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Jim Springer
Western Washington University

Huxley College of the Environment, Western Washington University

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Old-Growth Timber May Get Axed
by Tim Wheeler

The timber industry has a friend in Washington D.C. John Crowell Jr. left his job with the nation's second largest timber company, Louisiana-Pacific, to become the Agriculture Department's assistant secretary for natural resources and environment where he oversees the Forest Service.

At L-P, Crowell strongly supported and acceleration of timber harvesting from the national forests and he is now in an ideal post to influence government policy to that end.

In the Reagan administration, timber is to the Forest Service what energy supplies are to the Interior Department. Crowell has made it clear that he is as eager to exploit the riches of the forests as James Watt is to increase the production of coal and oil on public lands.

"We now have a remarkable opportunity to reduce the potential gap in timber supply in the Northwest," Crowell says. "I want to make the national forests contribute more to the economic well-being of the country."

Specifically, Crowell wants to double the harvesting of trees from the national forests as rapidly as possible by departing from the Forest Service's long-standing policy of not harvesting more timber than it grows.

The national forests are becoming more appealing to the timber industry because many companies are running out of privately owned trees.

The Forest Service manages 123 national forests which include 89 million acres of commercial timber. 63% of this inventory is located in the Pacific Northwest.

By law, the Forest Service must weigh conflicting demands on the national forests. The 1960 Multiple Use Sustained Yield Act requires it to ensure wilderness protection, recreational use, wildlife and fisheries management and water quality. Until now, the Forest Service has largely pursued a policy of scheduling timber sales according to a concept it calls "non-declining even flow". This means that the volume of harvested trees may not exceed the growth of a forest over a given period.

From the commercial forester's perspective, once a Douglas Fir matures it should be cut down to allow for new, faster growth. Crowell shares that perspective and says that the national forests "offer the greatest immediate potential to capture this vast old-growth inventory before it is lost to insects, decay and fire.

Douglas Firs reach maturity after 90 to 180 years, and in the Pacific Northwest, more than 60% of national forest timber has matured and virtually stopped growing.

"The non-declining even flow policy of the Forest Service just can't be applied to old growth forests," Crowell contends. "That policy is just ridiculous."

continued on page 8
Endrin Fouled Game Fowl

by Valerie Smith

Game-bird hunters may think twice before serving up fresh wild geese and duck to their friends and family this year for the fowl may contain a nasty surprise.

Endrin, a chlorinated hydrocarbon, (as is DDT) was sprayed on wheat seedlings to battle the wheat-eating cutworm. Unfortunately, wild geese and duck consider wheat seedlings a delectable meal. So, endrin is accumulating in the fat and skin of many a waterfowl hunter's delight.

Last March, 120,000 acres of wheat in Montana were dusted with endrin, and another 140,000 acres in Wyoming, Colorado, and South Dakota. Another thirteen states could potentially be affected by endrin since each year 20 million ducks and geese fly along migratory routes from Canada to Mexico. Washington is included in this flyway.

A6%

In Montana, the state fish and game commission considered whether or not to open hunting season this year. After reviewing results of studies investigating toxicity levels in 100 game fowl, taking into account the fact that 46% of the state fish, wildlife and parks department budget is from the sale of hunting and fishing licenses, the commission decided to allow hunting season to open (except in eight eastern Montana counties where geese carried particularly high levels of endrin). Had Montana decided to ban geese and duck hunting, many of the sixteen states along the migratory route may have followed suit. As it is, the hundreds of thousands of game-fowl hunters are free to shoot birds potentially contaminated by a highly toxic insecticide.

Endrin is about 250 times more toxic than the insecticide used against the Medfly, malathion, (depending on the species investigated) and has been found to accumulate in birds to a greater degree than DDT. Exposure can be through inhalation, ingestion, external contact, and water systems. Acute symptoms of endrin poisoning are loss of muscle coordination, tremors, tracheal congestion and convulsions. A single acute exposure to endrin during pregnancy can result in spontaneous abortions, still births, birth defects and a reduction in birth rate in many wildlife species. Its agricultural use has been linked to cattle losses, the incidence of illnesses in hundreds of agricultural workers, and numerous fish kills.

Fish are particularly susceptible to endrin and will die at just a few parts per billion. Rainbow trout, 48 hours after exposure, have a LC - the concentration of toxin that is lethal to 50% of the population in the order of only 1 ppb. It is the runoff from sprayed fields that deposits the organochlorines in streams, and residues accumulate in the normally edible flesh of the fish.

The endrin that does not run off into streams persists in the soil. In soil where the application of endrin is one lb/acre, seven years must pass without reaplication for 95% of the compound to have dissipated or broken down. Children playing in soils several years after the last application of endrin could still show symptoms of exposure.

This insecticide is banned in New York, California and parts of Canada. Its use is restricted elsewhere, but is still used by Western wheat farmers. Montana wildlife officials attempted to appease those opponents of a game-fowl hunting season this year by publishing warnings to discard skin and fat, and included diagrams on where to cut. But the solution does not lie with cutting off the fat of the fowl or tranquilizers given to field workers in convulsions; these are merely symptomatic responses. A widespread recognition is required by farmers in which the consequences to ecosystems are integral in the decision whether or not to apply pesticides.

According to the National Coalition Against the Misuse of Pesticides, in 30 years the agricultural use of pesticides has gone from 50 million pounds per year to 600 million, while at the same time loss of crops due to pests has doubled. This is due to the fact that insect populations quickly become resistant to the pesticides through selective processes in which the resistant survivors of a spray live to reproduce similarly resistant young. Since insects have a short life-span and the potential to bear large numbers of progeny, the time is not long for a population to increase and continue ravaging a farmer's crop, resistant to the insecticide previously applied.

There are alternatives to widespread pesticide use, particularly a method termed Integrated Pest Management. IPM is based upon applied ecology, the recognition that 100% pest mortality is unnecessary, and an avoidance of harmful chemicals. The method uses protection of the predatory and parasitic insects that attack pests, and improvement of field sanitation measures (dead fallen apples, for example, are often breeding houses for pest larvae) and selective spraying of target insects. The result is reduced soil and water contamination, lower pesticide residue in food and less exposure of toxins to workers. IPM can be an effective pest controlling system and overall ecological consequences are greatly diminished.

Until such systems are incorporated into farming methods, pesticides such as endrin will continue to persist in the soil, contaminate water, subject agricultural workers to exposure to toxins and accumulate in fish and wildlife.

So, duck and geese hunters—trim the fat, discard the skin, forget about gravy, and eat no more than one duck (or pound of goose) a week.
**Body Heat**

by Michael Willis

From the beginning of time people who were exposed to cold have been involved in a struggle with their environment. As a result they have developed shelter for protection, utilized natural resources for fuel and engineered heating systems for warmth. It is remarkable to note how the body has adapted to the elements, and much research has been done to find out how and why this adaptation occurs. Bergmann’s rule is a good guideline to follow when analyzing adaptation. The rule simply states that low body weight is found in high temperature habitats and high body weight is found in low temperature habitats. Since body heat is alleviated by body surface area the advantage in a cold environment lies with the body that has a smaller ratio of surface area to body weight. Thus, a torso with shorter limbs and a stocky build is very efficient in heat production and utilization. In an experiment designed to find out why people who endure cold environments are generally heavier, Russell Newman and Ella Munro compared the body size of 25,000 United States Army recruits with their home town temperatures. Their experiment compared the body size of male individuals from throughout the United States with their home town mean January temperatures and mean July temperatures. They found that body weight (per unit of body surface area) was more strongly correlated with mean January temperature than with mean July temperature or mean Annual temperature. They came to the conclusion that the larger body weight in relation to a cold environment is due to an increase in appetite and activity. This statement can be substantiated to a certain extent by military data taken during World War II. This information showed that soldiers living in a desert climate had a daily caloric intake of 3100 as compared to 4900 calories eaten by soldiers in the artic. The types of fuel people consume in cold weather plays a large part in thermoregulation, instinctively, people eat to weather the climate. Depletion of certain nutrients in the body could have some adverse effects if the body is exposed to cold. One way to help maintain body temperature in cold weather is to eat frequent meals composed of fat. On the other hand, high protein meals stimulate the body in the production of extra heat when needed. Eskimos are a good example of this. By eating a diet of fat and protein they have successfully adapted to their environment.

Heat is actually produced in the body by the oxidation of food and by the contraction of muscles. The body heating system is based on the basal metabolic rate. This specific rate of heat production can be increased by certain chemicals in the body such as adrenalin or thyroxin. It is essential to maintain the body core temperature at 99°F for the body cells to collect the chemical energy released by the oxidation of food. A deviation of even a few degrees above or below 99°F could stop or slow cell function. By burning energy and creating heat the body builds up waste products in the form of lactic acid and carbon dioxide that can clog its fuel delivery system. Effects of exposure to cold, such as shivering and muscle contractions create large amounts of these wastes that must be eliminated.

The human body relies on the delicate balance between its components: It is a complex chemical machine that must maintain a constant core temperature. The sensory nervous system and the blood stream play an important role in keeping the body core temperature at the proper level. Sensory nerves in the skin act as alarms to report its thermal state. The average human body has about 18 square feet of skin surface. A small portion of this surface (about the size of a fingernail and 1/8 inch thick) is packed with 100 nerve endings and almost 3 feet of blood vessels. Numbing of the skin is a warning signal that lets the body know the cells in an affected area cannot go on working because they are not receiving blood. This is a form of vasocostriction, a cold weather body reaction that confines it to the torso.

Man’s thermoregulating system is more efficient in ridding itself of heat than conserving it. Heat loss in the body occurs in five ways. The major factor of body heat loss is radiation. The body heats its micro-environment in the same way a radiator heats the home. Fifty percent of the body’s total heat production can be lost by radiation from the head alone, at 40°F. The upper torso also radiates large amounts of heat. Respiration is a form of heat loss that can mistakenly be overlooked. In cold weather people must warm the air that comes into their bodies and exhale it along with the heat. Anytime the skin touches something that is less than 99°F, conductive heat loss occurs. Therefore, warmth is transmitted from a person to his surrounding environment when he is standing on, sitting on, or touching anything that is less than 99°F. Evaporative heat loss can also be detrimental to the body’s temperature. Body water secreted by sweat glands is evaporated into the air along with body heat or absorbed by clothing. The latter is a major cause of hypothermia, because wet skin or clothing can transmit body heat 240 times faster than dry skin or clothing. A primary method of heat loss is the convection of warm air away from the body’s micro-environment. This happens when the wind in the existing environment exchanges the micro-environment air faster than the body can warm it. Protective clothing is the only way to prevent the convective loss.

Modern man has taken his artificial environment for granted. Seldom is he confronted with an emergency situation that would require him to use information gathered by his ancestors. Just knowing that 10% of the body’s produced energy is required to combat extreme cold could save his life. Bodily injury from the cold is prevented easier than it is treated. By acquiring some knowledge of the effects of cold exposure, people can deal with the unexpected emergency that could otherwise become a catastrophe. The body is a magnificent organism that, given some protection, can continue to function in the most adverse conditions.
Reagan anatomy: aid to the truly needy

by Jim Springer

The Reagan administration has shown it intends to bend over backward to try and resuscitate the sickly nuclear energy industry. The trouble, says Reagan, is a "crass" of regulations that do not enhance safety but do cause excessive licensing delays and economic uncertainty." Consequently, the administration will recommend ways of speeding up the licensing process for new plants so they can be planned and built in six to eight years instead of the 10 to 14 years it now takes. Reagan confirmed the government's intention to move swiftly to put in place facilities to store and permanently dispose of commercial reactor wastes. The ban on fuel reprocessing imposed by President Carter will be lifted and the Clinch River Breeder Reactor program will go ahead.

But apparently the administration sees more than just regulatory impediments to a thriving nuclear industry. A Department of Energy memorandum recently disclosed that public perceptions of nuclear energy are thought to be another cause of hardship to the industry. The memo shows that DOE plans to spend $2 million this year to conduct a media campaign to proclaim the merits of nuclear energy. The money will pay for the planting of pro-nuclear articles in newspapers and magazines, sending government officials on cross-country speaking tours, distributing industry prepared materials to schools, and financing favorable studies on nuclear energy by pro-nuclear scientists.

The public relations effort will also enlist the surgeon general to certify the negligible radiation effect of nuclear power reactors, and will downplay the roles that coal and solar energy could play in meeting future demand for electricity.

The memo didn't spell out which public perceptions are to be targeted, but it probably assumes the campaign will attack the notion that nuclear power is unsafe, uneconomical and unnecessary. And we will probably be assured that the waste disposal problem has been adequately solved.

In order to make a convincing case for the safety of nuclear power, the ad-fools will have to address the findings of the Kemeny Commission, which reviewed the Harrisburg accident. Serious shortcomings were found in the entire government and private sector system that regulates nuclear power. To avoid more serious accidents, the final report said, fundamental changes are required in the organization, procedures and practices, and especially the attitudes of the NRC and the nuclear industry. The NRC was found to have left safety issues unresolved for years and had no systematic way of identifying safety problems from the operating experiences at nuclear plants.

And since Reagan has decided to go ahead with fuel reprocessing and the breeder program, safety problems associated with plutonium will have to be addressed. The extreme toxicity of plutonium means that the health hazards of a reactor accident are greatly magnified. In handling, if plutonium containment is anything less than perfect, lung cancers are virtually guaranteed. And unlike currently used nuclear fuels, plutonium is potential atomic weapon material.

The belief, held by some, that nuclear power is a bad economic bargain, will have to be refuted in the media blitz. Nuclear plants are the most expensive kind of power plant to build, and nuclear construction programs account for many of the rate increases requested by utilities. In this state we have seen the cost of the WPPSS nuclear program rise from initial estimates of $4.1 billion to more than $25.8 billion. Across the country, it is common for construction costs to rise three- and fourfold.

An economic evaluation of nuclear power should include consideration of the costs of cleanup following accidents. In the case of TMI, the cost will be around $1 billion. The price of uranium fuel will not likely be a bargain either. If we become dependent upon nuclear power we will have to face fuel cartels just as we face oil cartels today—they will charge what they can get away with. Over the past few years, the price of imported uranium has increased 50%

We can expect to see a case presented for the necessity of nuclear power to meet growing demand for electricity. I don't expect to see any planted articles quoting the Worldwatch Institute estimate that "More than one-half the current U.S. energy budget is wasted. For the next quarter century, the U.S. could meet all its new energy needs simply by improving the efficiency of existing uses."

And Energy Future, the study by the Harvard Business School Energy Project, methodically illustrated that "nuclear power offers no solution to the problem of America's dependence on imported oil." The Harvard study concluded that investments in conservation and solar energy would produce far more jobs, economic growth, and national security.

continued on page 7
The following is an excerpt from an interview with Ralph Nader. It is reprinted from the Oct. 6 issue of In These Times.

In areas with which you have been concerned, what has the Reagan administration done to hurt people?

The most systematic theme of the Reagan administration thus far has been the moves to destroy the gains that have been made in the last 25 years, and there are about five major areas. One is the government’s role in defending people against the ravages of an industrial society: pollution, occupational disease, product deficiency. For example, the crash protection standard, which has been in the shaping since 1969, is about to be revoked by the administration, thereby leaving millions of motorists with the freedom to go through windshields.

In the food area they are going to try to cripple the Delaney Amendment, which prevents any substance causing cancer in animals from being put into food. They’re going to weaken the food inspection process. They’re going to weaken the ability of the FDA to get data for enforcing the food and drug laws.

They want to double the amount of pollutants that come from automobiles. They want to get rid of the concept of the “best available” technology as the standard that government agencies have to force the companies to meet. They want to develop average fleet emission standards so that it will be impossible to recall automobiles that don’t meet specific pollution standards.

Wind Song

Silver wave,
Outlined in blue,
Crumble into gaping jaws
Of bottomless crevasses—
Burying the past
In an avalanche of ice and snow.
Shear granite walls
Casting shadows of doom
Stand silently still,
Yet mock future intentions.
Memories fade...
Dreams drift out of reach.
Not in the moment to breathe!
Realizing that there is no living
Apart from Difej
And knowing that precious few
Have the awareness
The wind sings about;

The alpine meadows dance to the music
That resonates from the halls of the mountains
While glacial streams bound to the beat
All anxious to share the knowledge
That has been created within.

Only man
In his ignorance
Has the intelligence to ignore the simple truth
That the rest of creation celebrates.

—Mark Vanoc

15 years ago there weren’t that many. So they’ll slip, unless they can put things like passive restraints, air bags and so on in small cars. It’s really the Reagan devolution. It’s a systematic attempt to get rid of the last 25 years of protective measures.

Where do you see things going in 1984?

Well, Reagan will probably usher in a moderate Democratic administration, because it will look so good by comparison with Reagan. Reagan’s got himself in a bind. As the tax revenue goes down, he’s got to continue to cut social programs because he won’t cut the Pentagon. And there will be more disruption, more welfare claims, more pressure by states.

The states and localities are going to have a major role in the 1984 election. Not only are they going to be under pressure because they’ve had all this stuff dumped in their lap, but they are also going to be at the point of exposure. What Reagan is trying to do is to turn to the American public and say, “Get it from your mayor and your governor.”
Bryce Canyon, a part of me now

by Melanie Peck

Friday evening, first day of Spring

It has cooled down the last half hour or so, the cold in my hands just crept up and stiffened there leaving me little flexibility. It is getting dark; the sides of the tent pull and crackle with the strengthening wind. I can hear it through the tree tops around and above me, humming to the red cliffs.

Ah, to be finally alone amongst these red cliffs! Such joy to take time in the land of time, the Southwest. A land of sandstone and Pinyon Pine and naturally-carved spires. Of slow and impressive change, and the most outstanding erosive forces in the entire world. Such is Utah’s Bryce Canyon.

Such an amazing hike!! Left Bryce Point completely bundled and nervous too; finally finding the trailhead through waist high drifts of fresh powdered snow...more coming down all the while. Up and around wind carved temples the trail led, the ever-playful sun making welcome appearances throughout the splendor. Such formations have I traversed! Caves and holes and pinnacles-stained by the ferrous oxide minerals which have swept this land. I walk in a country of watercolors.

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Saturday

Now, in the warmth of a new day, I lie on the sparkling snow in the sun. My frozen pants, socks, drinking water and boots slowly inhaling the warmth. (As I have). An occasional twig cracks with the creek and its melting of winter; trickling on the soft red clay. Pussy Willows, their creamy fluff of life still frosted, move also with Spring’s energy. All through the night and even still, is the wind’s song. I, in a valley between salmon colored cliffs. Birds surround me, delighted over the deep blue skies of the Southwest and the second day of Spring. But for my frozen boots, nothing disheartening has crossed my mind.

Sunday morning

I’ve just been walking about this morning. Stayed in the tent and finally slept for the whole night last night. Didn’t do anything differently, but twisted my head toward the back and covered my shoulders with Carr’s Patagonia jacket. Many, many dreams last night and throughout this whole trip. The birds are very playful and cheerful here in Sheep Creek this morning (alas, no creek though). They rarely let me see them but with the silence (ah, except the wind) they send their good tidings all about this canyon.

Yesterday my boots finally became soft and mostly dry again and I packed my gear and was off. What a wonderful little valley I was shortly to travel upon; very low and dryer than any I have encountered. Good sage smells and very warm sun, as well as refreshing pattern of clean white snow and wind shaped trees. I felt very good there.

I came across some Cat tracks. All over the trails, but mainly in the highlands. In and about the brush; very clear, defined, fresh. I looked at many closely to be sure of my speculations...the distance between steps was a foot and a half, far enough to be sure that something big was involved and sunk enough to show that it had considerable weight.

In one area there were quite a few tracks—both rabbit and cat. I looked carefully and saw them meet and get all mixed together—like a struggle went on. A few more steps down the trail and I saw a few drips of red in the snow. A few feet down the trail was the feasting place, blood everywhere...but all quiet.

continued on page 8
There are precious few reasons to be grateful to interior secretary James Watt. One unfulfilled thing he has done, however, is to deliver a swift kick to conservationists and environmentalists who have failed to think clearly about the values and programs they advocate. Watt's assertions that we ought to use up all of the world's resources because Judgement Day is imminent, and that wild animals needn't be saved from extinction because it is more urgent to serve the needs of people may sound like absurdities, but they also state ideas which are widely held in our culture. Lovers of nature have never been able to provide convincing responses to such challenges. 

Even without Watt, a few thoughtful people have been re-examining the ethical and logical bases of wildlife conservation. John Livingston, a Canadian naturalist who has spent his life as a highly effective conservationist, has just published a soul-searching book called The Fallacy of Wildlife Conservation. Painfully, Livingston examines the arguments that have been used to persuade people toward respect for other creatures, and sadly concludes that "wildlife conservation is a catastrophic, heart-breaking disaster." The disaster is not merely the result of too much greed and money on the side of exploiters, but also because of basic flaws in the arguments made for wildlife. Conservationists have not done their thinking well, so they have been ineffective advocates for wildlife preservation.

As the conservationist arguments are examined one by one, they begin to reveal their common basis in human self-interest. Wild creatures are supposed to be husbanded to benefit, and look how they turned with money for advertising. Perhaps the dinosaurs on earth, and forgot that they were members of the living community, we can bet that they would legislate in their own best interests much as people do. Perhaps the dinosaurs ruled the earth for their own benefit, and look how they turned out: extinct. I wonder if latter-day dinosaurs were led by a Watt.
Timber (cont.)

The Forest Service's congressionally approved program calls for harvests of 11.9 billion board feet of national forest production this year, with increases to 12.4 bbf by 1985 and 16.4 bbf by 2030. Crowell has stated he would like to increase the national harvest to 25 bbf per year as rapidly as possible.

Jack Usher, a Forest Service timber management director is less enthusiastic about departing from existing policy. "Most foresters are brought up to think that departing from even flow is immoral," he says. The rapidly increasing timber harvests may help local mills and solve unemployment problems over the next thirty years, but Usher believes the public will have no assurance that the industry will discipline its harvest later on to compensate for excessive cutting now.

"When the timber industry's trees become marketable, they are cut," he says.

Usher warns that the current rate of cutting in the Northwest is already "close to the allowed maximum disturbance" to water quality in many watersheds. Road building to gain access to proposed clear-cuts is the primary cause of sediment build up in the streams, which kills fish and disturbs downstream uses.

While a slump in timber demand currently provides respite for our nation's old-growth forests, the Reagan administration foresees an economic upturn with an increase in the need for lumber. When demand does increase, John Crowell wants to ensure that government in no way interferes with timber harvests of nonproductive trees.

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While a slump in timber demand currently provides respite for our nation's old-growth forests, the Reagan administration foresees an economic upturn with an increase in the need for lumber. When demand does increase, John Crowell wants to ensure that government in no way impedes the harvest of nonproductive old trees that just stand out in the forest not contributing anything to the economic well-being of the country.

An additional 25 publications on various subjects have been recently acquired. They are on the shelves now in ES 518.

The Environmental Center Is For You

The Associated Student's Environmental Center, in conjunction with Huxley College, provides:

- A two credit seminar dealing with a wide range of activities such as recycling, citizen advocacy, internships, carpooling, wilderness preservation, educational programming, conferences, Carefest, and film series.
- An unique library featuring hard to find periodicals and texts. It is our goal to supplement the Wilson Library collection.
- The Monthly Planet - a two credit seminar which produces the magazine you are now reading. The Planet strives to feature a wide assortment of informative and entertaining articles.
- Your ideas are welcome, and your energy and involvement can make a vital difference. As economic and political pressures mount, please become active in your community.
- The EC office is located in the Environmental Studies building in room 535. Our phone number is 676-3974.

For your information, the Hames endowment fund has enabled the Environmental Center Resource Library to acquire several new books, two of which are:

- The Effects of Nuclear War, compiled by the U.S. Office of Technology Assessment.
  "This book is presented as a study medium for courses in international affairs, law, and politics in the hope that its inherent logic will finally lay to rest the idea of nuclear war."
- Current Issues in Environmental Policy, by Paul Portney.
  "It is a frank and direct statement on a wide range of environmental and pollution policy issues, it is an attempt to interpret existing research and apply knowledge to contemporary policy problems."

Bryce Canyon (cont.)

The Planet Staff

Editor: Jim Springer
Writers: Valerie Smith, Michael Hiles, Bill Miller, Gery Chan
Art: Deanna Hofmann, Arlene Luzmar, Beaky McConaghey
Typist: Chris Olsen
Advisor: Ernst Ghyden

EXPRESS YOURSELF!

I followed a trail to an Aspen grove. Lots of deep powdery snow and beautiful, beautiful trees.

Dried grasses, still bent by winters snow, caught rays of the mid-day sunshine and made delicate shadows on gleaming banks. People are always commenting how hard it must be for plants and animals to survive in this calloused country, but I can easily see. If you just give it a chance, you shall see that life abounds here. It is everywhere...in fact last night I climbed a sand hill and watched the ravens fly from the cliffs far above me; almost as if dancing; a pair up and down in unison, like a mirror hung in the sky. Their cries reached me in clear tones.

I felt the wind rustle my braids and saw the trees and dried grasses move easily see. If you just give it a chance, you shall see that life abounds here. It is everywhere...in fact last night I climbed a sand hill and watched the ravens fly from the cliffs far above me; almost as if dancing; a pair up and down in unison, like a mirror hung in the sky. Their cries reached me in clear tones.

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