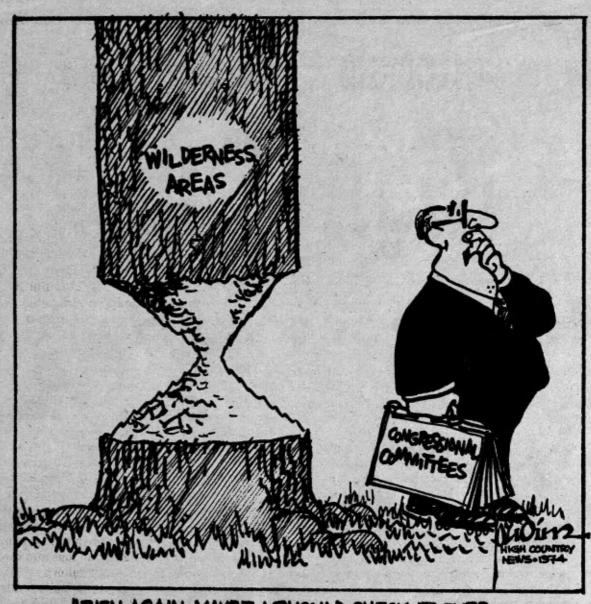
This is the philosophy which so escapes the developers and the land scalpers. They see land only as a commodity which can turn them a quick buck. Only when you live on the land, see the planted seeds germinate and grow and produce, hear the birds overhead, and see the little doe deer at the edge of the meadow at dawn can you appreciate that it is a community. And it is the intrinsic values of the living community which cannot be bartered in the marketp-lace.

I am at once humbled and awed by the responsibility of the stewardship I have assumed. But in the months and years ahead I hope to fulfill that responsibility. Only God will truly judge how well I have done.



High Country News will not be published on the regular publishing date of August 16, 1974. We'll be back to put out the August 30 issue, renewed by some first-hand experience in the Wyoming high country.

The Staff.



"THEN, AGAIN, MAYBE I SHOULD CHECK IT OVER ONE MORE TIME."



Letters

discours the daily TUO

Dear Editor:

Being embroiled in the affairs of the BLM in western Colorado, who will be opening a considerable amount of acreage for strip mining in Routt and Moffit county, I came across this disturbing yet beautiful eulogy to coal land before ruination. It is by country-folk singer, John Prine, and all or part of it might be appropriate for the High Country News.

PARADISE

When I was a child, my family would travel Down to Western Kentucky, where my

parents were born And there's a backwards old town, that's

often remembered So many times that my memories are worn

Chorus

And daddy won't you take me back to Muhlenberg County

Down by the Green River where Paradise lay Well I'm sorry my son, but you're too late

Mr. Peabody's coal train has hauled it

Well sometimes we'd travel right down the Green River

To the abandoned old prison down by Adrie Hill

Where the air smelled like snakes, and we'd shoot with our pistols But empty non bottles was all we would

But empty pop bottles was all we would kill

Then the coal company came with the world's largest shovel

And they tortured the timber and stripped all the land

Well, they dug for their coal till the land was forsaken

Then they wrote it all down as the progress of man

When I die, let my ashes float down the Green River

Let my soul roll on up to the Rochester Dam

I'll be halfway to heaven with Paradise waiting
Just five miles away from wherever I am.

Sincerely,

Bill Merk

Dear Mr. Hamilton,

I know how frustrated you, your wife, Mr. Bell and some of your readers feel. I share with you that same feeling. Even when things seem so

Editorials



Victory for People and Land

Strip mining control legislation has passed the House, 291 to 81. Although this bill is laced with loopholes to make it more attractive to the coal industry, we applaud its passage. Such a compromise is preferable to leaving productive lands underlain with coal at the mercy of unregulated draglines and shovels for another year.

As the House completed its action, National Coal Association President Carl Bagge said, "Unless this legislation is substantially improved in conference with the Senate, the coal industry will have no alternative but to urge a presidential veto." That may be a hollow threat since the Senate passed a somewhat tougher bill by a wider margin (82-8) last October. The votes to override a veto are clearly there.

Although he would probably resent association with this House-passed bill, or any bill that allows strip mining to continue, much of the credit for the strong controls must go to West Virginia Rep. Ken Hechler. He has been the House's conscience on strip mining matters. Hechler originally introduced a bill to phase out strip mining. When it was defeated (336 to 69), he fought a good battle to insert stronger language into the committee compromise bill.

Most congressmen treat strip mining in the abstract; Hechler and his constiuents live with the agony of poorly controlled stripping that has poisoned, scarred, polluted and even killed their land and their neighbors. Hechler has been accused of being too emotional on this issue. Living with the abuses he has seen, Hechler has every right to be emotional. Wyoming Rep. Teno Roncalio has said that if

Wyoming Rep. Teno Roncalio has said that if he was from West Virginia and had to live with what Hechler lives with, he'd sponsor a ban on strip mining too. As it is, Roncalio is from a state with vast, untapped strippable reserves and a relatively minor list of stripping abuses. He voted against Hechler's ban, saying "Not to mine it (Wyoming's strippable coal) would be an offense."

Hechler knew there were some economic hardships and energy supply problems with his proposal, but he strongly believes that the people and the land are a higher priority. We have to respect such stubbornness.

The chief sponsors of the bill, Rep. Morris Udall (D-Ariz.) and Rep. Patsy Mink (D-Hawaii) also deserve commendation. They steered this bill through some rough waters — notably heavy industry lobbying. When Rep. John Slack (D-W. Va.) won initial agreement to permit tearing off mountain tops and dumping the spoil into the adjacent valleys, Mink managed to nullify this nightmarish amendment.

Special praise needs to go out to Rep. Frank Evans (D-Colo.) who introduced two amendments to protect water rights of adjacent landowners. Evans first amendment requires mine operators to permanently replace any quantity and quality of water that is impaired by mining. His second amendment prohibits strip mining alluvial valley floors in semi-arid and arid regions of the West.

A particularly poor amendment, introduced by Rep. Philip Ruppe (R-Mich.) makes the state regulatory authority show that reclamation is not possible on lands before declaring them unsuitable for mining. Originally the bill had required a demonstration by the company that reclamation is possible before a permit was granted.



hopeless my husband and I keep telling ourselves we are not going to give up our fight to save our state and livelihood.

At first we thought our letters would not make much of an impact on our governor and state officials but thought we'd try. We actually got replies from them and some of them did "listen." They want the people to talk to them personally and to get hand written letters. If the state politicians received letters from 500 to 1,000 people — just think of the impact.

But our country has a disease called "apathy." We've just got to hang on to what we have left of our democracy, and that means to use it. "Big business" has taken over our federal government and now they are filtrating into our state governments. "Greed" is a hard thing to fight but I know we can do it.

Sincerely, Mrs. Sandra Helland Bentley, N.D.



HIGH COUNTRY NEWS

Published bi-weekly at 140 North Seventh Street, Lander, Wyoming 82520. Tele. 1-307-332-4877. Copyright 1974 by High Country News, Inc. 2nd class postage paid at Lander, Wyoming 82520.

Subscription rate \$10.00 Single copy rate 35c Box K, Lander, Wyoming 82520

Publisher Thomas A. Bell
Managing Editor Joan Nice
News Editor Bruce Hamilton
Office Manager Mary Margaret Davis

Material published in High Country News may be reprinted without permission. Proper credit will be appreciated. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Articles will be published at the discretion of the No list of friends and foes would be complete without reference to Rep. Craig Hosmer (R-Calif.) — the darling of the coal industry. After repeated efforts to have the House consider his stripping free-for-all bill, he managed to hack away at some of the strong language in the Udall-Mink bill. Hosmer convinced the House to strike a vital provision imposing an 18 month or more moratorium on new mining leases on federal land. He also got the House to agree to not require companies to eliminate environmental hazards on holdings that have been mined already but are inadequately reclaimed.

A major victory was the passage of the Melcher Amendment (Rep. John Melcher, D-Mont.) which requires written consent of the surface owner before stripping can commence on his property. This amendment, which seemed so basic to most Western congressmen, was bitterly opposed by those favoring eminent domain power on behalf of coal companies.

Arguments about a few landowners keeping the country from its much-needed coal seem shallow when one looks at the vast reserves still open to stripping without driving productive people off their land. When one also considers the even larger underground minable coal reserves the "landowners keeping the country from its coal" argument borders on the absurd.

Idaho Rep. Steve Symms says this bill shows "more concern about three-toed salamanders than about the ten-toed babies of the future." We believe this bill will help insure that both the salamanders and the babies will have a world worth living in.

—BH

Pit Is Asset

Exhausted open pit mines are a depreciable asset, according to a new ruling by the Internal Revenue Service. An empty open pit purchased as a dumping area for overburden from an adjacent strip mine represents a capital asset that depreciates as it is filled up according to Revenue Ruling 74-282. The IRS reasons that such land will be worth less once the pit is filled.

Is this how the coal companies plan to make Wyoming, Montana, and North Dakota intorich states — by turning them into big, empty black holes?

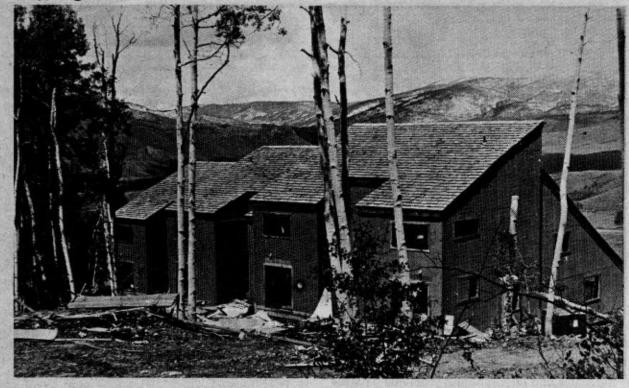
Doling Out Coal

In the latest chapter of the great race to dole out public energy resources, Assistant Secretary of the Interior Jack Horton said that leasing of federal coal reserves in the Northern Great Plains could begin before completion of a study on the impact of coal development in that area.

Horton told the House Interior Subcommittee on Mines and Mining last week that an interim report on the impact of coal development in six Western states is scheduled for completion next month, and that the final impact statement would be issued in late fall. But then he added the astounding note that Interior thinks "some coal leasing can begin while we are gathering data. There is a minimum four to five year lag between leasing and lease development."

Why isn't there also a lag between completing data gathering and leasing a valuable resource? Does Interior know what the data is going to reveal without even reviewing it? Is coal company interest the only criteria for deciding where and how fast to lease?

—BH



The Stagecoach development near Steamboat Springs is one of Colorado's newest ghost towns. With construction 30% complete, the project's developer, the Woodmoor Corp., declared bankruptcy early this year. The recreational community was planned to bring over 30,000 vacationers to Routt County (population 7,000).

Building...

(Continued from page 1)

was spent in drumming up a buyer. Woodmoor had "generating offices" in large metropolitan markets like Chicago and Dallas-Fort Worth where they would attract and screen buyers. Then they would fly each screened potential buyer to the site.

"We would not sell land to anyone who had not been on the site and seen it," says Stevens. "A man from Hawaii asked me to pick him out a lot before we had even put the lots up for sale and I refused to do it."

Despite the high sales cost, Woodmoor made more money off Stagecoach than they had projected. "Sales went wild," says Stevens. "Within the first quarter we passed the projected first year's sales. The first year we sold \$12.3 million worth of property. We sold \$22 million worth of property in the area before we shut down."

The ultimate potential population of Stagecoach — 33,000 — frightened many county residents. That figure is more than four times the entire county's 1972 population level of 6,946. Woodmoor stressed the point that about 90% of the new Stagecoach "residents"

pand into Mexico, but that project was never started — the company was already spread too thin.

the feet reference of the terrange to colonor

"Many months went by with only one or two sales on all the other properties," says Stevens. "Stagecoach was much more salable and our sales kept up, but for awhile Stagecoach had to carry the rest of the company from a financial standpoint."

Stevens was supposed to continue on with community improvements but no front end money was made available. He wanted to finish the ski lodge, finish the golf course and swimming pool and put in the reservoir; but that money was spent bailing out the other projects. Finally the burden became too much and in early 1974 Woodmoor declared bankruptcy.

Now Stagecoach lot owners don't know whether to keep up on their payments or not. Are they just throwing good money after bad? With the corporation unable to provide the amenities they promised, will Stagecoach ever become a recreational community or will it become a ghost town?

Stevens thinks another company will pick up the property and finish Stagecoach. "I'm in love with that piece of property," he says. "It was intended for development." **Peak Passed?**

A Question Of Need

Between the floundering Stagecoach development and the city of Steamboat Springs is another isolated valley. The site has an aesthetically pleasing mix of open fields and forested areas, a good dam site on the Yampa to create a recreational reservoir, plenty of open land highly suitable for housing, and an adjacent mountain on the Routt National Forest that some say could be developed into a ski area to rival Mt. Werner.

Indeed, it seemed to be another idyllic spot that was "meant for development," at least in the developer's eyes. In 1973 the Pleasant Valley or Lake Catamount development was brought before the county. By this time though, the county planning commission was skeptical about approving another rich man's playground in the county. Many wondered if the county needed and could afford one more large scale upper class development in the Steamboat Springs area. Was there some point when the county should stand up and say "No more"? Was this that time?

The 2,863 acre site is located approximately 10 miles southeast of Steamboat Springs at the foot of the Rabbit Ears Pass highway incline. It was zoned agriculture and forestry, and the developer needed to change the zoning to planned unit development to accommodate 2,543 high density units, 375 town houses, 100 patio houses, and 221 five-acre homesites for a net density of 1.22 units per acre. About 69% of the property (1,985.2 acres) would be left in open

In May of 1973 the developers brought their sketch plan and request for rezoning before the Routt County Regional Planning Commission. They told the commission how a year-round recreational community was envisioned that would provide boating, waterskiing, hiking, horseback riding, ice skating, swimming, and tennis. A full time working ranch was to be developed and provided within the new community. The recreational and commercial facilities were to be open to the public on a controlled basis. Wildlife areas, including an elk calving ground on the west side of the Yampa River were to remain undeveloped and protected. Live streams on the property, notably Harrison Creek drainage, would not be tapped as a water supply but would instead be used "to create aesthetic amenities throughout the development."

Despite such immaculate plans, on June 21,

"... ghost towns with roads, rubble, fanfare and billboards — but no community."

would be absentee owners because there was no economic base to hold people at Stagecoach.

"Steamboat Springs already has too many doctors and lawyers and who else can afford to move into Stagecoach?" jokes Stevens. He says 33,000 is only a potential population that he would not envision occupying Stagecoach for 30 years. Many just buy land and hold it because they think it's a good investment. On all of Woodmoor's primary home sites about 80% are sold but only 30% are developed, says Stevens.

In 1972 Stagecoach prospered and so did Woodmoor. In 1972 the company's net earnings were \$1.3 million, and increase of \$921 thousand or 231% over their 1971 earnings. Woodmoor President Steven Arnold attributed the record profits to the fact that all six of the company's projects produced revenues for the full year.

But 1973 was a different story. The Woodmoor empire started to cost more than it produced in revenues. Woodmoor had plans to ex-



The town of Steamboat Springs, Colo. recently annexed "The Hill," at the base of the Mt. Werner ski area. Over 1,000 new condominiums stand ready. But the boom is suspended. More than 43% of the condominiums remain unsold.

1973 the multi-million dollar development was disapproved by the planning commission. The Pleasant Valley subdivision was turned down by a unanimous vote of the eight members present at the meeting. In his motion for disapproval, commission member Bub Cary cited the following regulation:

"It shall be the duty of the Planning Commission to discourage the subdividing of lands that are far in advance of the needs of the county . . . or that for any reason are being unwisely or prematurely subdivided." (County Subdivision

Regulations - 3.1C)

The question of establishing a need for the development was the crux of the issue. The developers said, "We realize this is a very controversial subject in view of the proposed development and the amount of development taking place presently in the Routt County area. It is our feeling, however, that there will always be a need for well-planned, well-controlled and aesthetically pleasing development. . . . We hope to provide, as a result of this development, an opportunity for additional people to enjoy our way of life in a controlled, well-planned atmosphere."

When the sketch plan came before the county commissioners for final approval in September they overrode the planning commission's unanimous disapproval and voted 2-1 in favor of

the development plans.

A skirmish was over, but the battle was not won. On March 27, 1974 the Lake Catamount developers were back before the county planning commission with the request for a zone change and approval of a water and sanitation district for the project. The vote was 5-2 recommending disapproval of the rezoning and 4-2 recommending disapproval of the district. Again the question of need for the development was paramount.

The commission noted, "With only 20% build-up of the Steamboat water districts, a new development is premature."

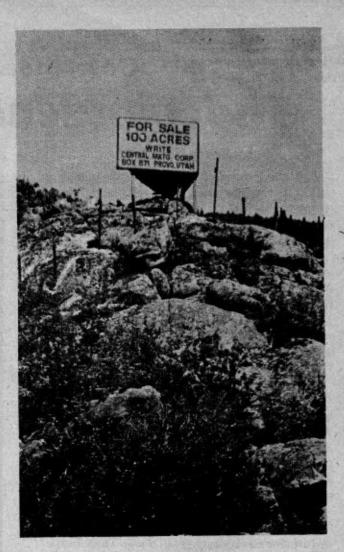
The specter of Woodmoor's announced bankruptcy also hung over the commission's decision. They said, "The Planning Commission is well familiar with the financial difficulties of some of the existing large land developments in the county, and feels that over-saturation of the supply of land available for development could only amplify the problems of such subdivisions."

The commission noted that less than 25% of the units platted in the county have been constructed. "Again the evidence seems to indicate that adequate land is available in Routt County for development," they said.

Twenty days later the county commissioners overruled the planning commission's recommendation against approval of the Lake Catamount Water and Sanitation District plan. Again, the vote was 2-1.

After the squabble over the question of need was put to rest by the commissioners' 2-1 vote, the rest of the arguments seemed minor. On April 24 the planning commission unanimously approved a 14-point modification outline for the Lake Catamount plan. Some of the modifications recommended conflicted with the Lake Catamount plan. Others were conditions that the developer had already agreed to.

On May 18 the planning commission gave Lake Catamount unanimous approval for their 176 acre Filing No. 1 for 296 units.



The signs remain, but hot land deals have cooled off in Routt County. The vacant lots and unsold buildings have a deteriorating effect on the county, but officials don't know how to assess the costs yet.

Peak Passed?

Routt-Empty Condos & Plenty of Plats

In Routt County, as in many other resort communities throughout Colorado, the market changed before the platting and building stopped. By June of 1973, the county had 13,992 units platted, giving the 7,000-person county a potential for an increase in population of 48,972 (assuming an average of 3.5 people per unit). These subdivisions occupied more than 9,200 acres or about 1.3% of the private land in the

Not many of these plats have been built upon, however, creating ghost towns with roads, rubble, fanfare and billboards - but no community. Charlie Jordan, county zoning administrator, says that of the 951 lots larger than two acres and outside city limits approved by the end of the summer of 1973, only about nine per cent (86 lots) had been built upon. Houses meant for year-round residence within the city limits have tended to be built and sold more

quickly, Jordan says.

Condominium units were built rapidly at the base of the main ski area (on Mt. Werner), but they have not been selling as expected. By May of 1974, at least 43% of the condominiums on Mt. Werner remained unsold, according to an inventory taken by Jerry Moore, a real estate appraiser based in Fort Collins. His figures show that of the 1,007 condominiums built, only 575 have sold. Moore says that since he counted pre-sales, which are not final, in computing the total number of units sold, his figures on the number of units still on the market are probably too conservative. "It probably is something like 50% (unsold)," he says.

Despite all these vacancies, enough additional condominium units have been approved to almost double this existing number. Al Shattuck, a Steamboat real estate salesman and the former zoning administrator for the county, conducted a survey in January, 1974. His figures show 110 units being built, 253 additional units approved and 551 additional units planned, but not approved, for a total of 914 new proposed units.

Jerry Moore attributes the slump in development in the Steamboat area to a number of factors. Losing the business that would have been brought in by the presence of the proposed 1976 Winter Olympics in Colorado, the passage of a state subdivision law, new county zoning, inflation, and the soaring interest rate combined to make the market unfavorable.

"When Colorado's laws grew tougher, I suspect a lot of developers just slipped across the border into Wyoming," says Moore.

The buyer motivation to purchase a condominium used to be easy to understand. "Depending upon the amount of use of the condominium by the owner, he could achieve a 10% return on his investment after taxes and was able to realize a substantial appreciation during his period of ownership," says Moore. He notes that one of the earliest (1968) condominium complexes on the hill, Storm Meadows, has realized a 48% appreciation — a rate well above inflation. Newer condominiums are appreciating between 6-22% a far more marginal investment.

The situation is acknowledged to have a negative effect on the county, although no one has assessed the exact costs yet. Vacant land and unsold buildings "have a deteriorating effect on the county," Charlie Jordan says. "It takes the land out of use and it may require county services without much tax revenue." But to correctly assess the costs, Jordan says, developments must be studied on a case-by-case basis. At the present time no cost-revenue studies or market studies are required to receive approval from the county on a subdivision plan.

"We're particularly concerned about large-lot subdivisions," Jordan says. "They tend to need more roads (a cost to the county), but their assessed value (the basis for revenue to the county from property taxes) is low because they are low density."

Age of Scrimp

The debate over growth goes on, despite the backdrop of economic uncertainty. Stagecoach, Lake Catamount and other large second home developments still carry the threat of bringing urban hordes into a rural paradise, in the minds of some Routt County residents.

Land use planning in Routt County has had a brief history of extremes. To most people four years ago, planning meant an unconstitutional taking of property. Since that time a large number of county citizens have spoken out and have made themselves a part of the process of planning. Today, many of them espouse land

use planning as a tool to protect property and public rights - not deny them.

If the economic recession continues, a new era in recreational planning may be ahead. Planning will be needed - not to hold down the number of developments perhaps, but to select for development essential to the community in -BH&JN an age of scrimp.

"When Colorado's laws grew tougher, I suspect a lot of developers just slipped across the border into Wyoming."

Confidential Oil Shale Study Reveals

Independence Spells Push for Shale

by Bruce Hamilton

With the federal oil shale prototype program still in its infancy, the first leased tracts barely off the auction block, it now appears that pressure is building to prematurely push oil shale into a full scale industry.

According to a confidential Department of Interior study prepared for the Federal Energy Administration (FEA), results from the prototype program will not be available before 1980. But key decisions on additional leases, water impoundments and government subsidies must be made during the next two years, the study shows.

According to the draft report, social disruption, air pollution, water supply problems and other environmental impacts will be compounded almost to the point of being unmanageable, if peak production is pushed. Still peak production may be essential if this country is to achieve President Nixon's goal of energy independence by 1980.

The report, "Potential Future Role of Shale Oil; Prospects and Constraints," was prepared by Interior's Interagency Oil Shale Task Force. It is one of nine studies on various forms of energy that will become the basis for the "Project Independence Blueprint" which is due November 1. An FEA spokesman told the Rocky Mountain News it was "logical to assume" that the oil shale report and the eight other energy reports would form the foundation of FEA recommendations to the President.

DISTURBING OPTIMISM

The study uses three model levels of development — "optimistic" (shooting for 2.5 million barrel per day production in 1990), "most likely" (approximately 1.7 million barrels per day in 1990), and "pessimistic" (approximately .75 million barrels per day in 1990). These value-packed words seem at odds with the environmental impacts outlined in the report. The "pessimistic" schedule would strip mine, dump wastes over, or otherwise "disturb" 9,500 acres by 1990 while the "optimistic" schedule would "disturb" almost five times that area — 46,000 acres by 1990. Over a 40 year period, the "optimistic" schedule of development would require 180,000 acres (about 281 square miles) of semi-wilderness in Colorado, Utah and Wyoming for "mining, processing, waste disposal, utility corridors, urban needs, and all associated facilities."

SUBSIDIES

While accepting this sacrifice, the study suggests that the American taxpayers should subsidize oil shale development to make sure profits are kept high enough to maintain oil company interest in the resource. "The risk having the greatest impact on oil shale development is the possible fluctuation in the price of oil during the productivity of the plant," states the report.

Investigating a range of subsidies, from low interest loans to increasing the oil shale depletion allowance (now set at 15%), the study finally recommends that the government adopt a "price floor" and "purchase agreement." The "price floor" would require the government to buy up oil shale at a guaranteed minimum price (\$12.35 is mentioned), if the market price of oil



An aerial view of Colorado's oil shale country — the Piceance Basin. Will Interior step up development at the expense of this land? Photo by Hubert Burke

fell below a predetermined figure. The "purchase agreement" would require the government to buy a guaranteed amount of shale oil at a guaranteed price as a steady customer.

MORE LEASING IN '76

"To accelerate oil shale production will require offering (more) public oil shale lands within the next few years," states the report. "Moreover, the leases must probably be larger than the 5,120 acre limit that now exists, particularly for locations in Utah and Wyoming."

As part of the prototype leasing program, Interior offered six oil shale tracts for lease in Colorado, Utah and Wyoming this past year. Each tract was approximately 5,120 acres in size, the maximum allowable acreage under the 1920 Mineral Leasing Act. Since the auction, mining plans have been drawn up by several lease holders that call for use of lands beyond the tract boundaries for waste disposal, water evaporation ponds and other support facilities. Such off-site expansion plans may be illegal.

These prototype tracts are not sufficient if the U.S. is to achieve energy independence in time, according to this report. To achieve "the optimum level of production, another lease sale will be required as early as 1976. Under the most likely schedule, lease sales would begin about 1977. To achieve the pessimistic schedule of production will require additional public lands in addition to the prototype leases, beginning about 1980," states the report.

Results of the prototype program will not be available before 1980 but the "optimistic" schedule would have the government lease more tracts four years before the results of their trial tracts are available.

COMPETITION FOR WATER

The study pinpoints water as a potential critical limiting factor to the grand plans for oil shale expansion. "The water resources of the oil

shale region of Colorado, Utah and Wyoming are adequate in total to support the three development levels postulated. . . . However, the right to use such waters and the construction of new impoundments will be an important constraint on development; making the optimistic schedule nearly impossible to attain."

The report says water in Utah and Wyoming is readily available for oil shale development, but in Colorado, where 80% of the high grade oil shale deposits are located, water is in tight supply.

"Even if new impoundments were constructed by 1981, the amount of potentially available water (in Colorado) is inadequate by 1986. This is not to say that Colorado will be out of water, for it will not be. This projection simply indicates that all of the water Colorado is entitled to is fully committed to specific projects by 1986. The issue that must eventually be faced is the distribution of the water among competing interests. . . ."

The study recommends immediate action on new impoundments including West Divide, Yellow Jacket and Yampa River reservoirs, if optimum development is desired. Construction would have to begin by 1975 on these projects to have them ready by the early 1980s, according to the report.

"Thus, any decision reached to accelerate oil shale development must carry with it implicit commitments for dam construction," reads the report.

PEOPLE PROBLEMS

The social problems that would accompany accelerated oil shale development mount higher with each added barrel of petroleum squeezed from the rocks. "... Extremely rapid changes in population represent a difficult, and sometimes impossible situation to manage. Observations of similar developments (notably Wyoming) indicate that a five per cent annual rate of population growth is the maximum rate that can be comfortably accommodated in the region. At a threshold of seven to ten per cent, boom-type growth is initiated. Above ten per cent, existing institutions such as the labor (Continued on page 7)

"... to accelerate oil shale production will require offering public oil shale lands within the next few years."

Deep Roots in Montana

High Country News-7 Friday, Aug. 2, 1974

A Montana sociologist studying Colstrip, Mont. and Gillette, Wyo. has found less of a tie to the land among Wyoming ranchers than among their counterparts in Montana.

The sociologist, Raymond L. Gold of the University of Montana, said that although both regions have similar histories of ranching development, "Wyoming ranchers identify with big business much more than Montana ones do. . . . ranchers in Montana tend to act in opposition to coal development. The ranchers in Wyoming tend to act so as to accommodate or acquiesce or capitulate to coal development."

In a report entitled "Social Impacts of Coal-Related Development in Southeastern Montana," Gold describes some of the recent social effects of coal development in the Colstrip region. During six months of research there, his research team noted:

- "strains in communicating with friends and neighbors of longstanding,

— the making of social class alignments previously considered unimportant,

— a shift in the established power structure from the ranchers to the new mining industrialists,

— the need to live with constant and increased uncertainties for which planning is virtually impossible,

a keen interest on the part of some merchants and businessmen in immediate monetary gain,
 the need to accommodate to the invasion and

Solar Heating Company Forms

The first publicly owned corporation in the U.S. to sell solar heating units for homes was formed in Colorado recently. The company, Solaron, plans to produce units at a sale price of \$700 for storage, controls and installation, plus \$4 to \$6 per square foot of solar collector space.

The units will collect heat in air, store it in rocks, and distribute it via a forced air system. The company says that for most houses, floor space can be divided by two to determine the amount of collector space needed.

President of the company is John C. Bayless of Boulder. Dr. George Lof, a chemical engineer and solar energy expert from Denver, is vice-president and a director of the company.

Oil Shale Push ...

(Continued from page 6)

market and local government institutions become inadequate and break down.

"Either the most likely or optimistic schedule would initiate boom-type growth across the region. However, in many smaller cities in the region, the growth would probably be much higher, leading to: 1) degradation in the quality of life, 2) reduction in industrial productivity, and 3) impairment of local governments' functions and fiscal viability."

FOOT IN THE DOOR

At the public hearings on the prototype oil shale leasing program those fearful of allowing the first "foot in the door" were assured that this was just a prototype program and its results would be fully evaluated before further development plans were initiated. The fact that this report exists indicates that the prototype-only promise may be hollow. Both the prototype program and the environment of the tri-state oil shale region may fall victim to the Project Independence planners.

requirements of newcomers who subscribe to foreign life-styles and value systems,

— and loss of a sense of community."

EXPLOITABLE NATIVES

"Ranchers, who for the most part view the corporations as amoral, cold-blooded, and motivated more by profit than anything else, are at a great disadvantage in dealing with the companies," Gold says. The companies have "better information, trained and experienced staffs, and an operational ethic suited to treating landowners as exploitable natives."

Companies reportedly take advantage of the

ranchers' traditional quiet independence. "Divide-and-conquer tactics" and "pincer movements" can be effectively used against the ranchers, Gold says.

"The traditional readiness of rural neighbors to get together to fight off destructive forces has been replaced by a modern rural inclination for the individual landowner not to get involved personally and directly in his own social salvation until it becomes desperately clear that any other course is almost certain to do him in," Gold says.

Gold's report is available from the Institute for Social Science Research at the University of Montana in Missoula, Mont. 59801.

How to Manage Sweetwater County

University of Denver Research Institute (DRI) researchers have proposed a series of programs designed to make boom town growth in Sweetwater County, Wyo. manageable. DRI has spent the past year studying growth problems in Rock Springs, the county's population center, and in other parts of Wyoming and Colorado.

DRI researchers John S. Gilmore and Mary K. Duff call their suggestions "problem solving institutions." Their three part proposal calls for the creation of:

— a Sweetwater County Priorities Board, comprised of local officials, industry representatives and citizens, to set a schedule and objectives for problem solving.

- a Wyoming Development Corporation to help

fund housing and public facilities.

— an expanded and extensive capability of state and local governments to manage the rate and scope of growth.

The social problems created by a doubling of population in less than four years in the county have degraded the quality of life, reduced industrial productivity, and threatened the financial stability of local government, the Gilmore-Duff study shows.

The study suggests that laws will be needed to manage growth. Some police-power tools are already available, such as planning programs, zoning, building permits subdivision controls and pollution standards. But plant site legislation and expanded authority over subdivision size, location and annexation will be necessary. The legal bonding capacity of local governments should also be raised, the researchers said.

The DRI study was funded by Rocky Mountain Energy Co., the coal-production arm of the Union Pacific Railroad. Copies are available from DRI, University of Denver, Denver, Colo. 80210.



Hot Cigarettes

Dr. Edward A. Martell of the National Center of Atmospheric Research says the cancercausing ingredient in cigarette smoke may be radiation instead of tar. Tiny, radioactive particles become imbedded in smoker's lungs, he says, and build up over the years until he or she is getting radiation doses that rival those of uranium miners.

In his research, Dr. Martell has discovered that radioactive particles in the atmosphere can collect on the sticky hairs of tobacco leaves. When the hairs burn, radioactive lead is fused into the hair particles. Dr. Martell is attempting to prove that damaged lungs are most likely to collect and hold the radioactive particles, because the lungs' defenses are already deficient.

In a smoker's lungs, Dr. Martell says, thousands of particles gather over the years in tiny clusters. A longtime smoker is still being bombarded with radiation caused by cigarettes smoked years before.

"We have learned a lesson from the experiences during the oil boom, with the air bases, and the ABM missile sites, that careful impact planning and preparation is essential to assure the well being of our own citizens and of the new arrivals as well. As responsible citizens we must insure that our state is equipped with the proper guidelines to guarantee proper utilization of our natural resources."

North Dakota Governor Arthur Link

48 States Plan Land

Forty-eight states have begun state land use policy studies and have instituted land use controls to cope with specific problems, according to Land Use Planning Reports. Only Alabama and West Virginia have failed within the past year to consider, to initiate a study of, or to enact state land use acts.

"Even states reluctant to move toward comprehensive land use legislation have found it necessary to institute controls over specific problems," LUP says. "Conservative Montana, for example, which passed a resolution this year opposing a federal land use act, has enacted some of the toughest strip mining controls in the country."

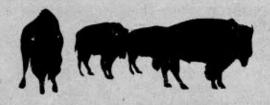


Today, for most of us, the buffalo is more symbol than sustenance. The following is an excerpt from a poem called "Report from Little Babylon" by Wilbur Wood of Roundup, Mont.

Railroads, reaching out from across the Mississippi. Across the great wide buffalo land, iron tracks the buffalo feared to cross, cutting the buffalo herds in half, in half again. Divide and conquer. Bands of men — I call them white men, but I mean men from Europe, from European civilization that came to America, I mean, my ancestors — chasing down the divided herds and killing and killing. If you have an enemy, the plains Indian, who won't step aside, you go out and destroy his food supply.

His food supply, his clothing supply. Buffalo meat, buffalo hides, buffalo bones for tools, buffalo sinews for rope, buffalo stomach for holding water. And a vision of the white buffalo calf maiden who appears to two men from the tribe in the ancient days as a beautiful woman approaching, so lovely, and one of the men desires her, desires to possess her. And the other man warns him, no, those are evil thoughts, she is a powerful holy being, we should honor her. But the first man can't stop thinking of possessing this beautiful maiden. And she calls him to her, and as he approaches a great cloud covers them. In a moment the cloud lifts and the sacred woman stands alone. At her feet the man with bad thoughts is a skull and bones on the prairie, fed upon by snakes.





just

The buffalo, a prized symbol of the American Great Plains, probably grazed its way into North America across the Bering Land Bridge during Pleistocene times. The animal was apparently not limited to prairie grazing. One report describes a band of Arapahoe Indians killing bison in the winter above timberline in what is now Rocky Mountain National Park, Colo. at an elevation of about 12,800 feet.

The buffalo was relentlessly hunted and nearly wiped out during the nineteenth century. When extinction looked near at the turn of the century, collectors paid \$400 to \$1,000 for mounted buffalo heads.

By 1901 the Yellowstone Park herd had dwindled to 23 animals. Today that herd numbers 800. It is the country's only wild, freeranging herd of buffalo still in their original habitat. Some biologists say its survival was aided by the warmth of thermal areas in the park during rough winters.

Other U.S. herds roam in Alaska, in Glacier, Yellowstone and Wind Cave National Parks, in House Rock Valley in Colorado, in the Wichita Mountains Wildlife Refuge in Oklahoma, and in a few other places.

Now that the numbers have grown, people have reverted to eyeing the animal as a meat object. There are 25,000 buffalo in the U.S. now and that number is increasing by 5,000 each year. The National Buffalo Association, based in South Dakota, predicts that Buffalo meat may sometime in the future sustain the American people. Their meat is higher in protein than beef.



beautiful buffalo

"I can't forget buffalo," admits poet Joe Ribar. "Sometimes I try but there they are again grazing in my brain." Ribar has written a collection of wry poems about this haunting creature. His **Book of the Buffalo** is available from Figtree Press, Star Route, Box 91, Claverack, New York 12513 for \$1.50. Poems from the book are reprinted below.

on buffalo dust

just beautiful beautiful buffalo no V-8's no america

there were more buffalo nickels than buffalo I've seen it all
where once great herds grazed
at sunset
someone has built a public
school
and children
swing on swings
dreaming at night of sugar plums
in houses built





Reckoning from Washington

by Lee Catterall

Weary in its sixth day of heated debate, Congress passed several startling amendments to the strip mining bill without major dissent, then passed the bill, 291 to 81.

A handful of congressmen grappled with the highly technical bill during its final day on the House floor, declining to ring the House bells for roll call votes until the very end.

Thirty to forty congressmen decided for the House to require that landowners give written permission before their land can be stripped for federal coal and that water right owners be given the same prerogative. They decided to ban strip mining for a large chunk of coal in the Powder River Basin that lies just beneath the surface of national grasslands.

The grassland prohibition occurred after absolutely no debate, with most congressmen having no idea what they were voting on.

The original bill banned strip mining on "national forest land," and Rep. Gunn McKay (R-Utah) proposed an amendment to allow it. Rep. John Dingell (D-Mich.) offered a counter-amendment that most observers thought would mostly restore the original language.

It did much more, merely by changing the phrasing to "National Forest System." When the bill was written in committee, Rep. Teno Roncalio had insisted on the more informal phrase so it would not include national grasslands, which are administered by the Forest Service.

Much of Wyoming's strippable coal — one estimate is more than a fourth — lies beneath the massive Thunder Basin National Grassland. It's part of the Fort Union Formation, the world's largest deposit of strippable coal.

But Roncalio was not on the House floor when Dingell offered his amendment and the House clerk read the important word change. He told this column he apparently was having lunch at the time. Because its effect would be greatest in Wyoming, no other congressman brought the subject up.

Instead, those members present passed the amendment by absurdly small votes of 23 to 15 (in preference to the McKay amendment) and 31 to eight (in preference to the Dingell amendment).

Dingell told this column he doesn't think national grasslands should be used as "playgrounds" for coal companies. "They are sufficiently important units of the National Forest System to have achieved the same general overall protection and status as other units of the national forests where trees are grown instead of being maintained for grass."

Rep. Craig Hosmer (R-Calif.), the bill's chief opponent, had used parliamentary maneuvers in previous days to bring quorum calls and roll call votes, but by that time he had abandoned any major attempt to weaken the bill. "The die has been cast," he said. "The troops are heading toward the cliff and they are going to walk over it, come what may, with this bill."

Roncalio praised Dingell afterward for "an expert job of legislative generalship." He said the original language, permitting strip mining in national grasslands, should be put back in the bill by senators and congressmen meeting in joint conference. He said he'll try to do that if he's named to the conference.



Strip Mining and The Rules Committee

by Lee Catterall

The strip mining bill came to the House floor in mid-July through the charity of a tiny but powerful committee that combines the features of a small town Southern sheriff and a big city Irish precinct captain.

The Rules Committee is a traffic cop, deciding in what order bills should be considered in the full House. But it decides not only when, but whether and how those bills should reach the House floor, and to whose parliamentary advantage.

So Reps. Morris Udall (D-Ariz.) and Patsy Mink (D-Hawaii) appeared before the committee to make their case in a chandeliered sanctum the size of a prosperous living room, complete with fireplace, next to the House galleries near the very gate of the floor.

His eyelids making every effort to stay propped up, 82-year-old Ray J. Madden (D-Ind.), the committee's chairman, listened at the opposite end of a boardroom table to Udall, Mink and friends, and to their opponents.

"I've been getting some opposition from miners in southern Indiana," Madden told them. "They say it's going to put a lot of miners out of work."

Not so, Udall said; that is false information the mining industry is trying to "peddle."

Rep. James J. Delaney, a 72-year-old Democrat from the Queens borough of New York, was interested not in Indiana miners but in the electric bills of his people. Slouched beside Madden, his heavy white eyebrows wrinkling their disapproval, Delaney growled his disaffection for "en-vi-ra-mentalists" and said Udall's proposal would "unquestionably" raise electricity rates even higher "right at the time when people can't pay their bills."

Rates would rise only three to five per cent, Udall said, and "the alternative (unreclaimed land) is not a very happy one either."

Delaney looked more approvingly later on the views of Rep. Craig Hosmer (R-Calif.) who likened the Udall proposal to "a domestic Arab oil embargo."

Hosmer said so very little land is disrupted by strip mining that it's hardly worth getting ruffled about. It amounts to 50,000 acres a year, he said. New York's Central Park is 8,000 acres, "so what we're talking about is a little more than six Central Parks."

Madden's eyes flashed open. "Is there strip mining in Central Park?"

Hosmer strained to repeat his illustration, then attacked another proposal — by Rep. Ken Hechler (D-W. Va.) — that would eventually ban strip mining. "The Hechler bill is nothing but a ploy by the environmental extremists — the green bigot brigade," he said.

More than a dozen congressmen followed each other at the end of the boardroom table, volunteering for the demeaning and intimidating experience before the 15-man committee and hoping Madden would flatter them by pronouncing their names right ("It's a French name," explained Rep. John H. Rousselot (R-Calif.). The "t" is silent.)

Rep. Teno Roncalio was one of the volunteers, telling Madden's committee that Wyoming has "the potential of being the number one producer of strippable coal of all the states in the country."

"Not to mine it would be an offense," Roncalio said, but stripping should be regulated as the Udall bill specifies. "We have bent ourselves backwards to satisfy responsible mining companies."

The committee finally gave its voice approval to allow the bill to be considered by the full House, along with the Hechler proposal to phase out strip mining and, at the opposite end, a Hosmer bill that's more agreeable to mining companies.

Editor's note: In the House, the Hechler and Hosmer substitute bills were soundly defeated and the Udall-Mink bill passed 291 to 81. The bill now goes to conference committee.



Yellowstone County Commissioner M. E. McClintock wants to put a dam on the Yellowstone River between Billings and Livingston. He says the impoundment is needed for flood control, recreation, agriculture and possible hydro-electric power. "We know there is opposition to such a dam, but there has been enough water flowing in the past 10 days to serve dozens of coal-fired generating plants," he says.

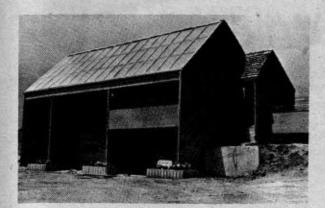
A "first-class" mobile home park is planned for 200 acres of land near Reno Junction, Wyo., says Brooke Beaird, a representative of the Atlantic Richfield Company. The site is 13 miles from Atlantic Richfield's proposed strip mine. "We felt if we didn't develop a respectable park there might be just a scattering of mobiles in the area," Beaird said.

"Since 70% of the power from proposed Colstrip Units 3 and 4 would be used in the Pacific Northwest, we feel that the plants should be located there," said Rosebud Protective Association president Duke McRae. In a letter to the four out-of-state utilities with interests in the Montana project McRae said, "Montana's 'Big Sky' should not be degraded to supply clean electric power for the Pacific Northwest."

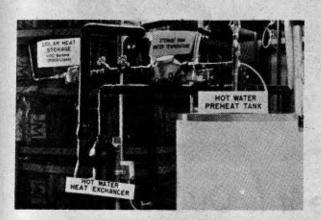
To the people of the Great Plains, I say: "Don't let them Appalachianize you. Don't listen to the siren song of the coal companies who have taken the wealth out of Appalachia while impoverishing the people. At a time when the nation needs your grain and your livestock, and your water supply is so precious, don't let them blast out your aquifers and divert all your water for coal gasification plants. When the slick salesmen tell you Wes-

terners about the fast bucks which can be made by strip mining, think twice about the big boom-time trailerparks, the suicides and psychiatrists, the huge army of temporary interlopers who feast on the quick profits, and then leave you for generations to pay the bills for public facilities and clean up the trash and bones once the coal is all stripped out."

Rep. Ken Hechler (D-W.Va.)



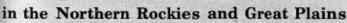
Fort Collins Home Heated and Cooled By Power from Sun





An open house has been declared in Fort Collins, Colo. for those who'd like to visit the world's first solar heated and cooled home. This \$68,000 model was built for scientific purposes, but it is equipped with all the conveniences to please a modern family. The solar system will provide 75% of the needed forced air heat in the winter and 85% of heat required to run a cooling system in the summer. Heat trapped in glasscovered panels on the roof is transferred to an insulated 1,100 gallon water tank in the basement (at left). The solar system was designed by George Lof of Colorado State University. The house was designed by the Denver architectural firm Crowther-Kruse-McWilliams. The project is the first of three solar houses to be built at an "environmental village" at CSU financed by the National Science Foundation.

Emphasis ENERGY





With a projected 10,000 mobile homes needed to house oil shale workers, Colorado Gov. John Vanderhoof has promised strict land use control enforcement in the area. "You just can't indiscriminately go in and set up trailer houses," said Vanderhoof. The Governor has named Donald A. Rapp, a former regional planning director, to the post of director of oil shale planning.

Digging at the National Reactor Testing Station in eastern Idaho has revealed about 150 cubic yards of earth contaminated with radioactive strontium 90 and cesium 137. Atomic Energy Commission spokesman Dick Blackledge said a corroded vent line from storage tanks apparently rusted through in spots, causing leaks. Both of the radioactive elements are created by the fission of uranium.

Last month the Department of Interior held a sale of 12 geothermal leasing units located on National Resource Lands in Utah (administered by the Bureau of Land Management). The 12 units, totaling over 23,000 acres, are located in the Roosevelt Hot Springs Known Geothermal Resource Area.

The first commercial solid waste recovery plant to be built in the Denver area will break ground late this summer. Energy Conversion Systems Inc. of Westminster, Colo. will build and run the plant. They will burn up to 450 tons per day of solid waste to generate electricity to serve the needs of 8,500 homes. The process is described as pollutionless and odor-free.

The Wyoming Geological Survey has received a grant of \$24,780 from the U.S. Bureau of Mines for a cooperative project of collecting and analyzing Wyoming coals. The project will provide a much-needed comprehensive study of the coals' chemical composition and physical characteristics.

Consolidated Coal Co. did not bid on a 320-acre tract of land adjacent to its strip mine near Stanton, N.D. in July because of "unwarranted and unreasonable expense added by lease stipulations." Among the provisions in the Bureau of Land Management lease that upset the coal company were requirements that all coal be mined, that reclaimed slopes and final highwalls be graded to 18 degrees or less, and that five feet of topsoil be used for reclamation.

A Bureau of Land Management official has promised that future federal coal leasing in southeastern Montana will not take place in areas where saline soil conditions prohibit reclamation. The statement came in response to a complaint registered by the Northern Plains Resource Council (NPRC). Citing problems observed at the Decker Coal Co. mine in Montana, NPRC asked the BLM to stop the leasing of lands with saline-alkali soils to coal companies. "If we find there is no way of handling the salt problem, we won't be able to lease it — nor will we want to," Montana director of the BLM Edwin Zaidlicz said.

Montana Gov. Thomas L. Judge is considering seeking construction of an experimental coal liquefaction plant in his state. Judge says his administration is investigating methods to assure Montana will always have adequate supplies of petroleum products. Liquefaction turns solid coal into a liquid ready for refining into fuel oils.

North Dakota Gov. Arthur Link told voters in his state to insist on a commitment from political candidates on the issues of coal development and environmental protection. He said he appreciated statewide support for his "go-slow" approach to coal development and that it would be a mistake to "send a legislature to Bismarck which lacks the commitment or courage to support these policies."

High Country News-11 Friday, Aug. 2, 1974 The Hot Line

across the country

An atmospheric scientist at Oregon State University says windmills off the Oregon Coast could supply 20-30% of the total electric energy requirements of the Northwest. E. Wendell Hewson says the windmills could be installed at about the same cost as nuclear plants but the fuel would be free.

The House and Senate have both passed the Geothermal Energy Coordination and Management Act. The bill guarantees loans to industry interested in building demonstration geothermal plants. Dr. Alfred Eggers Jr., head of the National Science Foundation's energy program, says geothermal power may provide a significant amount of the West's energy needs by the mid-1980s.

The June 21 issue of Science reports that oil shale has less energy value per ton than practically any substance that has been used for commercial fuel.

Dried plant material may become an important source of electric power, according to a Stanford Research Institute report. The report shows that a ton of dried plant material, costing about \$9.70 to grow and collect, would yield 15 million BTU if burned directly to generate power. Or, the plant harvest could be converted into synthetic natural gas, providing about 1,000 cubic feet of methane per ton of plant material. A 1,000 megawatt high pressure, direct-fired generating plant would use some 15,000 tons per day, harvested from a 245 square mile farm. That plant could produce electricity for about 13 mills per kilowatt-hour.

The Senate Government Operations Committee has reported out S. 2744, establishing an Energy Research and Development Administration and a Nuclear Safety and Licensing Commission. ERDA would manage federal R&D efforts. The nuclear commission would handle the regulatory functions now handled by the Atomic Energy Commission. Barring an impasse on the Senate floor or in a House-Senate conference, Capitol Hill observers believe the bill may be ready for President to sign by mid-August.

The University of Vermont has a \$50,000 contract from the state to study the feasibility of using cow manure to produce methane gas. Agriculture Dean Thomas Dowe says the project presents no technological problem. The real question is one of economics, he says.

Industry's failure to meet sulfur dioxide standards could lead to 6,000 excess or premature deaths annually, according to a draft Environmental Protection Agency report. The report emerged early in June to counter the utilities' anti-scrubber campaigns. Failure to attain standards could also cause 400,000 to 900,000 attacks of respiratory disorders like croup, acute bronchitis and pneumonia among otherwise healthy children; aggravated heart and lung disorders in elderly persons; and more frequent attacks for asthma sufferers, the report says.

Human waste could be an efficient source of power to run government vehicles, Sacramento city and county officials think. They are seriously considering a regional sanitation plan which would include converting raw sewage into methane gas. The gas could then be converted to a combustible liquid fuel called methanol.



New Tack Taken on Colorado Wilderness

In an attempt to bypass House inaction on three Senate-approved Colorado wilderness bills, Senator Floyd K. Haskell has won Senate Interior Committee approval to add the proposals to a bill already passed by the House. That House bill creates three wilderness areas in two other Western states.

The Senate Interior Committee okayed Haskell's amendment and ordered the omnibus wilderness measure, HR 12884, reported. As passed by the House of Representatives, the bill creates the Emigrant and Agua Tibia Wildernesses in California and the Mission Mountain Wilderness in Montana. The bill now goes to the Senate for consideration.

Haskell added to the bill the Colorado wildernesses which the Senate has already approved but which have encountered slow going in the House. They are still lodged in the House Interior Public Lands Subcommittee, chaired by Rep. John Melcher, D-Mont. The significance of Haskell's move yesterday lies in the fact that Melcher is a strong supporter of the Mission Mountain Wilderness proposal in his home state. The fate of that proposal is now tied to the fate of the three Colorado proposals sponsored or co-sponsored by Haskell.

The Colorado preserves are the 237,500-acre Flat Tops Wilderness north of Glenwood Springs, the 128,374-acre Eagle's Nest Wilderness near Vail, both approved by the Senate in October, and the 455,000-acre Weminuche Wilderness in southern Colorado, passed in February.

If it passes HR 12384, the Senate will send back to the House a measure which includes the three wilderness areas the House has already approved, but coupled with the three Colorado areas the Senate has approved. Unless the House specifically rejects the Senate amendments and sends the bill to conference committee to resolve differences, HR 12884 will go to the President for his signature.

"The move was just a legislative precaution,"
Haskell said today, "one designed to give the
Colorado wilderness proposals an alternate
route to passage by both houses this session of
Congress."

Council Backs Tough Mansfield Amendment

The Northern Plains Resource Council is calling for action which could "save the West and get Appalachia back on its feet and off welfare," says Robert Tully, NPRC chairman.

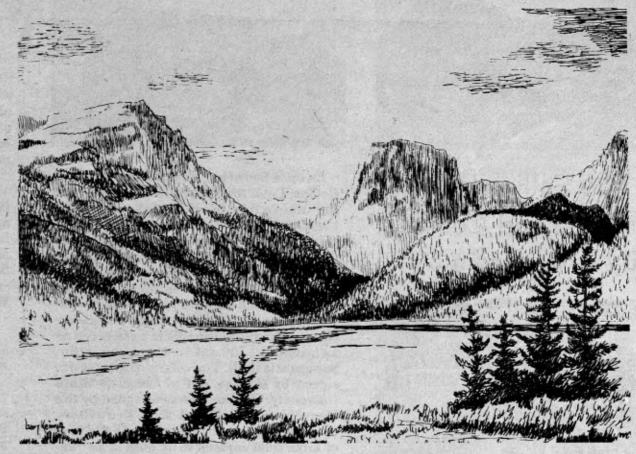
"Write your congressmen and ask them to support the Mansfield amendment," the council urges.

The Mansfield amendment was passed by the U.S. Senate in October of 1973. As part of a federal strip mining law, the amendment would prohibit the strip mining of coal in areas where the mineral rights are held by the federal government and the surface rights are held by another party. The amendment does not apply where mineral and surface rights are both held by the federal government or private interests.

The amendment would do two things, according to NPRC:

limit western strip mining and keep the homesteaded lands of the West in agriculture.
 encourage the economic development of Appalachia by forcing the coal industry underground to mine the vast deep minable reserves left in the East.

The Senate strip mining bill, which includes the Mansfield amendment, will be weighed against a parallel bill from the House in Joint Conference Committee,



Credit Where It Is Due

Encouragement of industrialists who do right by the environment, says the National Audubon Society, may accomplish just as much as angry protests against those who don't.

So the Society has established guidelines for a Citations to Industry program through which local Audubon chapters can give industry a public pat on the back for outstanding environmental actions and accomplishments. Nine chapters, so far this year, have voted such citations. The recipients include a steel plant that installed an advanced type of water pollution control equipment, a paper company that has organized a major recycling program, and a

Berries and Bears

It's berry picking time in the Rockies.

Louis Kis of the Montana Department of Fish and Game says that the huckleberry is the number one find for those stalking wild fruit. Huckleberries are most often found between 3,000 and 6,500 feet in burned-over, logged-over, or open areas. They look like the blueberries you buy in the grocery store and begin ripening about July 15 at the lower elevations.

Gooseberries and elderberries are found along low drainages in the mountains. Gooseberries turn from a dark green to light green to purple at the peak of ripeness. Elderberries, which are good wine-making material, grow in a bushy shrub and ripen to a dark purple.

The mountains also offer raspberries and black caps, a blackberry. These fruits are most often found along stream bottems and edges of disturbed soil such as road beds or old home

Chokecherries, buffalo berries, Oregon grapes and wild plums will also be available in abundance this year, Kis says.

Be warned, however, that wherever there are berries, there may be bears.

"People should be aware that bears do frequent berry patches," Kis says. "But people have nothing to fear if they stick together, make noise and keep their eyes open. The only trouble is the rare occasion when you startle a bear."

radio station that has consistently backed conservation causes in its broadcasts.

Such a citation is not necessarily an endorsement of the entire plant or operation, much less of an entire corporation or industry, Audubon says. Chapters are warned against public relations "snow jobs," where the corporation is only carrying out environmental protection measures required under law.

Audubon President Elvis J. Stahr said it was hoped that the program might give help and encouragment to an industrial administrator who "sticks his neck out and insists on spending corporate dollars to do more than a minimal job of pollution abatement (or reclamation, natural area protection, etc.) and who would feel severely let down if his company got little or no public credit, even from the segments of the public who claim to be most interested in the environment."

Eastern Island Chooses Wind Over Oil Power

Late last summer the president of a power company on a tiny island off the Rhode Island coast — Block Island — learned that diesel oil for the generators would be in short supply soon. His solution? Build windmills!

The power company is now building six giant windmills, with blades as big as city buses.

The blades themselves have to be capable of withstanding wind speeds of up to 150 miles per hour. Hopes are that the windmills will be operational as early as 1975 and supplying 70% of the island's power needs.

The population on the island peaks in summer to 7,000 people. Winds average about 13 miles per hour during the summer and twice that during winter. The power company says it will probably be cheaper to build the windmills than a conventional oil-burning station with the same generating capacity.

The president of the company, Henry Hutchinson, says, "You know, this really isn't that far out. There used to be six-and-a-half million windmills in the Midwest up until about 1935."

Western Roundup

DDT: Beef Check Requested

Controversy in the Pacific Northwest over spraying the tussock moth with DDT continues. Now Friends of the Earth (FOE) and the Health Research Group (a Washington, D.C. based research organization) have requested special surveillance and monitoring to assure that DDT-contaminated beef and mutton won't be marketed.

"Observers in some of the treatment areas report seeing cattle, meadows, and ponds in meadows getting hit with DDT from the spray helicopters," said a representative of FOE. "Some of these animals can be expected to exceed the legal tolerance (7 ppm), and we doubt that USDA's (the Department of Agriculture's) regular Meat and Poultry Inspection Program, which is conducted on a statistically-random basis, is going to catch them before the meat is sold.

"DDT has been shown to be a carcinogen (cancer causer) and a mutagen (mutation causer) in animal systems and presents a real health hazard to human populations," said a staff member of the Health Research Group.

Meanwhile, in the search for a more acceptable pesticide to control the tussock, the Forest Service has been spraying test plots near Potlatch, Idaho with Sevin. Earlier tests with Sevin on plots near Missoula, Mont. resulted in a 97-99% reduction in tussock moths in the 800-acre test site.

Flathead Changed by Development

Over 21,000 acres of agricultural land and 9,000 acres of big game winter range have been subdivided in Flathead County, Montana, since 1961. The agricultural acreage taken out of production represents one-sixth of the county's acreage in the four most productive classes of agricultural soil. A citizen's group called Flathead Tomorrow compiled the statistics. The group also reports that in a survey taken by the county last year 74% of the respondents believed that people were moving into the county too rapidly. Only 20% of those who answered believed that the Flathead Valley was becoming a better place to live.

Carpools & Bus Lanes for Denver

Mandatory implementation of car pool services and establishment of express bus lanes have been approved by the Colorado Air Pollution Control Commission for Denver. The new regulations require the Denver Council on Governments to prepare car pool locator service plans by April 1, 1975 with employers of more than 250 in one location. The express bus lane plan must be submitted by Jan. 1, 1975.

Fertilizer Plants & Utility Siting

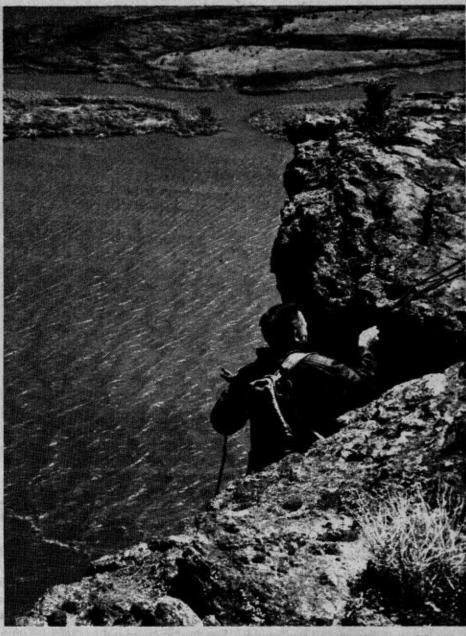
The Burlington Northern (BN) railroad insists that if you intend to produce fertilizer in Montana, you can ignore the state's Utility Siting Act. The siting act requires a thorough state study of utility plans and a substantial filing fee for large oil refineries, power plants, transmission lines and coal gasification plants which produce synthetic natural gas. The case is a sticky one, because the BN plant would produce ammonia fertilizer from synthetic natural gas produced from coal. The decision, which will come from the state Department of Natural Resources, could cost BN hundreds of thousands of dollars because of the impact studies required under the act. Some Montanans argue that an industrial project of this magnitude should be subject to the planning procedures outlined in the act. The BN plant is expected to consume at least a million tons of coal a year. The company has applied for permission to divert 67,000 acre feet of water per year from Fort Peck Reservoir.

Denver to Recycle Wastes

The injection of recycled waste water into Denver's city and suburban distribution system will occur in about three years, the Denver Water Board says. Recycled water will make up five per cent of the total supply by 1990 and 50% twenty years later.

EPA Studies Montana Salinity

The Environmental Protection Agency is at work on a study to help fight a major threat to the economic life in the Northern Plains states — saline seep. On the Highwood Bench near Fort Benton in northcentral Montana, salinity has been increasing. Fish have been mysteriously disappearing. Feeder streams and coulees in the area could contaminate the Missouri River. The EPA is now doing research, conducting a biological and water quality survey. A 1973 Soil Conservation Service survey estimates that 153,000 acres of dryland agricultural land has been lost to saline seep in Montana. Over a quarter of a million square miles of dryland cropland is thought to be threatened in the Northern Great Plains area.



The Snake River Birds of Prey Natural Area south of Boise, Idaho has one of the highest known densities of breeding raptors (eagles, falcons, hawks and owls) in North America. Dedicated by the Bureau of Land Management (BLM) as a bird refuge in 1971, today much of the surrounding public land is in serious danger of being turned over to private agricultural interests.

In the photo above, raptor biologist Morlan Nelson is descending by rope to investigate an eyrie on the cliffside above the Snake River. Along this 33 mile stretch of river about 240 nesting pairs of 13 species of raptors may be found. The area is especially good habitat for golden eagles and prairie falcons. These birds utilize the surrounding canyon rim wildlands for hunting ground squirrels and jack rabbits. On the north rim the BLM has established a five mile wide buffer zone back from the rim. In this buffer zone studies are to be conducted to determine how much land the nesting raptors need to support themselves and produce young each year.

Unfortunately, the soil type which is so favorable to the dense populations of ground squirrels is also classified as suitable for agricultural development. The BLM is being subjected to considerable pressure to open the buffer zone for use in the Desert Land Entry Program. This program permits an individual to apply for a patent to 320 acres of public land to develop it agriculturally. In five years the land reverts to private ownership.

It is essential that the BLM be allowed the four year moratorium on development in this buffer zone to determine the needs of the nesting raptors. If that stretch of land is put into production, many birds will vanish, for there will be an inadequate food supply to support this unique density of raptors. Letters of support for this moratorium on development would be very helpful. Send letters to: William Mathews, State Director, Bureau of Land Management, Federal Building, 550 W. Fort, Boise, Idaho 83702. For further information contact: Carol Snow, Route 5, South Five Mile Rd., Boise, Idaho 83705.

Coyote Getters in Idaho

Idaho has been allowed the "experimental" use of sodium cyanide for predator control by the Environmental Protection Agency. Ten Idaho counties will have programs similar to those already approved for the states of Texas, Montana and California. Predator poisons were banned by executive order, but reported high sheep losses have convinced the government to allow poisoning on this limited basis. Western governors have been pushing for still fewer controls on poisoning including the release of Compound 1080 which is far more persistant and toxic than sodium cyanide.

Thoughts from the Distaff Connent by Marge Highey

There are times when one feels very much in harmony with nature, but on some of those occasions, nature seems not quite attuned to the same key. I had spent four days away on business, and it was good to get back to the cabin and the mountains. The morning air smelled clean and spicy after a rain the day before. What a great day to

appreciate nature, I thought.

An unfamiliar birdsong high in a treetop back of the house aroused my curiosity. I went inside to get the bird book and binoculars, but when I returned, the trilling and warbling had ceased. I scanned the tall trees and saw something move. Raising the glasses to my eyes, I saw, as I brought them into focus, shiny black eyes, tannish sides with black and white stripes — and a long upright tail, nervously twitching back and forth! We'l, that little chipmunk had certainly not been the creator of such lovely music! I waited awhile, but apparently the bird wasn't going to sing for me, so I put away the book and binoculars and decided to go fishing.

Beaver Creek, which meanders through a jungle of willows across the meadow in front of the house, has long been one of my favorite fishing spots. It's been several years since I've fished there except in a couple of the few easily accessible holes. Today, I thought, I'll cut through the willows upstream, and fish down, for a change. I readied my rod and creel, made a pocket-sized sandwich, and left Pearl a note. She had gone to Steamboat, and I'd asked her to bring me some milk, so I knew she'd stop in on her way

home.

"Have gone fishing in Beaver," I wrote, then added, optimistically, "Come over for supper — we'll eat fish." I taped the note to the refrigerator and headed across the meadow.

Between the house and the creek we have a little pond, wherein lives a beaver. As I approached the bank I eased quietly to the pond's edge. Sure enough, Mr. Beaver was making a triangle of waves as he swam smoothly toward the outlet. I'll watch awhile, I thought — I have all afternoon to fish. But the beaver disappeared among the reeds downstream. The sun was warm on my back so I sat there, daydreaming, for quite a long time, but he didn't return.

When a small grey cloud hid the sun, I gathered up my things and headed for the willows. I should have known better — it's always been sort of a boggy jungle right there - but somehow the boggy spots seemed deeper and wider than they used to be. (Could it possibly be that I'm less agile than I was 20 or 30 years ago?) In time, I finally worked my way to the creek. By then, the small grey cloud had become a big black one. I caught a nice "brookie" just as the rain started, and another, smaller one, on the next cast. Well, I thought, I'm going to get wet before I get home anyhow, so I'll catch two more and we'll have enough for supper. But the rain pelted down in sheets, the fish quit biting, and I gave up. I shouldered my way back through dripping willows and plodded across the meadow through the saturated, knee-high grasses. Water dripped from my hat onto the forgotten sandwich in my shirt pocket.

Back at the house, I peeled off my sodden clothes and replaced them with warm dry ones. The note was still taped to the refrigerator. Apparently Pearl had returned in the midst of the downpour and had gone straight to her cabin. That's just as well, I thought — I'm so hungry I can eat both fish myself. (They were, indeed, delicious!)

It stopped raining, and after supper I walked over to Pearl's to get the milk. We talked awhile, and just as I was leaving, the setting sun broke through the clouds. At her door we stood in awestruck silence. A rainbow arched across the sky from one end of the lake to the other. It was a bright wide band of vivid color — as perfect and as complete as a child might paint a rainbow!

Ah! I thought — isn't nature wonderful?





Photo by Pat Hall

Bulletin Board

MORE COAL HEARINGS

Public hearings have been scheduled for Bureau of Land Management's draft environmental impact statement on federal coal leasing. The statement is a general assessment of the probable impact, nationwide, of the federal coal-leasing program. Hearings will be on Aug. 12 in Salt Lake City, Utah; Aug. 14 in Billings, Mont.; Aug. 16 in Casper, Wyo.; and Aug. 19 in Denver. Written comments will be accepted until Aug. 30 and should be addressed to: Director (Attn: 723), Bureau of Land Management, Department of the Interior, Washington, D.C. 20240. If you wish to testify you should preregister with your BLM state office. Copies of the statement are available at state BLM offices.

LAND USE CONTROLS OVERVIEW

The 58-page Summary of State Land Use Controls — July 1974 is now available. The report contains summaries of major state land use activities undertaken this year, state land use policies, coastal zone management activities, the use of local land controls, state methods to deal with power plant siting, strip mining controls, and efforts to preserve agricultural land through differential tax assessment. The report costs \$9.50. Checks should be made payable to Plus Publications, Inc., 2814 Pennsylvania Avenue, N.W., Washington D.C. 20007.

UINTA GUIDE

The High Uintas are featured in a new hiking and fishing guide with the publication in June of "High Uinta Trails" by Mel Davis of Salt Lake City. It will cover the High Uinta Primitive Area and the proposed High Uinta Wilderness.

The guide will give information on access points, trails, lakes, fishing and camping, as well as some items for those using horses in the area. Small maps are included.

The publisher is Wasatch Publishers, Inc., a new company started by Davis and hiking partner, Bill Rosqvist, who also produced "Wasatch Trails" last year (about trails near Salt Lake City) and "Cache Trails" this spring (describing trails around Logan).

The new book sells for \$2.95 and will be available at sport shops and book stores.

WILDERNESS WALKS

The Wilderness Workshop of the Colorado Open Space Council is sponsoring "Wilderness Walks" in August and September. The outings are aimed at teaching people about some key de facto wilderness areas which are now or should be considered for inclusion in the National Wilderness Preservation System. Walks for both "weather-beaten-explorer" types and families are scheduled. To get a schedule write: Wilderness Workshop of COSC, 1325 Delaware St., Denver, Colo. 80204.

WILDERNESS WARRANTY

"Wilderness carries no warranty from the Manufacturer," says Floyd Wilson of the Wilderness Education Foundation in Denver. Wilson has prepared a manual for the care and use of this delicate gift, entitled "A Code of Conduct for Those Who Visit Wilderness." The manual contains wise rules of behavior on trails, off trails and in camping. Wilson suggests that you limit your group to no more than six people, that you replace the traditional campfire with a stove and that you do not use axes, saws, shovels or guns in the wilderness. "Leave nothing you brought in with you, not even your footprints," Wilson says. Copies of the Code of Conduct are available from the Wilderness Education Foundation, 1407 Jersey St., Denver, Colo. 80220.

WYOMING PLANNED PARENTHOOD

All Wyoming residents are welcome at the Casper Planned Parenthood clinic, 1655 E. 2nd St. Information and help is available to both men and women who wish to control their fertility. You pay if you can. But if you can't, Casper Planned Parenthood will help you anyway. Fees and the price of supplies sold are held to a minimum. Donations are welcomed and are tax deductible.

WINDMILL SURVEY

The Alternative Energy Resource Organization (AERO) is conducting a windmill survey. If you have a wind powered device, they'd like to know where you got it, what kind it is, and who made it. They'd like to know how long you used it, what problems you had, and where you could get parts to repair it. If you can help AERO, write to Kye Cochran, 418 Stapleton Building, Billings, Mont. 59101.

Book Review

Knowing the Outdoors In the Dark

by Vinson Brown, Collier Books, N.Y., 1972. \$2.95, paperback.

Reviewed by Peter Wild

As one who as a child saw bears — or worse — lurking behind stumps as soon as the sun went down on the other side of the wood lot, I approached this book with some skepticism. After all, people do fall off cliffs in the dark; snakes, including poisonous ones, do prowl around at night.

Undoubtedly Vinson Brown realized that some readers would bring their phobias to his book. He begins by gently reassuring them with two sections in the introduction, "Exploring the outdoors at night in safety and comfort" and "Sharpening the senses." The dark can be dangerous, but with a little care and thought it need not be. Those senses, night vision, smell, touch, dulled by civilization and its disposition toward hiding from the night, blossom to a remarkable extent when given the chance. His first chapter suggests one begin learning by a night exploration of a familiar place, such as the back yard. It provides detailed hints as to how to proceed, what to look, listen, touch, and smell for.

The next seven well-illustrated chapters deal specifically with mammals, birds, reptiles, fish, insects, life by the waterside, and plants. Anyone who observes aspects of nature by day will soon realize that he can experience his favorite subjects in a totally different way at night. For instance, the bird enthusiast will delight in identifying birds by their silhouettes against the moon, those interested in plants by learning them by touch or by how each variety moves in the wind.

After this groundwork in the basics, later chapters of Knowing the Outdoors in the Dark present the more advanced and fascinating techniques of attracting wildlife and developing what most people have experienced at

one time or another, a sixth sense. All of this has to do with individual harmony and growth. Those who have been pumped up, then disappointed, with the promises of quick courses in sensitivity training will find true substance here.

I might add that Knowing the Outdoors in the Dark would be suitable for interested children at the sixth-grade level and above. It would also be an invaluable guide for parents and teachers, and others working with children, who wish to open them to a unique and perhaps profound experience.

Peter Wild is a writer, teacher and environmentalist from Tucson, Ariz. Last year Doubleday released his latest collection of poems, Cochise, which was nominated for a Pulitzer Prize. This fall Doubleday will publish another of Wild's books, entitled The Cloning. Wild teaches literature and creative writing at the University of Arizona and is co-chairman of the Wilderness Committee of Arizonans for Quality Environment.

Eight thousand acres a day, three million acres a year, are going under the bulldozer. Cities are sprawling, bursting at the seams. Highways and airports are frequently being misplaced, homes built in flood plains, strip mines dug into beautiful mountainsides. The idea was not to stop growth, but to give it vision and direction so that we would avoid the mistakes of the past.

Rep. Morris Udall (D-Ariz.) referring to the land use bill he sponsored. The bill was killed in the House earlier this summer.

Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

"Second homes for 4,000," the builders decreed.
"With golf, elk, and tennis, our sales will succeed."
The condominiums shone,
But the locals just groaned,

"We don't think it's something we need!"



An increase in the coughing of fish may signal changes in concentrations of industrial wastes entering lakes and streams. Fish cough frequency is being monitored by an aquatic biologist at the National Water Quality Laboratory at Duluth, Minn. Coughing is a natural process to remove debris which has settled on the gills. It is common in bluegills, sunfish, fathead minnows and all species of trout and salmon.

In an unusually straightforward attempt to halt growth, the city of St. Petersburg, Fla. adopted an ordinance requiring the last 25,000 people who had settled there to move out. The edict was rescinded a fortnight later, because it looked unconstitutional and impractical.

Federal prosecutors must fight "twentieth century buccaneering" by illegal coastal marsh land real estate developers, said Attorney General William Saxbe. Speaking at an enforcement conference in Florida, Saxbe said failure to wage this battle will "signal an impending and crushing defeat in the larger effort to maintain an environment that civilized man can inhabit."

The Coca Cola Company will be selling soft drinks next year in throwaway plastic containers. Chemical Week magazine reports that other manufacturers are annoyed at Coca Cola's decision. They worry that, with millions of the throwaway containers around, the government may crack down on the entire packaging industry.

A 4,000 mile long transcontinental bicycle trail is planned for the U.S. Its most scenic stretches will include the Oregon Coast, Yellowstone Park, Teton Park, the Wind River Range, the Colorado Rockies, the Ozark National Scenic Riverways, Kentucky Bluegrass and the Shenandoah Valley.

Sen. Gaylord Nelson (D-Wisc.) has asked the Senate Appropriations Committee to delete funds sought by the U.S. Forest Service to spray the herbicide 2,4,5-T in national forests. "Sound public policy dictates restraining all use of potent and toxic agents, such as 2,4,5-T, until adequate safety tests are conducted," Nelson says. The National Academy of Sciences says use of 2,4,5-T in Vietnam brought "reports of serious deleterious consequences."

A study of Americans' attitudes about environmental problems—reported in the Christian Science Monitor—demonstrates that most Americans are all for solving the nation's environmental problems. . . providing it doesn't cause any personal inconvenience.

The study involved a survey among a number of high school students and teachers involved in a conservation association. Among the findings of the survey is the fact that 86 percent of the students admitted to using throw-away beverage containers, even though they realize that they're detrimental to the environment. Also, 68 percent of the students said that they would prefer to drive their cars in the city rather than take public transportation.



A CONSERVATION PORTRAIT:

Dorothy Bradley, Legislator for the Land



Montana State Representative Dorothy Bradley (D-Gallatin County) had everything going against her when she first decided to run for the legislature on Earth Day in the spring of 1970. "I was the wrong age, wrong sex, and wrong party," says Bradley.

Another disability was her "totally environmental platform" in a very conservative district. "I talked a lot about planning and zoning. It's a really heated subject here, especially zoning, and we've had a lot of bad luck with it in Gallatin County. We don't even have a planning board, yet we're one of the fastest growing counties in the state," says Bradley.

Raised in Montana. Bradley attended Colorado College. "If you'd asked me five years ago, I'd have thought politics was the last thing I'd ever be involved in. I wasn't the type that was involved in student government. I was headed for graduate school in anthropology.

"The initial reason for filing was that I thought I could raise some potent issues during the campaign. I think people in my district appreciated my forthright campaign, even though they didn't necessarily agree with me on all issues. I think it's incredible that someone like me could run and be elected," she says.

Since her first year in the legislature when she was the only woman in the House (this past year there were seven women representatives) Bradley has introduced or been a strong supporter of many key environmental bills. Serving as vice-chairperson on the House Natural Resources Committee, she is in a crucial position to oversee the orderly development of coal in Montana.

"Coal development began so abruptly and suddenly on a large scale in Montana that we really began only tackling it seriously in the legislature a little over a year ago. But the issue definitely dominated the '73 session, and after adjournment I think most legislators returned home with feelings of confidence and pride that we had passed some significant measures which would insure precautionary approaches, protect the land; and also reach that much sought balance between a sound environment and a healthy economy."

In the 1974 session, Bradley thinks, "Perhaps the most important action that we took was Governor Thomas Judge's bill which placed a moratorium on industrial exploitation of the Yellowstone Basin. But I will qualify my enthusiasm of that bill by saying that many citizens and many legislators felt that that was only part of what should have been passed one year earlier when we considered the broader moratorium which included, not just water, but also the expansion of strip mines and energy conversion facilities.

"I'm convinced that the carrying capacity of the northern arid plains is going to be determined by water. Water needed for energy conversion plants is already competing with water needed for agriculture. I would recommend that no more conversion plants be permitted in the northern plains until all states which are involved have set their water priorities. These priorities should insure water for present and future agricultural use, and just as importantly, enough water for maintaining a good aquatic habitat.

Despite the passage of Montana's strict strip mine reclamation laws, said by some to be the toughest in the nation, Bradley isn't satisfied. "Every time a state passes a new reclamation law someone says it's the toughest in the nation," says Bradley. "We've taken a trial and error approach to strip mine reclamation, and I don't like to see this reclamation topic glossed over. Unproven techniques are being used simultaneous to, rather than prior to, strip mining activities. This is inconsistent with the National Environmental Policy Act, the Montana Environmental Policy Act, and common sense. The burden of proof should be switched from the public to the mining companies, who, is spite of what I really consider monumental efforts, have not yet lived up to their reassurances at this time. I think the only way to implement a policy like this is to stop all further mining permits until reclamation of the arid northern plains, to the point of a healthy self-sustaining capacity, has been proven."

Two years ago, Bradley introduced a bill calling for a two year moratorium on expansion of coal strip mines in Montana. It lost by only one vote. The bill would have allowed existing mines to continue operation and Westmoreland to begin operation in Sarpy Creek. It also required a two year suspension of any permits for energy conversion facilities.

"The bill outlined a whole series of studies to be done during the moratorium," she says. "We wanted to know about the influx of massive population, the problems of reclamation, the problems with the aquifer - removal and change in the groundwater structure, air pollution, water impoundments - the whole gamut. We wanted to have the information before decisions were made and especially before commitments were made to development.

We debated the bill in the House and it won by one vote. That was on second reading. The next day, on third reading, one representative from my county who had previously supported the bill, changed his vote and we lost by one vote. That's how close it was.

"At that point a substitute motion was made that the bill be held over until the end of the session - the 59th day. This motion gave the House something to fall back on if we didn't pass all the other related legislation that we were still in the process of debating.

"It's the thought of some that it was a nice club to have to make it possible to get the other things through. I'm not sure if it acted in that capacity or not. I still think that Montana, regardless of that club, would have passed a strong reclamation and utility siting bill. The mood was just there."

On her moratorium bill, one of the strongest supporters was the Farmers Union. "They had outlined a program exactly like mine before they even knew I had the bill. They came out and were tremendous lobbyists. They gave radio reports and other kinds of support," says

"More and more you see this strengthening tie between agricultural issues and environmental issues. I think they are beginning to be really inseparable. Right now it's a pretty delicate coalition, but the potential is immense."

Bradley sees a similar coalition forming over land use planning in her own county. While trying to get a county planning board established, she finds some of the leading support for the idea coming from the Farm Bureau.

"They know that sacrificing good agricultural land in Gallatin County is going to be devastating to agricultural people and to the whole economy, and they've decided they've got to do something about it," she says.

Following her campaign promise, land use has been one of her pet issues in the state legislature as well as at the county level. "We've had bad battles over subdivision regulation in the state. I think we're growing with the issue, but we aren't keeping up with it fast enough yet. This past year the House passed, but the Senate unfortunately killed, a moratorium on rural subdivisions on class 1-4 agricultural land.

"A moratorium on rural subsivisions is still crucial. I still don't have any confidence that Montana can get a grip on the subdivision problem. I sometimes get the feeling that a small economic depression is the only thing that will slow down the pace.

"A couple of years ago in our county we just had Big Sky (the ski area resort development promoted by the late Chet Huntley). Now Big Sky is expanding rapidly and other major subdivisions, transmission lines and roads are being proposed for development all around it.

"Aside from the rural agricultural land losses, I don't think the animal habitat losses are getting a thorough enough discussion. Each little subdivision may only take the habitat from 20 elk. But when you start putting them all together it's getting so that in Gallatin the best we will offer in a few years is a roadside zoo."



In the News

Boom Suspended

Colorado's second home industry slows down and locals look at the question of need.

Oil Shale

the leap from prototype to full production are we about to take it?

Buffalo

today, the symbol sustains us.

8

16

6

Legislator for Land Montana's Dorothy Bradley.