

## On the Verge Of Extinction

What do a Pahranagat bonytail, a blunt-nosed leopard lizard, a Hawaiian hoary bat and a light-footed clapper rail have in common? They are all on a list of native endangered species that now numbers over 100. They are all little-known animals whose survival as species is in immediate peril.

For the most part, Americans have never even heard of our endangered wildlife. Hunting or other forms of commercial exploitation have not been the major cause for most of these ani-mals getting on the list. Most are victims of pesticides, landfilling, wetland drainage, water pollution, and other massive man-made en-vironmental changes. These changes have destroyed or drastically altered essential elements of their habitats.

So why worry about them? Who needs a Pahrangat bonytail or any of the others? These animals haven't been of great economic importance to man. Over the past 150 years North Americans have lost over 40 types of mammals and birds permanently, and yet today we manage to get along without them. Why

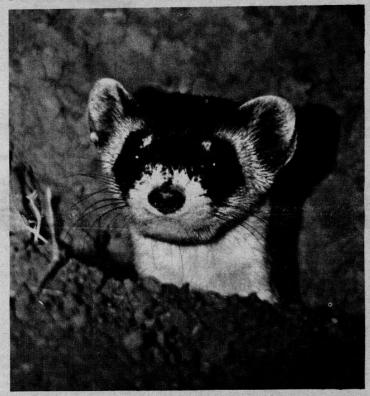
Part of the answer to such a pointed question has been provided by Lehr Brisbin, an ecologist with the Atomic Energy Commission. He feels dollars should not be the only criteria for determining an animal's worth. A "worthless mold" became penicillin, points out Brisbin. The rare snow leopard provided a unique biochemical compound that permitted synthetic vaccines to be made to prevent feline dis-temper. A rare Asian pheasant was domestitemper. A rare Asian pheasant was domesti-cated to become today's farmyard chicken. Who knows, says Brisbin, that the endangered California condor, which lays one egg each two years, may not be a key to slowing man's skyrocketing birth rate.

"It has been shown again and again that obscure and worthless things have attained great value to man almost overnight," says Brisbin.

A less practical defense of endangered species can be mustered on aesthetic grounds. Even if the now-extinct passenger pigeon never pro-vided us with sport, meat and feathers one could argue the bird still deserves to live. The pigeons still were of "value."

"Slowly the passenger pigeons increased, then suddenly their numbers Became enormous, they would flatten ten miles of forest

When they flew down to roost, and the clouds of their rising



The black-footed ferret, a black-masked weasel, is one of our rarest mam The black-footed terret, a black-masked weasel, is one of our rarest mammals. One of our fairst mammals. One of our fairst mammals. One of our fairst mammals. The black-masked weasel, is one of our rarest mammals. One of our fairst mamma Photo credit U. S. Bureau of Sport Fisheries and Wildlife

wrote Robinson Jeffers in his poem "Passenger

I will never witness that spectacle. Nor will men women and children after me. That facet of life is lost to the world and only a few stuffed pigeons in museums remind us of the loss. Never again, anywhere in the universe, can we expect that combination blood, bones and feathto be repeated.

ers to be repeated.
"A thing is right when it tends to preserve the integrity, stability and beauty of the biotic integrity, the in groups when it tends other-

wise," wrote Aldo Leopold. His words speak of a world view that needs wider acceptance if we are to keep our endangered animals and ourselves alive and thriving in a healthy environ-

"A little too abstract, a little too wise, It is time for us to kiss the earth again, It is time to let the leaves rain from

the skies, Let the rich life run to the roots again."

National Wildlife Week, March 17-23

## HIGH COUNTRY BY Jone Ball

Standing upon a mountainside, looking down as an eagle does, gives a little different perspective of things. Somehow, man's fouled-up world doesn't look quite so bad. And with a small son's excited cries of discovery, it is easy to forget the cares of the world of reality.

to forget the cares of the world of reality.

But it doesn't last for long, and you must come back. It is then that the enormity of our present circumstance hits home again. You look at that small son and wonder what's in it for him. What will the world be like when he is nearly

In my travels the past several weeks, I have been privileged to hear two men who have had quite an impact on our modern world. One was Dr. Ralph Lapp, one of the creators of the atomic bomb. The other was Dr. M. King Hubbert, formerly a geologist with Shell Oil Co. and formerly of the U.S. Geological Survey. Dr. Lapp appeared at Casper College as one of the distinguished lecturers on a seminar entitled Science and Technology: Servant or Master? Dr. Hubbert spoke at the University of Wyoming as an American Association of Petroleum Geologists' Distinguished Lecturer.

I was particularly struck by the thesis which both men presented. It is simply that man has a choice in his destiny. We can either control the growth of population, demand on our resources, and destruction of our life support systems, or we can destroy ourselves as a species. In other words, at this point in time, manhind might conceivably be numbered amongst the endangered species. It is our choice, just as it is our choice as to the fate of the timber wolf or the desert purplish.

These were not environmental "kooks" popping theories off the tops of their heads. These are serious men of science who have contributed much to their fields of endeavor. They spoke from long experience and with graphs, charts and figures which backed up their contention.

In the words of Dr. Lapp, there is just no way we can continue exponential growth in population and in energy

and Dr. Hubbert's studied approach to the problem shows why. His figures indicate (drawn from several sources) that American oil and gas production has peaked and we are now steadily declining.

Dr. Lapp sees some dangers in nuclear energy but thinks

Dr. Lapp sees some dangers in nuclear energy but thinks we must commit ourselves to that technology. Dr. Hubbert says nuclear energy is too dangerous and has too many pitfalls for weak, vulnerable man. Hubbert sees coal as the interim energy producer and solar energy as the vast and unpolluting source of the future.

Both evoke a sense of urgency for at our current rate of growth we don't have much time to address ourselves to the problem. We Americans must somehow be brought to the realization that the world in which we now live is somewhat of a honeymoon experience. It is all very delightful, but in the long history of man it is but a fleeting moment. Ahead may lie a long and satisfying human experience marked by restraint, consideration, and selflessness. Or it may be marked by self-seeking, greed and indifference toward fellow man and the good earth which

There may be hope. Dr. Hubbert remarked after his talk that in talking to a group of high-placed financiers, they were as concerned and absorbed with the problems as a group of young collegians.

group of young collegians.

God in all His wisdom is going to have to guide and work
His way with each of us if there is to be a future for my sons.



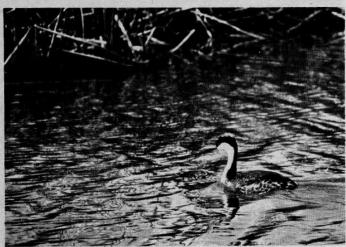


Photo by Tom Baugh

## Letters

Dear High Country News:

I hope letters like the first two in the 15 February issue don't discourage you. Of all our "entrionmental" publications, HCN is my favorite— it's excellent. With each issue I grow increasingly incensed and frustrated at what is happening to the part of the country we once called home. My husband and I hope to return; in the meantime we feel we're standing by helplessly, watching "motorized recreationists" et al tearing up the countryside. Maybe there is more wilderness area left in Upstate New York. . . . Keep it up!

Jane Brunson Mexico, New York

Dear Mr. Bell:

I was playing around with some figures, recently, and I made a very startling discovery. According to a recent article in the Wall

Street Journal, the U.S. generates about 1.75 trillion kilowatt hours of electricity annually. This is about 22 kilowatt hours perday for every man, woman and child in the U.S.

According to an article in Environment Magazine, in the Jan. Feb. 1973 issue, some people in Denmark have been successfully operating a wind-driven generator ever since 1957, which has been generating about 400,000 kilowatt hours of electricity annually. (At its generating capacity of 200 kilowatts, this means that it would have to operate about 23% of the time.)

Thus, if we had enough wind-driven generators of equal capacity, located in the windy sections of this country so that the overall density for the entire country was only two per square mile, these wind-driven generators alone could generate 1-1/3 times as much electricity as we are presently generating in this entire country.

Sincerely, Stephen Tarver Gillette, Wyo. Dear Editor:

As for your front page story in the Feb. 1 issue "Everything You Aren't Supposed to Know About Nuclear Power..." Thave been involved in nuclear power both as an instructor at an operating protytype and as a radiological control technician for four years and I assure you, Mr. Knight's logic comes right out of Poisoned Power. Let me review a few pertinent examples from the text of the article. The "China Syndrome" he speaks of, wherein thousands of persons could be killed (he says). The severity of the accident depends, of course, on the facts that nothing is done, no attempt is made to dissipate the heat the damaged core produces, the wind is just right, the fission product distribution is just so, the ground conditions are just right, etc., etc. Is this why we should outlaw nuclear power?

Or is it because one man's study "seems to indicate" that leukemia walks hand-in-hand with fission?

Maybe it's the eternal blackmailers and extorters. You know, those rascals who are always stealing plutonium to make bombs with and then shooting them off in downtown New York Cityl I'm confused as to the target of this intimation, though. Is it the reactor or the weapons industry? Why steal a lump of plutonium when you could just as easily rip off a ready-made

But perhaps I'm being unfair with Mr. Knight. He does bring up some valid points, and these should not be lost. It is true that the disaster potential of a reactor increases exponentially with its size, and since one big one is more profitable than two or three small ones, the industry will favor the big one. This trend must be checked, limits must be placed on the size of single reactor cores.

It is also true that a body charged with promoting a product can not fairly be expected to police it as well. Steps are being taken already to correct this situation by the director of that body, but none the less an eye should be kept on the AEC (keep the other one on those Prophets of Doom).

Let me make a suggestion to you, Mr. Editor;

# Editorial Wildlife Signals Man's Demise

We have strong air and water pollution laws on the books. They have been used to shut down factories and cause the relocation of proposed energy installations. But have you ever heard of a project called off because it will damage or endanger wildlife?

endanger wildlife?
Wildlife biologists determined that Alaskan
caribou would not tolerate the trans-Alaskan
oil pipeline. Of 5,559 caribou that encountered a
simulated pipeline, 4,275 refused to cross. Did
this stop the pipeline?

Every environmental impact statement you pick up reveals the cost of the project in terms of wildlife. In the case of oil shale development in Colorado, the price is thousands of mule deer and range for several kinds of endangered species. If the Meadow Mountain ski complex



AMERICAN BALD EAGLE

don't use the shotgun approach. Concentrate instead on specific problems, and document them with thoughtful, logical evidence instead of "oh-myada" and "wac he unto us"

of "oh-my-gods" and "woe be unto us."

If you would advocate an upper limit on the size of nuclear reactors, and stiff penalties and examinations concerning the safe operation of the reactor industry, you would have my fullest

support.

I am looking forward to the next issue of High Country News.

Sincerely, John Hinckley Idaho Falls, Idaho



#### 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 35¢ Box K, Lander, Wyoming 82520

Editor Associate Editor Field Editor Office Manager Circulation Manager Thomas A. Bell Joan Nice Bruce Hamilton Mary Margaret Davis Marjorie Higley

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

next to Vail, Colo. is fully developed we will exterminate 150 head of elk. The Acord Lakes Mountain Retreat, a 3,600 acre summer home development surrounded by Utah's Fishlake National Forest, blocks the seasonal migration of about 200 elk and occupies an elk calving ground.

The list goes on; the toll-continues to mount up. Subdivisions eat up big game winter range. The land isn't worth \$40,000 an acre for wildlife purposes. Don't worry about the birds that live there, they'll fly somewhere else. We'll build a highway underpass for the pronghorn and hope they use it.

If enough public uproar is heard, mitigation measures are taken. Wildlife just isn't important enough to stop a project. We are always told we "need" the coal strip mine, ski area, super highway or reservoir more than we "need" the wildlife.

Ecologists view wildlife as an environmental barometer. A world that is healthy for all kinds of wildlife, is healthy for man. As the environment deteriorates, animal species start to disappear — which should serve as a signal to man. Unfortunately, man has not learned to heed the signal. He fouls the air, water and wildlife habitat so that only pigeons, rats and cockroaches can survive. Man says he can adapt to this fouled lifestyle — most wildlife flees or perishes.

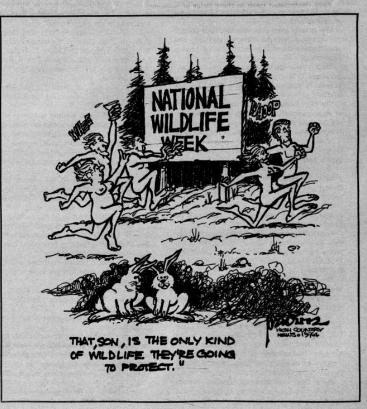
Chief Sealth of the Duwanish Indian Tribe in



Washington wrote a warning of this trend to President Franklin Pierce in 1855. He said, "The whites too, shall pass — perhaps sooner than other tribes. Continue to contaminate your bed and you will one night suffocate in your own waste. When the buffalo are all slaughtered, the wild horses all tamed, the secret corners of the forest heavy with the scent of many men, and the view of the ripe hills blotted by talking wires. Where is the thicket? Gone. Where is the eagle? Gone. And what is it to say goodbye to the swift and the hunt, the end of living and beginning of survival."

We have national air and water quality standards to protect the environment. We do not have national wildlife standards. Even if we could find a way to survive without wildlife in our lives, would it be a life worth living?

—BH



## Grizzly, Go Home!

#### by R. C. Burkholder

"All units! Attention all units!" the police radios blared. "Code something or other! A bear, B-E-A-R, on the corner of 34th and Elm! Attention all units!

Eleven police cruisers screeched to a halt at the corner and 22 police officers, weapons ready, closed in on the huge bear draped over a red, white, and blue U.S. mail deposit box. "May the New Orleans Saints preserve us!" Sergeant O'Weary gasped. "It is a bear!" "Not only that," Officer Urbanovich, an avid reader of the Vice and Wildlife Journal,

"Man!" Sergeant O'Weary sighed. "How in the world did he get here . . . in the middle of

Across the street, artistically wrapped around a light pole, was a truck. Across the si of the truck, in large, sickly-green letters, were the words: BOOZE & SPIRITS; D. T. Lush and Son, Distributors; Guzzlers' Gulch, Monta The back of the truck was in shambles, littered with broken and empty bottles and literally torn apart by fang and claw. There was no sign of the driver

applying the very latest communicative techni-que recommended by the Police Academy, "but aren't you a wee bit cut of your cultural envi-

"Huh?" the grizzly grunted, gingerly raising his head and trying to focus his red-rimmed, beady-black eyes on the policemen gathered

around him.
"It seems to me," Sergeant O'Weary went on,
"that this is no place for the likes of you. As a

The grizzly stared out over the oiled streets, concreted sidewalks, littered gutters, and smoke-stained buildings and nodded his head in

"Tell you what we'll do, sir . . . er, bear," Sergeant O'Weary said politely, "come along peaceably and we'll give you a lift to the city limits.

The bear looked around at the growing crowd of strange-smelling and frightful-looking peo-ple massing around him and quickly scrambled into the back seat of Sergeant O'Weary's car.

"Are you really going to turn him loose?" Officer Urbanovich whispered. "A dangerous,

What else do you do with a dangerous, mean, vicious, lost, bewildered, and confused grizzly bear from out of town?" Sergeant O'Weary

Officer Urbanovich had no answer. The grizzly waved a huge forepaw. "Let's go!" he grunted impatiently. "Let's go!"

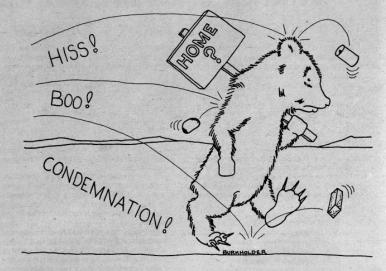
Four miles away and two hours later, the bear was standing on the highway along side of the police car. A sign behind him read: LEAVING UGLYBURGH — ENTERING NORTH UG-

The bear looked south into Uglyburgh, then north into North Uglyburgh.

You know," he commented dryly, "I can't see a blackberry's difference.

Sergeant O'Weary suggested help-Dear, Sergeant O weary suggested help-fully, "if I were you, I'd save my breath for some fast traveling. The North Uglyburgh police haven't had sensitivity, public communica-tions, or interpersonal relations training and may not be as understanding as we are. So, Go Home! . . . and Fast!"

The grizzly shuffled away, passing through North Uglyburgh on a rambling route west of the combination suburban-residential-



commercial complex and east of the freeway-railroad-industrial area. Concentrating on a faraway glimpse of blue sky and an occasional whiff of fresh air, the bear headed north toward

"You're supposed to be the Agricultural Advisor!" Cy Anide, a local farmer, snapped disgustedly, "So what are you going to do about this bear in my sugar beets?"
"Hold on, Cy!" Les Sprayitt replied, thumbing through Department of Farming Publication No. 1,369-2c6(b) entitled How To Raise, Harvest, and Sell Sugar Beets For A Bundle. "Maybe I can find something in the Helpful Hints section."

"Never mind," R. Senic, a neighboring farmer, broke in, "here comes the Sheriff. He'll take care of him."

The Sheriff's car, leading a convoy of four jeeps, two armored weapons-carriers, a fire truck, and a war surplus Tiger tank, peeled off of the highway on two wheels, careened down the lane in a cloud of dust, gravel, and Plymouth Rocks, and pulled up to the crowd of voters congregated in Cy's beet field.
"Slim" Chantz, Sheriff of Chloride County,

unwound his slender, 6 ft. 7 in. frame from his car and faced the milling group of confused citizens and concerned constituents. "O.K.," he

drawled, "what seems to be the problem?"
"Holy hollyhocks!" Cy snorted. "Can't you see this here grizzly bear?... in my sugar beets?... less than a mile from my house and barn?... right here in Chloride County?"

"Yup," Sheriff Chantz answered as he step-ped forward to take a closer look at the bear.

"Well, what are you going to do about it?" Cy demanded. "He don't belong here! Not on my

"Let's spray him with something!" R. Senic

suggested.
"Here it is!" Les Sprayitt exclaimed, waving
Publication No. 1,369-2c6(b) in the air. "Under Supplementary Suggestions! When in doubt, it says, 'apply a liberal dosage of mercurial-dibenzoethylchlorotriawfulene mixed with fuel

'On a bear?" Cy Anide sputtered in amaze-

"Pll get my rig!" R. Senic volunteered.
"Now, hold on!" Sheriff "Slim" Chantz broke

in, determined to obtain and maintain control of a potentially dangerous situation. "There'll be no indiscrimination in the application of our official spraying policy as long as I am the law in this here County. Besides, I think this old bear is just passing through and don't mean no

The grizzly hurriedly nodded his head in ag-eement and pointed to the north and the distant foothills.

"Look, bear," the Sheriff said, "why don't you just keep moving? The County line is just 60 miles thataway. Ain't no room for you in Chloride County nowhow.

The bear lumbered away.
"And bear," the Sheriff called after him, "stay away from the highway. We don't want you menacing the motorists or terrorizing the

"And stay out of my alfalfa!" a voice bellowed. 'And off of my fences!'

'And out of my irrigation ditches!"

"And off of my plowed ground!"
The grizzly walked 17 miles out of his way to find a highway underpass and breathed a sigh of relief when he reached the unfarmed foothills lying to the north of Interstate 21, 74, and 309. He was more than happy to leave Chloride County far behind under an overcast of pesticide-fungicide-miticide-rodenticide-herbi-cide mist. He set out for home, wherever it

"O.K., boys," one of the 86 cattlemen and 42 sheepmen surrounding the grizzly yelled, "we got the varmint now! I'll count to three and then we'll let him have it!"

One hundred and twenty-eight rifle barrels lined up on the bear. One hundred and twenty-eight eyes squinted over the sights. Two eyes glared back, displaying a mounting impatience with the world in general and the world of men

in particular.
"One, two. . ."

"Stop!" a voice proclaimed. "Cease and desist already!" A Wildlife Maintenance and Preservation Functionary stepped out from the crowd with his right hand over his heart. "According to the Monroe Doctrine, the Magna Carta, and the game laws of this state, everybody is inno-cent until somebody proves he did it!"

"A bear is a bear!" a voice answered.
"And a grizzly is a bear!" another voice

"I didn't know that!" a third voice admitted. "They all look like stock-killers to me!" some-

One, two.

"At least let me talk to him," the Wildlife Maintenance and Preservation Functionary in-terrupted. "You don't want to do something today for which you will be sorry tomorrow . . . er, do you?"

The posse muttered and mumbled, collectively to each other and individually to themselves. "We'll give you 10 minutes," a goal-oriented sheepman spoke up for the totallyinvolved and fully-committed group, "and then . . . for the long-range benefit of society and the future well-being of mankind . . . POW!"

The Wildlife Maintenance and Preservation Functionary walked over to the bear. "Bear," he said, wiping his sweating brow with a saddle blanket. "you are in big trouble! What in the heck are you doing here in the middle of 19 cattle ranches, eight sheep ranges, and a wild horse refuge?"

"Just passing through," the grizzly sulked. "Going home.

"You didn't by any chance help yourself to a w...or a few sheep...in the past day or two?"
"All I had to eat this week was two ground

squirrels and an ant!" the bear snapped.
"Let me see your paws," the Wildlife Maintenance and Preservation Functionary said tartly

and then quickly added a polite "please." The grizzly held out his paws, claws and all,

for inspection. They were clean. "And now your stomach contents," the Wild-life Maintenance and Preservation Functio-

nary said professionally.

The bear reared up on his hind legs, towering

three feet above the startled man, and grinned down into his upturned face "Never mind!" the Wildlife Maintenance and

Preservation Functionary hastened to say as he backed away on the run. He turned to face the

"Gentlemen," he announced, "this particular bear is innocent of any wrong-doing and, in the name of the Director of the Bureau of Bears and the Governor of this State, I hereby proclaim him to be a protected species until such time as he deliberately or accidentally damages or de-stroys property owned or leased by any citizen of this State; such property to include, but not be limited to, livestock, fences, water develop-ments, salt grounds, hay sheds, grass and other forage, so help me Hannah! Now break it up and go home. And be thankful that I was here to save you from yourselves! Shame on you all!"

One hundred and twenty-eight rumps thumped into padded saddles as the chastised posse mounted their horses and dejectedly south into the setting sun. The Wildlife Maintenance and Preservation Functionary relieved himself of a sigh.

Well, bear," he said, turning, of course, to the bear, "I'd like to suggest that you get out of this country as soon as possible. Go back to where you belong. In other words, go home! As the preamble to the Constitution of the Interna tional League of Progressive Preservationists says: We the. .

'Please!" the grizzly begged. "Not that! I'll

He wheeled away on two legs and took off on a high lope toward the timbered mountains and snow-capped peaks lying to the north. Scatter-ing Black Angus, Herefords, Guernseys, Jerseys, Shropshires, Rambouillets, Suffolks, Percherons, mustangs, quarter horses, and

Photo credit National Park Service

mixtures thereof left and right, the grizzly headed for the high country.

A full moon bathed the Richard M. Nixon Campground on the edge of the lake in a soft, silvery glow. An owl hooted from a Douglas fir tree high on the slope. In the distance, a coyote yipped from the willows. All was peaceful and tiet in the 550-unit campground occupied by

6,342 campers until...
Suddenly pandemonium broke loose in the geographical center of the campground. The se-renity of the night was shattered by the crash and clatter of garbage cans, the tinkle of breaking glass, and the scrunch of cardboard being rent asunder.

nt asunder.
"Bear! Bear!" a voice screamed.
"Where? Where?" another voice inquired. "Somebody call the Custodian!" still another voice yelled above the racket.
"Hey, Custodian!" someone called

"Not that way, dumb-dumb! Call him from the pay telephone booth down by the laun-

"I ain't going out there with no bear!" the voice replied.

"Bertram!" a woman's shrill voice shrieked above the din. "I want to go home! This instant!" "We can't leave until I disconnect the sewer

line, water system, electricity, and TV antenna," Bertram answered.

"Well, don't just lay there!" the woman nag-

ged. "Do it! A body isn't safe in this wilderness!"
"You do it!" Bertram replied. "I'm not overly
anxious to meet a bear under the trailer!"

Crash! Clatter! Crunch! 'Oh, oh!" a voice exclaimed. "He just wiped

out our 7-piece patio set, portable cook shack, 30-cubic foot freezer and ..."
"... and \$2,500 worth of cameras and photo-

graphy equipment!" another voice groaned.
"Hey, Custodian!" a familiar voice bawled. That's how it is," another voice complained,

whenever you need one, you can't find one!" Smash! Shatter! Scrunch!

Well, so much for that Cadillac convertible with all the groceries in the back seat!"
"Hey, Custodian!" the incorrigible voice yel-

led. "I'll sue the government if that dumb bear lays one finger . . . er, claw . . . on my new second-hand Studebaker! And don't you forget it! . . . wherever you are!"

"Look!" a voice rings out from the interior of a 110-foot combination house boat and travel trailer. "They're coming! The Custodians are

Eighteen official-looking sedans, pickups carryalls, 4 x 4's, and a 2-ton stake truck loaded down with men and equipment roared into the campground. With sirens wailing, red lights flashing, and spotlights glaring, the armada circled the bear

The Chief Custodian, followed by 68 Deputy Custodians, got out of his car and approached the invader

"O.K., bear," the Chief Custodian snapped, pening his little black notebook, "is this your first offense?'

'My what?" the grizzly asked, nibbling dain-

tily on a caviar sandwich.
"Have we ever picked you up before for raiding campgrounds, eating garbage, and terrifying the visiting public for whose safety, health, and welfare we Custodians have primary responsibility to safeguard and protect to the best of our ability, so help us?

A smattering of polite applause emanated from the trailers and campers encircling the scene. The Chief Custodian beamed. "Well?" he

demanded harshly.
"I don't think so," the grizzly answered, deftly opening a bottle of imported beer with his teeth.
"He's not ear-tagged," one of the Deputy Cus-

"And he's not wearing a combination radio-detector identification collar," another ob-

served.
"Let me see the inside of your upper lip," the
Chief Custodian ordered.

The grizzly obliged by curling his upper lip back over his nose. There was no identification number tattooed on the inside. "What are you doing up here in the Bearfoot

Mountains among all these people anyhow? the Chief Custodian demanded.

"I'm just passing through," the grizzly explained, "and I got hungry.

"Well, find somewhere else to pass through and something else to eat!"

"Where?" the grizzly asked. "What?"
"How do I know!" the Chief Custodian
snorted. "I don't make decisions, I just work here!

You have one of two choices, bear. You can Tou nave one of two choices, bear. You can high-tail it out of this country... and stay out... or you can have a free trip on succinylcholine chloride in a culvert on the back of a truck. What'll it be?"

"I'm leaving," the grizzly said and shuffled away through the maze of recreation facilities covering most of the valley floor. Behind him, the voices bid him a fond farewell.

"The nerve of him!"

(Continued on page 6)

## Grizzly..

(Continued from page 5).
"A bear in a campground! It's a "Who needs bears!" disgrace!"

"Especially grizzly bears!"

'Go home, bear!"

The grizzly's sensitive nose picked up a thin ribbon of sweet, clean air flowing down a steep, heavily-timbered canyon. He followed it, up into the higher high country. Home, perhaps, was up there somewhere.

Twenty-seven mountain-climbing backpack-ers were winding their way in single file up the Washbowl Basin-Soapstone Ridge trail deep in the heart of the Solitude Mountains. Thirty-two backpacking mountain climbers were hiking down the Washbowl Basin-Soapstone Ridge trail deep in the heart of Solitude Mountains. Between them, a grizzly bear was snoozing away in a thick clump of brush adjacent to the

"Wagh!" the grizzly snorted with under-standable surprise when 59 bearded strangers, including 14 women, stomped through his boudoir. "Wagh!" he bellowed, leaping to his feet as mountain-climbing backpackers and backpacking mountain climbers scattered up, down, and around the slope.

"Bear!" eight of them screamed as they an-dived head first into the gurgling trickle of water pretentiously named Big Slurp Spring.

"Grizzly!" a mixed group of 34 panic-stricken outdoorspeople shrieked as they all tried to clamber up the same white bark pine.

"Help!" four groups of six terrorized ex-nature-lovers screeched as they stampeded away through the rocks, brush, and fallen

"Get up a tree! Get up a tree! an enterprising young man suggested from his perch 10 feet above the ground in a six-foot alpine fir.

Very soon a Woodsman, accompanied by five Assistant Woodsmen, stepped dramatically out of the timber. Sunlight glinted on badges, sung-

lasses, shoulder patches, and six rifle barrels.

"May we be of any service?" the Woodsman Leader inquired politely. "Our primary goal and principal task in these here wild and primitive mountains, a wonderland of nature, is to

"Knock it off, man!" a voice floated up the ridge from a tangle of bodies, arms and legs at the bottom of a talus slope, "and do something about that uncivilized and inhumane beast up there who was instrumental in disrupting our social, economic, and constitutional rights to

use and enjoy these public lands!"
"What did he say?" one of the Woodsmen
asked, removing his hat and scratching his head with a copy of the Official Woodsman's Manual and Guide To Back-Country

"Darned if I know," the Woodsman Leader admitted, "but we better hurry up and efficiently resolve what appears to be a major conflict of interest."

The Woodsmen surrounded the bear. Fiftynine abused and persecuted visitors surrounded the Woodsmen to watch the confrontation. The Woodsman Leader unrolled a map, studied, it, and then addressed the bear.

"Bear," he said, 'you are trespassing. This trail, and a 300-yard wide buffer zone on each side, is classified PP 6-9."

"PP 8.07" the property of the control of the same and the same are same as the same are same are same as the same are same as the same are same are same as the same are same are same are same as the same are same are same as the same are same ar

"PP 6-9?" the grizzly replied, scowling perp-lexedly. "What's a PP 6-9?"

"Peoples' Priority, June through September," the Woodsman Leader answered. "No bears al-

"Do you have any BP 1-12?" the grizzly asked, glaring balefully around the circle of people.
"Bear's Priority, January through December?
No people allowed?"
The Woodsman Leader checked his map.
"No," he replied. "We don't, but you might find

ome in the Seclusion Mountains north of Isolation Valley.

doubt it!" the bear growled.

"At any rate," the Woodsmar Leader went on, "you can't stay here. You have to move on. We can't have you harassing all these good people..."

"This is my home!" the grizzly snarled. "What right do they have. . .

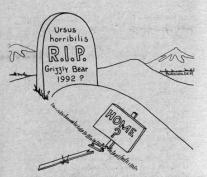
"Now don't lose your well-known temper," the Woodsman Leader broke in as six rifle barrels raised and centered on the bear, "or you'll be officially and personally sorry.

"I ain't going!" the grizzly growled 'Do you realize who you are resisting?" "I ain't going!" the bear repeated.

"I order you to remove yourself from this area," the Woodsman Leader shouted, "in the name of the people and the republic for which we all stand! Get going, bear!"

A frightened rock rabbit squeaked from the rocks above the trail. A pine squirrel chattered his displeasure from a patch of trees below Big Slurp Spring. A red-tailed hawk skreeeeeeeeeeed overhead and turned away, skreeeeeeeeeeed overhead and turned away, unable or unwilling to witness the drama unfolding below.

The grizzly analyzed the problem, considered the alternatives, and made a decision. Bellowing with rage and frustration, he lowered his head and charged into the roaring guns.



Shades of Burkholder! It really happened. A 350-pound black bear wandered into Cookeville, Tennessee. Two Tennessee Tech coeds saw the animal walking down Broad Street at about midnight. The girls ran for about a mile before stopping in a restaurant to notify police. The bear crossed town, banged on a motel door and ran off a large dog. Police hemmed the bear in in front of a bank. It broke a large plate glass door, went inside, and lumbered around the community room. A game and fish officer found a tranquilizer gun in a nearby town, entered the bank, and shot the bear as he reared up on a plate glass window.

The bear was to be sent to a zoo or sent back to eastern Tennessee. There are not supposed to be e in the vic any bears in east-central Tenness inity of Cookeville. Police had no idea where the bear had come from

### Timber Sale Ruled Illegal Forest Service Reduces Cut

A federal court in Washington, D.C., has ordered the Forest Service to reduce sales of timber from the National Forests by one billion board feet between now and June 30. This would require the Forest Service to reduce timber sales offerings by 10%, to not more than 10.8 billion board feet for the current fiscal

In a suit brought by three national environmental groups — the Natural Resources Defense Council, the Sierra Club, and The Wilderness Society -- United States District Judge Joseph C. Waddy ruled that the Forest Service must prepare an environmental impact statement before selling the timber.

A spokesman for NRDC stated that the sale of the additional one billion board feet of timber was agreed to by the Forest Service in March 1973, following pressures on and criticism of the Forest Service by officials of the Cost of Living Council, Office of Management and Budget, and the Secretary of Agriculture. The reason given for the increase was to reduce inflationary pressures on lumber prices. Since then, those pressures have been alleviated by a decline in hous-

The environmental groups alleged that the sales increase could lead to overcutting on the National Forests and threaten long-range timber productivity by violating sustained-yield principles, and could lead to environmental damage due to increased cutting in ecologically fragile areas. They asserted that the incremental sales reflected an overemphasis on timber production at the expense of other uses

contended that the National Environmental Policy Act required the Forest Service to issue an environmental impact statement discussing these impacts and the alternatives to the sales increase which are conceded by the Forest Service to exist. Such alternatives include restrictions on exports of timber, which have mounted rapidly in recent years, and bet-ter utilization of timber now being harvested. Forest Service officials admit that only 25% of the timber which is harvested is turned into

One billion board feet of timber covers approximately 40,000 acres and when cut, would fill 150,000 logging trucks.

### Ever Heard of EPA?

A study released last month by the Environmental Protection Agency concerning attitudes about the environment and the fight against pollution turned up a couple of surprises. In the course of over 3,000 personal interviews the "representative sample" of adult Americans surveyed named sewage treatment and air pollution controls as top concerns in their environmental awareness. But what probably came as a surprise to the EPA was the relatively few individuals who could identify the EPA or what it does.

Only 10% of the people questioned could name the EPA unaided. Another 48% — when they heard the name -- indicated they had heard of the Agency, making a total of only 58% of those surveyed familiar with the EPA. The other 42% had not heard of it.

Forty per cent of those who had heard of the Agency indicated they knew "almost nothing" or "nothing at all" about it. The remaining per cent indicated they knew a fair bit about the Agency's function. : : EARTH NEWS

#### **Myth-made Management**

## **North American Wolves**

The fears and hates which surround the wolf, wrapped up in stories from Europe about Little Red Riding Hood and werewolves, are difficult to trace on the North American continent. Wolves were probably never much of a menace to human beings. One researcher was unable to find a single authenticated case of an unprovoked wolf attack on man in the last 50 years.

Stories about mens' close-calls with snarling wolves do exist, however. And wolves robbed early Western graves and killed domestic animals which man had placed on its range. The animal must have done just enough to fire the myths into our imaginations. It gave us a good scare.

In this state of fright, we made our plans for managing the wolf. In most places, we put a price on its head. Our infiltration of wolf habitat, coupled with the bounty system, proved effective in ridding ourselves of what we could only see as an outlaw. In most of the lower 48 states today, wolves are just a memory.

Three kinds of wolves in the lower 48, the red wolf (Canis rufus) and two subspecies of the timber wolf (Canis lupis), have gained protection because of their closeness to extinction. They have each been named by the Department of Interior as endangered species. One of the endangered timber wolves is the northern Rocky Mountain wolf, which is now thought to exist in a few scattered western areas including Yellowstone National Park and Glacier National Park. The other is the eastern timber wolf. The eastern timber wolf is found in the northern Michigan mainland (about 10 or 20 individuals), in northern Minnesota (500-1,000), and on Isle Royale in Lake Superior (20-24). Somewhat larger numbers of eastern

timber wolves live in Ontario, Canada. The other endangered wolf, the red wolf, is found in a few areas of Texas and Louisiana.

In recent years evidence has been presented which should have tempered our irrational approach to the wolf. At the end of World War II, biologist Adolph Murie's book, The Wolves of Mount McKinley, was published. In it he accurately described the important ecological role wolves play. He showed that despite minor population fluctuations in some years, over the long term wolf numbers stayed in balance with the numbers of caribou, moose, Dall sheep and grizzlies. Wolves were a vital factor in maintaining that balance, Murie observed.

taining that balance, Murie observed.

Unfortunately the book emerged just as the sheep and caribou populations in Alaska and Canada took a large dip. The dip alarmed some of the guides and hunters in the area. The message spread to the general public. Murie's long-term look at a balanced natural world was slighted in favor of the news appeal of a crisis. "Failure to act now means the permanent loss of revenue, a meat famine for thousands of frontiersmen, the feeding and clothing of thousands of natives by the taxpayer..." a typical editorial read.

And so in Alaska and Canada, just as in the lower 48, man declared war on the wolf. Despite the attack, the wolf still endures in these last strongholds. The animal's future will depend upon whether old fears or new facts will dominate man's policies.



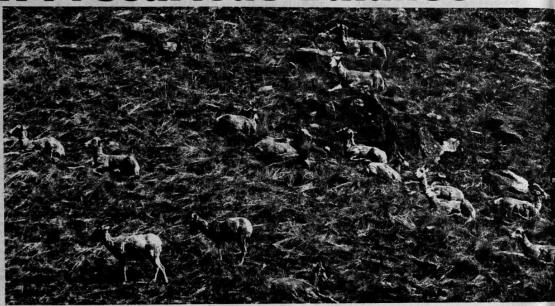


The nine-month old wolf pup posing on this page lives in a sanctuary on the eastern slopes of the Sierra Nevada. The animal's home is Mountain Place near Doyle, Calif. Thirteen adult wolves and four pups, including a pair of endangered red wolves, live in the enclosures provided. John and Sandra Harris started the refuge in 1972 through an organization called the North American Association for the Preservation of Predatory Animals. If they can raise enough money, they hope to make Mountain Place a breeding ground for endangered species.





## Bighorn Sheep: A Precarious Balance





by Joan Nice

The horns of a Rocky Mountain bighorn ram can weigh almost as much as his entire skeleton. Armed for conflict, each autumn the mature males charge at each other from a distance of 30 to 40 feet. They crash and reel and charge again, until one gives up. The winner ambles away with the ewes — until he meets another challenger. This testing forges a social order.

For a few weeks their head-butting competi-

For a few weeks their head-butting competition rings through the mountains like an anvil. After breeding season, which extends from mid-November through December, the largest rams leave the herd for the most rugged wintering areas. The rest of the herd winters a little lower on the mountain

lower on the mountain.

The herd is strengthened by these conflicts from within. The bighorn has fared less well in the face of outside competition, however. In most cases, wherever the bighorn has been forced to share its range with deer, elk, or domestic livestock, the wild sheep has died off. Some biologists believe that two other forces are discouraging healthy herds: hunters and hikers. Whatever the reasons, the number of sheep in the U.S. has dwindled by about 90% in the last 100 years.

Bighorns were never plains animals. But before the invasion of the masses of white men in the West, they probably grazed lower down in the valleys than they do today. The first siting of a wild sheep in the U.S. was made in some rugged country around Council Bluffs, Neb.

The rise of the cattle industry after the Civil War probably marked the beginning of the decline of the bighorn. Then domestic sheep aggravated the crowding problem. For the large wild mammals which had grazed the grassy bottomlands, the ancestral pastures were becoming cages full of sagebrush. Those that could, moved up the mountain.

could, moved up the mountain.

Wild sheep seem to require steep, rocky territory as escape cover. They can fill that need at higher elevations. But the summits hold less of their favorite food — bunch grass — and tougher winters.

The sheep's heavy horns and rocky home have added to its allure as a game animal. 'I have seldom met a sheep hunter who for various reasons does not consider the sheep the greatest game animal he has ever encountered," says Erwin Bauer, an outdoor writer who enjoys the hunt.

The way Bauer tells it, many sheep hunters are not just ordinary men after meat—they are loftier souls on a quest for something called a "Grand Slam."

"The aim of every serious sheep hunter is to collect a trophy head of each" of the four kinds of North American sheep: the Rocky Mountain bighorn, the desert bighorn, the Dall and the Stone, Bauer says. This collection of heads is the Grand Slam.

James K. Morgan, a wildlife biologist who spent five years studying Rocky Mountain bighorn sheep for the Idaho Fish and Game Department, fears that current hunting fashions may be another of man's insults to the sheep. Trophy hunters may "slam this shy and friendly creature to final extinction," Morgan

Morgan's argument is that a cult of head collectors will select out the large-horned members of remaining herds. Although rams develop a curled horn which subtends three-





Photo by James K. Morgan

quarters of a circle when they are three to five years old, they do not mate with ewes until they have earned some social status in the herd at about the age of eight, Morgan says. Most western states issue hunting permits only for rams with a three-quarter or larger curl. Thus, Morgan says, rams are taken either before they've had a chance to reproduce or while in their reproductive primes. This limits the bighorn gene pool.

"Ultimately, this kind of hunting pressure should be expected to reduce the horn size of bighorns and encourage the genetic feebleness associated with inferior rams," Morgan says.

Wyoming adheres to the three-quarter curl rule. A spokesman for the State Game and Fish Department defends the department's use of the regulation. By the time a ram's curl reaches this size the ram has already made a contribution to the gene pool, he says. In a herd of 1,000 sheep in the Wind River Range, he has observed two and three year old rams mating.

The three-quarter curl rule may be detrimental in the smallest remnant herds, the Game and Fish biologist admits. In those cases, an entire herd may depend on only two or three rams. A trophy ram taken from one of those groups might weaken the herd, he says.

In Montana, 40 either-sex permits have been issued in the Sun River area in the past two Years. During this time, few females were actually taken. And the average ram horn size was the same as for the most recent three-quarter curl season.

"The either-sex seasons point the need for ewe-only permits to control bighorn populations," says Montana biologist Al Schallenberger. Hunting is not even a factor in the plight of dwindling herds of the California bighorn. They have been protected from hunting since 1883. Only about 200 to 225 California bighorns remain. They are a subspecies of the Rocky Mountain sheep. The remnant herds range in small, separate groups in the southeastern part of the Sierra Nevada. Their current threat is neither hunters nor other grazing animals — but an explosion of hikers in the area. Recreational use of the High Sierra is growing at the rate of 18%

"It appears that human disturbance may be a major factor that limits the bighorn in the Sierra," says Bavid Dunaway, a Forest Service wildlife biologist. The three bighorn ranges where the sheeps' numbers continue to dwindle are also those that have received major increases in recreational use. On two ranges that have not been exposed to the surge in recreation, bighorn numbers have remained fairly stable over the nast 20 years.

able over the past 20 years.

There is no statistical data to prove that too many hikers can indirectly kill a sheep. "The relationship appears to be real, however," Dunaway says.

Dunaway says.

In California, at Dunaway's suggestion, the Forest Service has set aside 41,000 acres for the bighorn. Because the problem is people—not firearms or forage—no hikers are allowed.

Wyoming has implemented a different plan to aid the bighorn. Game and Fish biologist Bill Crump determined that the Whiskey Basin herd in the Wind River Mountains was dwindling due to a scarcity of forage during the critical winter months. Crump persuaded his department to buy and protect some low-lying winter range for the bighorn herd. They restricted big

game in the region and fenced out livestock. The Whiskey Basin herd, which numbered about 300 in 1954, has now grown to about 1,000 animals.

The Game and Fish Department uses both hunting permits and live traps and transplants to keep the Whiskey Basin herd at a size which fits the range. The transplants, tried here and in other states, are sporadically successful. Sometimes when a group of bighorns is placed in a new area, it disperses and fails to use the potential winter range. In Montana, some animals introduced to a winter range lived there the entire year, risking depletion of their food supply, Schallenberger reports.

the entire year, risking depletion of their food supply, Schallenberger reports.

We have only begun to understand the bighorn's ways and needs. Unfortunately, remnant herds don't afford the luxury of experimentation. Although a few management successes in western states offer hope, as James K. Morgan says, "This rugged creature is balancing precariously close to oblivion."



by Lee Catterall

The anti-stripmining lobby is claiming new sup port in its effort to persuade Congress to enact rigid regulations. The support is said to come not despite the energy crisis but, ironically, because of it.

Industry spokesmen disagree with that assessment. A representative of the National Coal Association told of it said because this transmission.

tion, told of it, said he suspected it to be "whistling in the dark" and indulging in "self-prophesy." In fact, he said, the mining lobby has picked up support during the energy crisis, not lost it.

But, in the dark or not, environmentalists are whistling.

Opponents of stiff strip mining standards succe fully stalled House Interior Committee action last November, betting that winter fuel shortages would improve their argument later on. The committee re-

turned to the bill last week, and environmentalists say the mine lobby's tactic backfired.
"The turning point was, oddly enough, the Mideast War," explained Louise Dunlap, a lobbyist for the Environmental Policy Center. Before then, she said, sobody paid much attention to the strip mining debate, outside of a few groups like hers that are in-

"Up until that point, most people didn't see the larger implications of strip mining," she said. "They didn't think coal was that big a part of the energy

equation."
But then the Middle East erupted, oil imports to But then the Middle East erupted, oil imports to the United States were halted, and suddenly coal became important. President Nixon announced Pro-ject Independence — energy "self-sufficiency" by 1980 — and urged Congress to enact "reasonable standards" to control strip mining. "Reasonable" is political jargon for "lax," as opposed to "unreasona-ble"

Suddenly, Dunlap said, "strip mining took on a whole new dimension that it never had before." She said "eastern business interests and chamber of commerce types" have since indicated tacit, if not formal, support. They became fearful, she said, of "jobs lost in Appalachia when the coal boys move out," and generally of a massive geographical shift in the nation's economy.

One of those groups is the National League of Cities/U.S. Conference of Mayors, which a spokesman said now takes "a great deal of interest" in the issue, unlike the time before the Mideast War.

"We're not drawing any conclusions yet," he said, but added the staff is studying strip mining's effect on the environment, the water table in the West and "the movement of jobs and industry from east to cause "it appears to have some very serious national implications.

Mayors attending a mid-winter conference in Washington next week will decide whether to take a formal stand, he said.

Emotions also have risen in West Virginia, where American Electric Power Co. ruffled some feathers recently by saying it would soon begin burning west-ern coal in a power plant along the Ohio River.

West Virginia coal, the company said, was so high in sulfur content it created pollution when burned that exceeded the state's air quality standards. Faced with the embarrassing prospect of burning coal from Wyoming or Montana in a state noted for its coal production, West Virginia authorities agreed to relax the air quality standards.

The incident, however, awakened West Virginians, and the issue of jobs lost to Wyoming or Mon-tana is now present. The industry disputes the valid-ity of this, saying there will be no job "displacement" and that coal production in Appalachia will continue while increasing in the West

## Invalid Claims on Wild Horses

by Velma B. Johnston Under provisions of the Wild Horse and Burro Act, privately owned horses and burros grazing without permit or lease on public lands, and thereby in trespass, must be removed by their owners. The animals remaining will be protected, managed and controlled as wild horses and burros. The National Advisory Board has commended that certain requirements be met in filing claims for the trespass animals. This is in order to safeguard the wild ones that might be gathered by claimants eager to acquire and sell them along with their owned animals. Representatives of the Bureau of Land Management and the Forest Service together with the state brand inspector must then concur that the ownership claim is a valid one under the terms set forth in cooperative agreements between the

federal and state agencies.

The existence of the Act provides no guarantee of safety to the animals. In some areas, the

private, special interests dominate the state and federal agency people.

The livestock industry has enjoyed an unchallenged use of public lands for decades. It is est interests of the industry to remove as many free-roaming horses and burros as possi-ble. State brand inspectors are sometimes sympathetic toward the livestock interests, and in many instances, they themselves are in the

Men of the government agencies are responsible to the American people for the welfare of wild horses and burros. But they are under In another, also heavily populated, claims to only a minimal number have been filed. The first is a District where determination of validity of claims of ownership is lenient; the second a District where determination of validity of claims of ownership is strict.

The public throughout the West should be aware of these behind-the-scenes possibilities, and become involved to the extent of challenging claims that appear to be questionable

In another area of concern, the public should also be made aware that protection, management and control of wild free-roaming horses and burros has placed a heavy burden of responsibility and an additional work load on the governmental agencies. To properly fulfill their obligation they must have sufficient funds and manpower, and the support of the public. We cannot expect the agencies to do the job well until that is provided.

#### CLAIMS FILED

According to a government report as of December 20, 1973, a total of 1661 claimants have filed claims of ownership to 17,165 horses running at large on public domain land in ten Western states.

The federal law has been defied in New Mexico with the filing by the New Mexico Livestock Board, of an ownership claim to all freeroaming horses and burros within the State. The claim was filed "in behalf of ranchers and a lot of public officials who are not at liberty to say



Wild Horses in the Red Desert of Wyoming.

Photo by Roger L. Slocum

pressure from extremely vocal and powerful interests which are actually in the minority. (Official figures indicate that only one percent of beef and six percent of lamb marketed is raised on the public domain lands.)

In some instances claims having no validity whatsoever have been filed during the allotte ninety day period ending November 15, 1973. If recognized they will serve a three-fold purpose:

(1) To clear the public lands of as many horses and burros as possible before the remainder comes under federal custody;

(2) To provide a marketable commodity for human and pet consumption that has cost the 'harvesters" very little to raise, since no graz ing fees have been paid on the animals; and (3) To make available to domestic livestock

and target animal interests the lands the horses

and burros formerly occupied.

It will be a matter of attitudes that will determine how many will be left. For example, in one BLM District, heavily populated with freeroaming horses (both trespass and wild), claims to ownership to all but a score have been filed.

how they feel." A total of 7523 horses and 36 burros have been claimed in that State.

Nevada has the next highest number of animals upon which claims have been filed, 6854 horses and 64 burros. Next is Oregon with claims for 1310 horses and 2 mules; then Wyoming for 765 horses and 1 mule; California for 305 horses; Utah for 150 horses; Montana for 133 horses; Colorado for 74 horses, including some from the Bookcliffs; Idaho for 42, including the Little Lost River horses rounded up in February of last year near Howe, Idaho; and Arizona for 9 horses and 20 hurros

Mrs. Velma B. Johnston is sometimes better known as Wild Horse Annie. Instrumental in getting the Wild Horse and Burro Act passed, she serves as one of the public members on the National Advisory Board. It has recently been reported (Jan. 27) in the

Nevada State Journal in Reno that Mrs. Johnston has received so many threats that "she now has to travel out-of-state with a body-guard."



A weak and unacceptable strip mine bill was narrowly defeated by the House Interior Committee recently. A substitute bill, backed by industry and the Nixon Administration, was offered by Rep. Craig Hosmer to replace the tougher committee bill that has been under consideration for two years. Rep. John Melcher of Montana called it a "rip-off" of the western states. Above is shown the kind of problem which legislation has to deal with. The Kemmerer Coal Co. mine near Kemmerer, Wyoming, will be roughly 1200 feet deep and a mile across when mining is discontinued at some time in the future. The thick vein of coal at right center is only one of several veins being mined. Westerners generally want the toughest legislation which will protect the land and still allow mining. Opponents of the tougher legislation say that in view of the energy crisis, we cannot afford strong legislation. It now seems that only a large groundswell of public concern will prevent weak legislation from getting approval. Write your congressman and demand that environmentally sound legislation be considered and pas-

Emphasis ENERGY

in the Northern Rockies and Great Plains

Space age technology is coming to the remote, inaccessible outposts of the West. The Bureau of Land Management is going to use solar power for radio relay units in Colorado. Use of solar energy will reduce the need for roads, power transmission lines, or gasoline-powered generators in remote areas.

Wyoming Rep. Teno Roncalio has introduced an oil shale bill which would provide for increased federal royalties on the value of oil processed from shale. Roncalio says this would compensate the public for low estimates used by the Interior Department in drawing up the prototype leasing program. The bill would also establish a federal impact aid fund to help boomtown communities, and increase state uses for their oil shale monies.

The Colorado Air Pollution Control Commission says the major source of air pollution in the state is still the automobile and other forms of transportation. Other major visibility reducing pollutants come from hydrocarbon vapor emission sources — refineries, gasoline transfer and bulk storage facilities, organic solvents, paints and dry cleaning establishments — and from fuel and power generation, and solid waste disposal.

North Dakota has received a \$52,000 grant from the federal Economic Development Administration to study "the feasibility and impact of establishing gasification and electrical generation facilities in North Dakota utilizing lignite." A three man research team will be hired to conduct the study which will focus on the physical, social and economic impact of coal development and try to present a comprehensive planning approach.

New Mexico is beginning to react to the energy crisis. One of the top energy producers of the country, the state is undergoing marked change in political climate because of the demands put upon it from outside. The conservative chairman of the Senate Finance Committee pushed an increased severance tax measure through the legislature. Sen. Aubrey Dunn said, They're going to drain the economy of the state, and we'd better protect it. We'd better put some money in the bank for our grandchildren."

The General Accounting Office (GAO) has just released a study which doubts the legality of allowing private firms to dump waste oil shale on public lands which are not leased. The report, prepared at the request of Rep. Charles Vanik (D-Ohio), also gives the opinion that the proposed off-site dumping will constitute "a major federal action significantly affecting environmental quality," and thus requires the preparation of an environmental impact statement under the provisions of the National Environmental Policy Act.

The GAO also said that, if the lands were used for dumping spent shale, an arrangement for compensation for the use of the public lands should be required. Right now, these additional lands are being offered to lease holders for no additional cost.

The oil companies that just signed a lease for the first of six tracts to be offered plan to use 5,800 acres of public land for waste disposal. This amounts to more land than they just leased, 5,089 acres, for \$210.3 million. The companies are Standard Oil of Indiana and Gulf Oil Corp. Their proposed operation would produce 1.4 billion tons of waste over 30 years.



A Federal Power Commission staff report says that insistence on strict air quality standards is going to leave many areas of the country short of electric power. The report said many power plants may have to be shut down for non-compliance if the air quality standards are strictly enforced.

The president of Kennecott Copper Corp., of which Peabody Coal Co. is a wholly owned subsidiary, says air quality regulations must be relaxed in order for coal companies to see added incentives for mining. Frank Milliken also told stockholders that strip mining and safety regulations may also have to be relaxed.

An Environmental Protection Agency study says that the nuclear power industry may routinely produce pollutants which will remain dangerous to living things for 25,000 to one million years. The study shows that from 31,000 to 7,000 deaths due to cancer and birth defects attributable to man-made radioactive materials emitted by the industry could occur during the next 50 years. To keep these deaths to the minimum figure, nuclear fuel reprocessing plants, which cost about \$80 million each, would need to invest in about \$67 million worth of radiological pollution controls, the EPA estimates.

The EPA findings have been published in a report called "Environmental Radiation Dose Commitment: An Application for the Nuclear Power Industry." Copies are available from EPA's radiation of the Author of the Nuclear Power Industry." Copies are available from EPA's radiation of the Author of the Author of the Author of the Nuclear Power Industry."

The concept behind the EPA's research is to measure the effects of a buildup of long-lived radionuclides. Up to now, EPA's radiation chief William Rowe says, effects have been measured in doses to individuals on a yearly basis. Atomic Energy Commission officials have said that the EPA report is unrealistically pessimistic. The Natural Resources Defense Council has said the report was probably overly optimistic about the health effects of the radioactive materials.

The Select Committee on Science and Technology advised the English government not to buy nuclear lightwater or pressurized water reactors designed in the U.S. The committee based its recommendation on what it called "the conflict of opinion on the safety" of the American reactor and on the possible consequence to British nuclear technology of not ordering British reactors.

The Interior Department estimates that a federal subsidy of about \$2 a barrel may be needed to stimulate investment in synthetic fuel production from coal and oil shale. Interior Secretary Rogers Morton says the Administration favors the subsidy.

Suit has been filed in federal court to prevent Westmoreland Resources, Inc., from strip mining some 31,000 acres of coal leases on Crow Indian lands in Montana. The suit was filed by ranchers in the area and a national environmental group, Friends of the Earth. The suit alleges that it will be impossible to reclaim the land, grazing land will be destroyed, water quality degraded, and the area subjected to air and noise pollution.





I don't like to go ski touring immediately after a big snowfall. Oh, it's nice to break new snow and get the feeling that you're the first person on the face of the earth, but there aren't any tracks yet. It may be tough going in the deep powder, but that only adds to the physical feeling that you're getting good exercise. It's the lack of tracks to follow that makes me like to wait a day or two before I venture out.

It's usually colder then because clear skies

It's usually colder then because clear skies often drop temperatures (it may be downright warm just after the storm that dropped several inches of new snow), but it doesn't take long to warm up, plowing through the soft surface, sinking in as much as a foot.

There around the base of those little pine trees a filigree of tracks suggests that the small rodents have been active, scrambling about in search of seeds or perhaps a warmer place to hole up. The wing-tip tracks of magpie or jay or even horned owl tell of the terror awaiting the too-active rodent, perhaps a spot of blood marks a sudden kill.

Junco tracks appear in the underbrush where weed seeds have been scattered by the wind or by a passing animal or by the very weight of the tiny birds on the branches. Rayless cone flowers and mullein and dozens of lesser flowering plants keep the little seed-eaters busy but fat through the winter. Chickadees add their marks too, and their sounds.

The porcupine drags his tail through the soft snow, almost covering up his actual tracks but leaving a deep zig-zagging trench. The beaver's webbed hind feet may be hard to find too because of the tail drag and the fact that while they are standing upright to cut a tree or a twig, they tend to move about a bit, thereby obliterating distinct prints.

Deer, moose, and elk all drag their hooves in the deep snow, leaving sharp lines leading to each track. The direction of travel is difficult to determine at first glance because the toe-marks of the actual hoof print may be covered with freshly-fallen snow or with snow sifting into the track.

Coyotes have a tough time moving in the soft snow, but their tracks are everywhere, especially a few days after a storm when the surface begins to crust. Blood trails and kills become focal points of tracks in the snow, and the territorial marks of the canine clan become obvi-

Shadows leave no tracks, but the birds that fly over stop to perch and to rest. Goose tracks and droppings are obvious along many streams and ponds that remain open in cold weather, and even eagle tracks may appear near a kill. The wing-prints often indicate a near-landing or a take-off for birds that rarely land on the ground, and even the snow jiggled off a branch may mark a bird's perch. Grouse and other ground-dwelling birds leave intricate patterns in the snow, and the print of the trumpeter swan is unmistakable.

My favorites are the prints of the snowshoe rabbit or varying hare: two large snowshoe-like prints in front and two much-smaller squirrelike prints behind, a strange print with the hind-foot tracks before and the fore-foot tracks behind because the creature moves by bringing his powerful hind legs around in front of and outside of the briefly-planted forefeet. They're all over the place.



The peregrine falcon is one of our rarest birds of prey. Its position on the top of the food chain has been a major reason for its decline. Persistent toxic pesticides, notably DDT, are "biologically magnified" and concentrated as one animal eats another. The top predator gets the highest dosage. Scientists believe this high concentration of pesticides in the peregrine causes reproductive failure. Another cause of this bird's endangered status is loss of habitat. The peregrine is extremely sensitive to man's intrusion. Another of the peregrine's main threats is the irresponsible falconer. Peregrines demand a high price on the illegal falconer's market. Recently, the Audubon Society was forced to install an electronic alarm system around Morro Rock in California to protect a favorite nest site that was invaded twice last summer by vandals.

Photo by James H. Enderson

### DDT Linked to Falcon's Decline

Research indicates that the American peregrine falcon, an endangered species, is declining fast in the southern Rocky Mountains mainly as a result of pesticide ingestion, according to the Wildlife Management Institute. DDT, which alters the calcium cycle in birds resulting in eggshell thinning, is suspected.

eggshell thinning, is suspected.

A survey conducted by Colorado State University, the World Wildlife Fund and the U.S. Bureau of Sport Fisheries and Wildlife found that only three young were fledged from 14 active nests in the region in 1973. Normal clutch size per nest is three to four eggs. The chemicals are ingested by peregrines in their food. The falcon, being at the top of the food web, is subjected to cumulative doses of contaminants in

its normal diet.
Four eggs which did not hatch were analyzed and found to contain high levels of pesticides.
Residues of DDE, a metabolite of DDT, found in the eggs compared with concentrations associated with nesting failure in brown pelicans.
As of 1970, the BSF&W reports that there

Grizzly Suit Dropped

The Fund for Animals has agreed to drop its lawsuit over the National Park Service grizzly bear management program (see HCN Feb. 15, 1974, for details.) In return, the Park Service has agreed to prepare an environmental impact statement before July 1, 1974, on their man-

agement program.

At issue is the effect of closing garbage dumps to grizzlies in Yellowstone National Park during 1969. The Fund agrees with Dr. Frank Craighead that the program will lead to the bears' extinction in 20 years.

The Park Service disputes this criticism and

The Park Service disputes this criticism and has commissioned the National Academy of Sciences to study the management plan. The NAS study should be completed by May 31, 1974 were less than 65 known active nesting sites for the peregrine falcon in western Mexico, the lower 48 states of the U.S., and southern Canada. A few hundred pairs still breed in interior Alaska and northwestern Canada. There are seven confirmed active peregrine nests in Colorado.

Falcons are protected by federal and state laws. At present, a number of pairs of falcons are in captive propagation programs. At Cornell University, four pairs of peregrines raised a record-breaking 20 young this spring.

Idaho Eagle Count Down by 50%

The January, 1974, eagle count in Southwest Idaho turned up half as many eagles as the 1973 count. "The drop this year is nothing to get alarmed about, but if the population should stay as low as it is now, we'd begin to worry," says Mike Kochert, a wildlife biologist with the Bureau of Land Management.

Kochert feels the low eagle count is due to a decline in the state's jack rabbit population. "The golden eagles are highly dependent on jack rabbits for food; over half their diet is jack rabbits, and the 1973 crash in rabbit numbers is beginning to have its effect," Kochert said.

Eagles in the 7,000 square mile study area dropped from 1,176 in 1973 to 574 in 1974. Jack rabbits dropped from 40 per square mile to 19 per square mile.



## Western Roundup

#### DDT Ban Broken for Moths

The Environmental Protection Agency has broken its ban on the chemial pesticide DDT. The agency has granted a Forest Service request to spray DDT on forests in Idaho, Oregon and Washington infested by the tussock moth. The EPA has also authorized fighting an anticipated pea leaf weevil outbreak with the controversial pesticide.

The tussock moth spraying will take place on 650,000 acres of forest land only if the Forest Service determines this spring that an emergency exists. The spraying is expected to be a one-shot affair. Alternatives will be available for later outbreaks of the moth, the EPA expects.

Dr. Steven Herman, a scientific advisor to the Sierra Club, Friends of the

Earth and the Environmental Defense Fund, called the EPA decision "scientifically irresponsible. No expert who has worked and published on the tussock moth supports the use of DDT against the pest."

The Audubon Society in New York said that by killing the moth's predators and the less resistant moths that the DDT might actually strengthen the insect species. "When DDT was used against the gypsy moth, a similar insect pest in the East, there was considerable evidence that the spraying actually led to peak outbreaks that were worse than therwise would have been the case," an Audubon spokesman said. DDT was banned by the EPA because the poison was shown to persist in

the environment and to accumulate in organisms

The use of DDT to control pea weevils in Washington and Idaho will be allowed this spring only where field surveys show the infestation could cause significant damage to dry pea crops, the EPA said.

#### Rockies Don't Need Clearcut Ban

A recent court ruling which banned clearcutting in West Virginia's Monongahela National Forest (see HCN, Nov. 23, 1973) probably won't be applied in the Rocky Mountain West, says Denver Sierra Club lawyer Anthony Ruckel. The reason is that the Forest Service in the Rockies "has been very cooperative in reducing the amount of timber mowed down on its own, and we don't see any need to go after them in court now," explains

Colorado Business reports that the Forest Service has reduced clearcutting substantially throughout the region. Clearcutting used to provide 50% of the annual harvest in Montana. Now that figure is 10-15%. In Colorado and Wyoming clearcutting has dropped from 39% of the harvest in 1969 to 25% in 1973. By comparison, in the Monongahela Forest of West Virginia clearcutting provided more than 47% of the annual harvest.

### Colorado River Clean-up Proposed

The chairman of the House Irrigation Subcommittee, Rep. Byran Johnson of California, has proposed a \$275 million project to desalt the Colorado River. A complex of canals, aqueducts, upstream facilities, and desalting plants would purify the waters of the river before entering Mexico. A \$98 million desalting plant proposed for near Yuma, Arizona, would require

3500 megawatts of electricity for operation.

Mexico has protested the extreme saltiness of the Colorado River when it finally gets to use the water. Besides natural salt content picked up from geological formations, the saltiness is increased as fresh water is taken out upstream for irrigation, powerplants and other uses

### Utah Sees Dry Years Ahead

Officials of the Utah Water Resources Division say the state will never have enough water to meet its needs. They point to development of oil shale and proposals for large powerplants which will take most of Utah's remaining unallocated water in the Upper Colorado River. This they say will not provide much water for additional irrigated agriculture or population growth.

Meanwhile, the Central Utah Project is the subject of a suit brought by

the Sierra Club, Trout Unlimited, the Natural Resources Defense Council, and the Environmental Defense Fund. CUP would divert approximately a half a million acre feet of water out of the Colorado River drainage and put it into the Great Salt Lake Basin. The suit says this great water diversion plan is being done without adequate planning for all environmental consequences. Conservationists contend water development will be at the expense of wilderness lands, and free-running streams known for their fishing quality and high aesthetic and recreational values. Dams, diversion aqueducts, and other developments would affect mountain lakes and streams throughout northeastern Utah. Conservationists also say the diversion of large amounts of water into the Salt Lake Valley will result in an even larger concentration of people and more problems of urbanization.

High Country News-13 Friday, Mar. 15, 1974



One of many western de facto wilderness areas which coust he included in the wilderness system is the area lying north of the famed Beartooth Highway from Red Lodge, Montana, to Cooke City and Yellowstone National Park. This area, a part of the Shoshone National Forest in Wyoming, is separated only by the Montana-Wyoming state line from the Beartooth Primitive Area of Montana. Hearings are scheduled on the proposed Absaroka and Beartooth Wilderness Areas on March 27 in Cody, Wyoming; in Billings, Montana, on March 29, and in Livingston, Montana, on March 30. The areas under consideration include spectacular scenery, panoramic views of the mountains, scenic mountain waterfalls, and glacial mountain jakes. Elk. deer. mountain goats and bighorn sheep, where of the mountains, scenic mountain waterials, and gracian mountain lakes. Elk, deer, mountain goats and bighorn sheep, grizzly and black bear make their homes in the general area. Those wishing to make written statements on the proposal may do so until April 30. Write Regional Forester, Missoula, Montana 59801.

### Coors Supports Idaho Returnables

William Coors spoke in favor of a bill banning throwaway cans and bottles at a recent session of the Idaho legislature. Coors is president of Adolph Coors Co., the fourth largest brewery in the U.S.

Henry King representing all other U.S. brewers, opposed Coors' stand on the Idaho bill. King is president of the U.S. Brewers association.

Some type of mandatory return of all aluminum cans is necessary "or there won't be enough aluminum in the U.S. to meet needs by 1976," Coors

said. "Eventually the entire country will have to recycle cans and even bottles — to save energy and cut littering."

The proposed Idaho bottle bill differs from a container law in Oregon which forced manufacturers to use only bottles. The Idaho bill, sponsored by Sen. John Peavy, would fix a redemption value on all beverage contains.

Harry Barsalow, an Idaho Falls bottler, says the law protects aluminum cans (which are Coors' primary container) at the expense of steel cans. Aluminum is easily recycled, at a great energy savings. For economic reasons, steel and the commonly used bi-metallic cans are rarely recycled

### Briefly noted . . .

Grazing lands owned by the public are "in a declining condition in Idaho, New Mexico, Arizona, Nevada and Utah in particular," says Curtis J. Berklund, director of the Bureau of Land Management (BLM). BLM sources estimate that grazing capacity for livestock on Western rangeland has been reduced by one-half or more in the past century. Berklund hopes to restore good health to public grazing lands through the use of restrotation grazing.

A decision will be made on the Jackson Hole Airport improvement and expansion in Grand Teton National Park within five weeks, according to airport manager Bob LaLonde. After meeting with Interior Sec. Rogers C.B. Morton, LaLonde predicted that the government would go ahead with all improvements except the runway expansion necessary for jet aircraft.

Last month New Mexico Gov. Bruce King signed a bill which repealed the state's Environmental Quality Act of 1972. The law was patterned after the National Environmental Policy Act and included requirements for the preparation of environmental impact statements on state actions. A spokesman for the Southwest office of the Sierra Club called the loss "the result of a strong coalition of state agencies including the State Engineers Office, the State Land Office, along with almost all of the major industries in New Mexico.'

### Thoughts from the Distaff Corners by Marge Higley SOME SECONDARY SECONDARY

The fawn bounced excitedly through the trees

toward his mother. "Mama!" he excl he exclaimed, "my friend the says that this is something called Wildlife Week. What does that mean, Mama?"

"Til try to explain it," answered the doe.
"Each year, Man sets aside a week to honor all the birds and fish and animals. I think the en who thought it up want to remind Mankind that we must all live in this world together.

That's nice of them," murmured the fawn, "but I don't see why it's just one week. Shouldn't

they remember us all the rest of the year, too?"
"You'd think so," said the doe, "but Man is a peculiar creature."

I thought Man was an animal, too!"

"He is," she replied, "but he's quite a different kind of animal. We wild creatures are blessed acute senses, strengths, and instincts Man lacks these things, but has something called intelligence

"Is intelligence better than instinct?" queried the fawn.

"Hmmm. . ." mused the doe. "That's a moot question, but the general consensus seems to be that intelligence is better. You see, it gives Man a chance to think before he acts, while we wild creatures react instinctively, to protect ourse-

"Is Man our enemy?" asked the fawn. "I don't see why he'd have a special wildlife week just for us, if he's our enemy!"

"Well," his mother replied, "it's most difficult to explain. Man doesn't consider himself our - he just doesn't seem to realize that we need to have our own quiet green place to live. So when his cities grow and spread close to our homes, we have to move away from all the noise and machines and dirty air.

"Is that why we moved to this side of the mountain?" the fawn asked. "Not exactly," she answered. "We had to

move over here because Man brought in noisy machines and cut down the forest on the other side. We had no protection whatever . . . And the year before that," she sighed, "they built a dam across the river. We couldn't even get to our usual summer range."

The fawn mulled over these facts, and finally

he asked, "Are you sure that Man isn't our

enemy?"
"I don't believe he means to be our enemy,"
"I doesn't think." she answered. "I guess he just doesn't think."
"But Mama," he argued, "you said that Man

had something called intelligence, which is bet ter than our instinct because with it, he could

think before he acts."
"Hmmm. . " she muttered, "I did say that, didn't I?"

"Yes, Mama, you did. So why —?"
Gently, she nudged him away.
"You'd better run along and play now, dear," she said. "I think I need a little time to think!"





Photo by David Sumner

## **House Kills** Land Use Bill-Revival Needed

One of the nation's most critical needs, land use planning policy, suffered a severe setback at the hands of the House Rules Committee. The powerful committee voted 9-4 on Feb. 26 to ostpone consideration of House Resolution 10294 indefinitely. Observers feel the action was the result of apathy on the part of citizens, and strong anti-legislation lobbying on the part of special interests. Ironically, President Nixon, who has consistently declared land use planning was top priority, was instrumental in tor-

Rep. Morris K. Udall of Ariz., sponsor of HR 10294, commented afterwards, "Today's Rules Committee vote results from another and almost classic example of the kind of immoral White House double dealing we have come to

Barnum was right. The real estate sucker has proved his point, multiplying at an astonishing rate. There are no slopes too steep, no soils so unstable, no ecosystem so fragile that those modern-day hucksters won't try to sell to some innocent sap. The danger is that while those interested in wildlife debate hunting, the "developers" continue merrily on their path of sending wild lands and wildlife into oblivion. Nathaniel P. Reed

Assistant Secretary of the Interior Speaking to the American Humane

expect on environmental issues. First, we hear a series of pious Presidential announcements out the need for land use planning; Mr. Nixon calls it his No. 1 environmental priority. The good guys of the Administration are allowed up front to present the program to the Congress and Nation — decent, honorable men like Russell Train and Rogers Morton who believe in ensible land use planning and put their sincere efforts and reputations on the line.

Then as passage approaches, some of the big interests who provided much of that \$60 million CREEP fund go through the back door of the White House to make their case. All of a sudden, mealy-mouth equivocal statements begin appearing. The whispers begin: The President really does not support the bill; he really did not understand what he was getting into. Republican House leaders suddenly discover that the bill needs more study and, why yes, they favor the idea of land use planning but the House cannot be trusted to vote on these impulsive proposals emerging from the Interior Commit-tee. That is, legislation molded and scrutinized over a period of three years — legislation that was approved in the Senate by 64 to 11 and in the House Interior Committee by 26 to 11.

The cynicism of all this ought to be apparent. It is a defeat for the quality of life, responsible planning for future energy needs, for the intelligent use of natural resources, for the next generation. The hysteria of a few right wing or-ganizations and the selfish interests of a few industries have delayed a bill all Americans

The postponement of the bill followed closely upon the defeat of a U.S. Chamber of Commerce Bill sponsored by Rep. Sam Steiger of Ariz. Steiger had discussed the Interior bill with Nixon and was thought to be instrumental in getting the President to shift.

Rep. Udall and other strong supporters of the bill, Rep. Phillip Ruppe of Mich. and Rep. John Dellenback of Ore., say they will not take any more action on the bill until more public support is shown. Udall said that almost without exception, the Rules Committee members indicated they had not received a single piece of mail in support of the bill.

Other support seems to be gathering momentum. Republican Gov. Dan Evans of Washington has been named chairman of a newly formed coalition of state, county and city officials which has been working for several years to develop a land use policy. Evans says, "Intelligent land use planning and management provides the single most important institutional device for preserving and enhancing the environment and for maintaining conditions capable of support ing a quality of life while providing the material means necessary to improve the national stan-

If you have not written your representative in Congress on this matter do so at once. HR 10294 is a carefully worked out piece of legislation which deserves support. Write: Mr/Mrs. (Representatives' name), House Office Building, Washington, D.C. 20515.

## Protecting the Unhunted

by Bruce Hamilton

"It is said that the bluebird is declining in numbers and is in trouble," writes Dr. Joseph Linduska. "That is a sad state of affairs. But it would probably not be so if the bluebird weighed three pounds and held well to a pointing dog..."

Ironic as this statement may appear, it is filled with truth. Animals governed by game laws have a better chance of survival. There are probably more deer in this country now than there were in the 1600s. Many say the best way to protect the wolf from extinction would be to elevate its status from "varmint" to "game."

The reason is management. Management measured in research, habitat improvement, population manipulation, and public concern for game has protected the hunted species. The unhunted have been treated with indifference.

Ordinarily an animal species could survive without man's constant attention and manipulation. But man's indifference to nongame has in many cases been coupled with actions that drastically disrupt the unhunted's life and life support system.

There was no national program designed to exterminate the black-footed ferret. Man's indifference toward the ferret was so complete that most people never even knew the animal existed until it was on the verge of extinction. For the most part, the only men who ever killed ferrets intentionally were museum collectors. But man poisoned and trapped prairie dogs indiscriminately to provide better rangeland for domestic stock. And that program wiped out the main sustenance of the ferret. In the early 1970s the federal government was still poisoning prairie dog towns where ferrets might have been living. Only within the last 10 years has there been any public concern backed up by money for research and habitat purchase for the black-footed ferret. It may have come too late. Only a handful of ferrets are left — and their days may be numbered.

Hopefully, the experience with the black-footed ferret will not be repeated with other species. There is now a new awareness and concern for nongame species and especially the rare and endangered ones. Congress has been passing laws to protect endangered species. Many states have set up nongame management programs. But awareness and concern is not enough in an age when a handful of compound 1080 poison or a strip mine can cause such violent, irreparable damage to the natural environment. Endangered species protection laws must be enforced, more research must be carried out to provide more information on species needs, more wilderness and wildlife refuges must be established — all costing money.

Where will the money come from? Money for game management comes almost entirely from hunters and fishermen through license fees and excise taxes on their guns and tackle. This same money has been a main source of nongame management funds in recent years.

"In our view," says Daniel Poole, president of the Wildlife Management Institute, "the time is at hand for the nonhunter and the nonangler to begin to match his 'nonconsumptive' demands for fish and wildlife and their habitat with his

But how do you license a bird watcher? How do you tax a wildlife photographer or painter? Even if you could charge these overt 'nonconsumptive' users of wildlife, why shauld they be asked to pay to protect a resource that is valued by most of our population, hunter and nonhunter alike?



Charles Callison, executive vice-president of the National Audubon Society, points out, "No one has ever come up with a good estimate of the number of bird watchers, although recreation surveys indicate there are at least as many active birders today as there are hunters. Then add to the ranks of real and potential wildlife program advocates all of the nature photographers and everyone else who thrills to the sight of a deer or an eagle or a flight of wild waterfowl when in the out-of-doors, and I think you've got about everybody who ever gets into the out-of-doors."

The states are searching for solutions to this financing dilemma. One solution is the "Model Law for a State Nongame Wildlife Program" that has been drafted and recommended jointly by the Wildlife Society and the International Association of Game, Fish and Conservation Commissioners. This model law is a statement of policy and a formula for funding nongame management from the state's general fund. As of March, 1973, the model law had been introduced in the legislatures of 12 states and passed by at least four.

Callison wrote to wildlife departments in all 50 states in 1973 to find out if they needed legislation like the model law. In the replies, 26 states said they had ample authority to manage nongame species, and 18 states said they needed new legislation. "But I know that none of them have the money to do it except in a tiny and tentative way," said Callison.

Aside from securing management funds through general revenue appropriations, several states are looking at other means of raising the necessary money. Colorado has just initiated a wildlife conservation stamp program. For five dollars, citizens can purchase a stamp depicting the black-footed ferret. Proceeds from the sale of the stamps are used exclusively for the management of endangered species within the state. The program will focus on buying up key habitats for such species as the black-footed ferret, the lesser prairie chicken and the greater sandhill crane. Stamps can be purchased at the Colorado Division of Wildlife office or by mail (6060 Broadway, Denver, Colo. 80216.)

The Washington state legislature recently passed a bill earmarking revenues from personalized auto license plates for nongame wild-life. This scheme is expected to generate more than a million dollars annually for nongame management.

Missouri is looking at a special tax — a one cent levy on soft drinks to raise nongame funds.

Callison says, "I strongly recommend the general revenue approach. All it will take is the courage to ask the state legislature for an adequate appropriation and the skill to mobilize the interested public behind it. And the patience and persistence to follow through in case the legislature isn't convinced on the first try."

It's a battle worth fighting. It's a cause that may ultimately affect the human species at some distant point in time.

## Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

Said the Condor, "I have this great fear That I can't last much longer 'round here. Now, there's nary a smidgeon Of the Passenger Pigeon — Will my species, too, disappear?"

Michigan's largest department store operation has agreed to stop selling coats trimmed with wolf fur. It is against state law to sell products involving endangered species. Michigan has fewer than 50 timber wolves but is considering importing some from Wisconsin

Los Angeles Mayor Thomas Bradley has charged General Motors, Standard Oil and Firestone Rubber and Tire Co. with purposely destroying rapid mass transit in that area. Bradley says the companies or ganized Pacific Transit Lines in 1938. That company acquired and then dismantled Pacific Electric System. Bradley made the charge in a letter to a Senate antitrust committee.

A federal judge has ruled that President Nixon did not have the authority to stop construction of the cross-Florida Barge Canal in 1970. Judge Harvey Johnson said the President does not have the power to terminate projects which Congress has authorized. The President's executive order to halt construction was issued mainly because of environmental considerations. Now the judge has ordered the White House to immediately release \$150,000 for an environmental impact study of the canal.

Delaware's tough Coastal Zone Act is under attack in the state legislature. The act, which bans oil refineries, super tanker terminals, steel plants and other heavy industry along the coast, was passed in 1971. Lobbyists to repeal the bill are raising the issues of the energy crisis and economic recession.

The effects of air pollution on work capacity of the human body is being studied at the Institute on Environmental Stress. Volunteers breathe pollutants as they stride along a treadmill in a heated chamber. Research at the Institute, located at the University of California at Santa Barbara, has been going on for two years. Researchers hope to gain factual information on which to base smog alerts and safety criteria.

Figures compiled by UPI reveal that population trends in the U.S. are the lowest ever recorded since records have been kept in a number of states. Connecticut recorded the lowest number of births among the states, 12 per 1,000 persons. Utah was the highest with 23.8 per 1,000. Delaware exactly matched the national average with 15 per 1,000.

		he times. — Read try News
Enclosed is	\$10.00	Please send to
Name	N.F	
Street		
City	Stat	te Zip
		how to sign the gift ca

Box K, Lander, Wyo. 82520



Photo by James Garrett Davis

## In the NEWS

WILDLIFE WEEK

**Endangered Species** 

who needs them?

a new HCN feature —
Colorado cartoonist Rob Pudim. 3

Go Home a grizzly tale by R. C. Burkholder.

we've come a long way since Little Red Riding Hood.

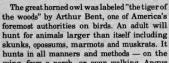
**Bighorn Sheep** 

they lost their range with the winning of the West—now remnant herds face hunters and hikers. 8

Nongame

nobody pays for bluebirds.

y James Garrett Davis



Tiger of The Woods

nums in all manners and methods — on the wing, from a perch, or even walking. Angus Cameron reports in The Nightwatchers how great horned owls have walked up ramps into chicken coops, and waded into a half a foot of water "seizing bottom feeders such as bullheads and suckers when they come into shallow

The owl's diet can be studied by dissecting the indigestible fur, feathers, beaks, claws and bones that can be found in the pellets or "casts" that are regurgitated. Owls often eat their prey whole, but the gizzard rejects certain wastes and forms them into neat pellets which litter the ground below a nest or a favorite perch. The casts pictured below hold many rodent bones and skulls. The owl's predatory habits benefit man. Still the great horned owl is often illegally trapped, shot and molested by men not ap-

reciating its important role.

Labelled "savage" and "vicious" by its accusers, the great horned owl could best be described as an effective hunter. This is due to the bird's size, power, nocturnal habits, silent flight and

The silent flight of the owl is made possible by tiny filaments on the leading edge of the wing (see center of photo of adult owl.) These fila-ments break up the air currents and thereby silence the noise of the air rushing over the

Contrary to popular belief, owls cannot see in total darkness. However, several species of owls can hunt in total darkness using their acute hearing. Still the owl's eyes are a truly amazing tribute to evolution. Though the adult great horned owl weighs less than one fiftieth the weight of an average man, its eyes are the same size as an adult human. An extraordinary number of rods (light receptors) packed into the eye's retina enables the great horned owl to see in very dim light. The eye also has a high number of cones (which perceive color and de-termine sharpness of the image), so that an owl can pick up distant objects during the day that a man can't see. Another feature that aids the owl is having both eyes on the front of its head to provide binocular bision. Most birds have monocular vision which limits their depth perception and hunting ability.

