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Eye on the Environment

THE GREAT BEAR

By Liza Ward

At eleven o'clock at night, I'm out in my flannel pajamas armed with a glow-in-the-dark star book, hunting The Great Bear. These are the sort of things insomniacs do. Dusk creeps into valley and the synapses fire, our minds jumping from star to star, dizzy and hungry by the time the crepuscular predators take their last stabs at a kill in the gently lifting darkness.

And maybe those of us who can't sleep were made for some other world. The owl world. The skunk land. Long nights of the desperate coyote. Because ever since I can remember, the night has made me more alert, more animal-feeling, more apt to draw comparisons between nature and myself.

Tonight, it's spring. You can't feel it in the temperature but you can read it in the stars. The Great Bear has climbed high over the fringe of the naked larches, scraping heavenward with her little cub beside her, just as the flesh and blood bears begin to stir from winter hibernation.

All over the valley, the creeks pump like restless hearts. The birds of prey are pairing up. Canada geese are on the wing. Everyone but the pregnant alpha female canids are on the move; they stay close to their south-facing dens in the hollows of trees and river banks, preparing for the litter of pups.

By early April, the cow elk are well into their pregnancies. This month marks a time of increasingly rapid development for the unborn calf. Winter is over, and there is more for pregnant cows to eat. In two

month's time, the cows will isolate themselves from the migrating herd, and give birth to their calves, licking the grass clean of after-birth so predators can't sniff a path to her scentless offspring. Their survival often depends on staying motionless.

The grizzlies with cubs will be the last of the bears to rise, but even *they* are beginning to grow restless in the lengthening days of early April. Large tracks have been spotted by a snowmobiler near the top of the Crazy Horse Fire Line.

Black bears are cutting trails along the Swan River. And the orphan cub in the man-made den has taken to fastidiously fixing his straw bed as if he can't quite get the hospital corners right. How well he'll do in the Swan Valley, still isn't clear. His mother didn't live long enough to teach him much, and to most wild young, survival is determined by what their mother teaches them, and how well they remember once they're on their own.

The orphan cub's mother must have mated in late May or early June of 2005. But due to a process called delayed implantation, the fertilized cub egg did not attach to the uterine lining until late fall when the female had collected enough fat reserves to den for the winter. This mother must have been healthy and ready. Otherwise the egg would have been absorbed, and the cub would never have been born.

Two months later, the orphan cinnamon bear came into the world hairless and blind. Grizzly cubs are slightly bigger and born with fur but no less helpless. The den was his world—a kind of outer womb, a waiting room where he nursed and slept and grew strong enough to follow his mother out into the sun.

In his first days, he was one-tenth the weight of a human baby, the size of a tea cup—unable to walk. Finding the teat closest to his mother's pelvis was a migration across fur fields in darkness, and as he grew stronger, he and a brother or sister crept upward across her chest, to the highest of the six teats, growing strong on the fat rich

milk miraculously produced from the mother's hyperphagic reserves.

By the time he left the den, he was six pounds, the size of a white tail fawn at birth. How glorious the first steps must have been into the sunshine, the cubs emerging like dark chick hatched from the snow egg. Snow under the paw. Conifers twisting in the spring wind. But something happened to this cub's mother in the days when he was growing fast. Most likely her death was human caused. She was either struck by a car or killed by a hunter. Perhaps the mother had sent her cubs up a tree, and the hunter didn't know what he/she was aiming at.

A black bear cub should be with its mother for a year-and-a-half—learning how to forage and where to den. Grizzly cubs stay with their mothers for two-and-a-half years. Females only mate every three years, in the late spring after the cubs have undergone the devastating process of being cut loose the previous fall-- in part so they aren't killed when a male bruin seeks out the female to mate.

These early spring days are the times of the largest nutritional cost for the female. Cruel days, during which nature can be as unpredictable as fast cars in a snowstorm. The cubs are growing more rapidly and food is scarce. They nurse aggressively, switching from teat to teat as their mother lies on her back making a fence out of her giant paws until she simply gets up and walks away, the discouraged cubs trailing in her shadow.

During the prime lactating period which begins in June, coinciding with the birth of the valley's cervids, a black bear cub consumes thirty ounces of milk a day. A grizzly consumes forty-five. Through the lean days of early April, bears may rely on winter kill, combing the bottom of avalanche chutes for flattened carrion, or the carbohydrate rich roots of plants and grasses.

Yellowstone grizzlies are learning to adapt to climate change and failure of the white bark pine by feasting on Canadian thistle root and the gophers that thrive on

these invasive weeds. We can only hope our bears will learn to adapt to a changing ecosystem in ways independent of human encroachment.

The next three weeks will be a test of sorts. Mother bears will have to make the journey away from the dens, into places where the cubs are more vulnerable. All paths seem to lead to the highway, where I suspect all sorts of scavengers will be attracted to the amount of deer struck and killed this past month due in part to road salting and ditch grass—and the desperation of the season—the stresses of not much food and many more mouths to feed.

The past week has been particularly devastating. At the Condon Work Center, a young buck lay curled beneath a ponderosa dying slowly from a head wound—until Diann Ericson put him out of his misery. He was sent to the Grounded Eagle foundation to help feed other highway casualties.

Two days later, a man came into the SEC office his bumper crumpled and covered in blood from striking a pregnant doe. I found her on the side of the road, her neck twisted her legs broken, twin fawns flung from her uterus into the brown grass just before the turn to Beck Road. These creatures were strangely perfect--well into their fifth month of development—already larger than newborn bear cubs--with eyebrows and green hooves delicate as little tubers, pink ears as thin as orchid petals. I don't mean to be a bleeding heart. Deer after all. There are plenty of them and I know that there is a certain heart-hardening that must go on. I mean only to say that this sight disturbed me, got me thinking about the relationships between species in this ecosystem, the interdependence of the plants and the cervids, the canids, migratory birds, and the great bear—and countless other creatures.

The Swan is so special in part because this interdependence can still be felt, while in other places it seems forgotten in the sidewalks, speedways, and streamlined monitors. So I'm out here under the stars, searching for a memory--a way of crawling back to some beginning, lest I

forget what Anne Dahl heard on the radio-- every hiccup is a throwback to my salamander days.

A boreal owl whinnies from the trees, calling for a mate, and the voices of coyotes shiver up through the giant ponderosas—the most vocal of all wild mammals. Over time they have been systematically hunted down, eradicated by government endorsed programs. They've been strychnine poisoned, fed glass, dynamited, gassed and trapped—pups have been fished out of their dens with hooks made of telephone guy-wire--but in spite of all this, the trickster persists. The more humans attempt to eradicate the species, the greater the alpha female's litter size.

The females have probably denned by now—they are almost ready to give birth to their pups. On average, only two will survive. At six weeks, they'll cut their teeth on voles and mice, nipping their mother's lips until she regurgitates. Starvation is always a possibility. Disease. Predation. But the sound of them tonight—their gleeful yipping almost makes me laugh where once it haunted me. They seem to be congratulating each other on a job well done.

The star book tells me how the great bear came to be. Zeus fell in love with Callisto, and gave her a son named Arcas. Hera got jealous and turned Callisto into a bear, and when Arcas was a grown man, he stumbled across his mother in the forest and almost shot her with an arrow. I imagine this transpiring on the snow covered logging road that winds through the trees just below the field-- Zeus turns Arcas into a cub and flings him up into the sky to sit beside his mother. They scatter into stars where they preside over all the other constellations, filling those of us on the earth with a kind of wonder.

I suppose there's a lesson in every myth. To hunt is natural—we are predators after all, but thinking of the orphan cub, the vulnerability of all young animals—our intelligence comes with a certain responsibility. We should be required to feel compassion for all creatures, even if they

don't feel it for us—I should drive a little slower even if it makes me late—someone should find something other than salt to use on the road. Come black bear season, those of us who hunt should take special care to know what we've got in our sights before we fire.