



READING THE ENTRAILS: AN ALBERTA ECOHISTORY

by Norman C. Conrad

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ECOHISTORY



NORMAN C. CONRAD

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With hope, Verity and Felicity.
In memory, Mother and Father.

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My intent is to provoke thought, so this work suffers the usual problems of the brash and brazen—wanting in respects, indelicate in places and perhaps wrong in yet others. But the main themes seemed so important I felt they must be presented this way.

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The project was demanding. Heavy burdens were borne by my children. It is dedicated to them, Verity and Felicity, with love in my heart and hope. That does not make it right but I tried my best doing what I thought best. The faults, errors, excesses and deficiencies are mine and mine alone.

Calgary, September 1999

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PROLOGUE

NEIGHBOURS (1993)



I live in sight of the Calgary Tower. For a time it was the tallest freestanding manmade thing in the west. Later, with the vertically ambitious thrusting higher all around, it became just a tall pointy thing with a saucer in a neighbourhood of higher things. It is not strictly my neighbour. It is just in my sight. Happily so, because my neighbourhood is nicer. An ordinary inner city community in one way, it is a fascinating crossroads in other ways.

My lawn is a standard commercial mix of grasses brought in from Kentucky and California or wherever and “blended” for local conditions, hoping I guess that it looks like someplace else, maybe California or Kentucky. Out front is an old cottonwood, female, and so we tolerate her mid-June bursts of cottony seeds. She is the only remnant wild thing on this narrow lot. A couple of Manitoba maples are struggling to become the dominant near-exotic trees in the backyard. We live next to June.

The narrow lot is sliced and boxed from lands that underlay front lines in the battle of the ice giants 20,000 years ago. Cordilleran ice thrust out from the Rocky Mountains, grinding eastward down the Bow Valley toward my house. Looming in from the east was the massive colossus of the Laurentide Ice Sheet, a mile thick, horizon-wide and advancing southwest. Would either have toppled that Calgary Tower thing if it were then standing? That would be a popcorn, beer and lawnchair event!

Slipping down an ice-free corridor between these hulks, right over my lawn, might have come the first Americans. From Eurasia with a stopover in Beringia, they brought along state-of-the-art tools, spears, stone pounders and the like. And wow, what a biorama—mammoths, camels, wild asses and sabretooth tigers—right there, milling around in my backyard.

Sometimes, when tending my flowers in the backyard (exotics and not happy about their place), I turn to these earlier times. Other times I think about the future. Maybe someday, in 100 years or so, somebody will be standing out here watering petunias and wonder about me, the guy who let the feral maples go and left the cottonwood to stand and rot. What will

become of that person? Anyway, if there is one real purpose in writing the following stuff, it is because of worries for neighbours.

Timescape/landscape neighbours include the Stoney, Cree, Blackfoot and those before them. What became of them? How is it that a pasty little white guy like myself holds title to bison lands, even if only 10 by 40 metres? Not long ago the bison and Native people had it all: land, lots of rich land; life, lots of wonderful life; and then, what is more, they got great gifts from their new European friends. With liberal immigration policies, Native people opened their world to new high technology, free trade and global competition. They got rich and then, just over a century ago, they lost it. Maybe they overshot and collapsed? Maybe they did not understand what they were doing? Maybe they listened to their hunters too much?

Their forefathers enjoyed a similar bonanza 11 millennia earlier. Back then the new species, man, assayed pristine America with its myriad animals. Neither nature nor nurture prepared Quaternary creatures for the gangs of rock-throwing, sharp-stick-poking, cunning, puny bipedal predators. Eden was easy pickings—except for a couple of nightmarish predators, giant short-faced bears and ghastly cats. With all kinds of unwitting and tasty animate resources to exploit, humans, the new king of beasts in the New World, became wonderfully well off. They got rich and plentiful; then it stopped. Maybe they overshot and collapsed. Maybe they did not understand what they were doing? Maybe they listened to their hunters too much?

Immigration, they say, brings new human resources, new tools, new ways, new ideas and new energy to build the land and to make it strong and just. Was that the effect of that first immigration or our last? During the most recent influx, the coming of Europeans, Native people shared their lands with their new neighbours and adopted many of their ways. Guns and horses slew bison like never before. Other techniques levered their power higher, enriching the instant while devouring their future. Did these new tools plunder first Americans?

How could charming trade consume these first people? Its magic was to turn things one had too much of into things one had too little of. Excess solved deficiency as bountiful bison were turned into scarce guns, flour and axe heads. Trade encouraged specialization, dependency and galloping consumption. The words of an anonymous Hudson's Bay Company memo from May 22, 1822 keep ringing in my ears:

I have made it my study to examine the nature and character of Indians and however repugnant it may be to our feelings, I am convinced they must be ruled with a rod of iron to bring

and keep them in a proper state of subordination, and the most certain way to effect this is by letting them feel their dependence upon us In the woods and northern barren grounds this measure ought to be pursued rigidly next year if they do not improve, and no credit, not so much as a load of ammunition, given them until they exhibit an inclination to renew their habits of industry. In the plains however this system will not do, as they can live independent of us, and by withholding ammunition, tobacco and spirits, the Staple articles of Trade, for one year, they will recover the use of their Bows and spears, and lose sight of their smoking and drinking habits; it will therefore be necessary to bring those Tribes round by mild and cautious measure which may soon be effected.¹

Alongside came European appetites, ambitions and diseases. While things seemed the same only better, everything changed. Soon the bison disappeared, Native people and their lands withered to near nothingness. I wonder about that time and the people, and if they understood what was happening.

And now today we have the same wonders coming our way: liberal immigration policy and a clamour for more; all kinds of new technology and the clamour for more; and wonderfully expanding markets and international trade and we clamour for more. We (or some, or more realistically a decreasing few) are getting very rich but those few say there is more wealth to come, more than enough for everyone. Things are different now because we are smart, just, democratic and besides, our hunters tell us there is lots left. More than enough for us and future generations.

Those things come to mind when I pull dandelions. I worry about my other neighbours, the nonhuman kind. As I watch a robin (one of the only native wildlife species now common in my yard) pull out another worm, I think "What a wonderful array there once was." That splendid pageant is over; halted by the trappers, bison hunters, wolfers, railroaders, farmers, oil men, foresters and the florescence of consumers. As we grind nature down, eliminating first the mega-faunas, then exploiting succeeding trophic levels in a mad dig to entropy, I wonder how smart we are and reflect on the words of a noted thinker, Michael Polanyi, in *The Study of Man*²:

Animals have no speech, and all the towering superiority of man over the animals is due almost entirely to man's gift of speech. Babies and infants up to the age of 18 months or so

are mentally not much superior to chimpanzees of the same age; only when they start learning to speak do they rapidly outdistance and leave far behind their simian contemporaries. Even adults show no distinctly greater intelligence than animals so long as their minds work unaided by language. In the absence of linguistic clues man sees things, hears things, feels things, moves about, explores his surroundings and gets to know his way about, very much as animals do

A great connoisseur of rat behaviour, E. C. Tolman, has written that a rat gets to know its way about a maze as if it had acquired a mental map of it. Observations on human subjects suggest that a man, however intelligent, is no better at maze-running than a rat, unless assisted by notes, whether these are remembered verbally or sketched out in a drawing.

It sets me to think. Do humans really think often, well, or deeply? Certainly we are an inventive lot, but for all that, the thinking we do usually feeds more base objectives (Maslow's hierarchy speaks to the issue). If the end is cheese, how superior is man to Tolman's rat?

Human knowledge and sentience is of what? Not of nature, at least not in essential ways. Mostly our grasp of nature is of the kind the butcher feels when contemplating beef—where to find it, grow it, kill it, cut it, sell it and, if truly prudent and sustainable, how to do it all over again. Religion and philosophy in the European envelope are positively stunted, profoundly insentient when it comes to nature and human relationship with nature. World views without the world—a vast problem to any intelligent life form? For example, in his modern liberal classic *A Theory of Justice*, John Rawls summarily deals nature away, perhaps for another day when it might better be made to fit with contemporary constructs:

No account is given of right conduct in regard to animals and the rest of nature They are outside the scope of a theory of justice, and it does not seem possible to extend the contract doctrine so as to include them in a natural way. A correct conception of our relations to animals and to nature would seem to depend upon a theory of the natural order and our place in it. One of the tasks of metaphysics is to work out a view of the world which is suited for this purpose; it should identify and systematize the truths decisive for these questions.³

Fortunately, since Rawls wrote this in 1971, others have turned their minds to the issue, so that religion and philosophy now have back eddies of thinkers who are grappling with them. If it takes several centuries for a philosophical idea to leap from thinker to mass mentality (it took the Pope 350 years to apologize to Galileo), we may look forward to some broader social enlightenment on these matters in the 23rd century.

Tired of pulling dandelions, I get a beer. So sentience and reason are, at best, doled out to humans in spare quantity and quality. Where does that leave human divinity? Well, just as God's divinity plunged a few centuries ago, human divinity dives lower in my mind. The closer I get to the bottom of my beer and the more science looks at it, man is another breathing, living-dying, peeing-pooing, reproducing beast. His brain only starts to look really clever when one amasses the products of billions of such minds, assembled over tens of thousands of years, with good thoughts captured by means of extrasomatic systems to record and propagate them to those coming after. Yes, throw in some mutant minds, geniuses and the fortunate products of many stupid mistakes. Add it all together, mix it up and attribute the product to each individual. Then each of us looks very smart. The fallacy of attribution turns idiots to savants.

This brings up the past—how do we treat our chronological neighbours? Good things from the past we accept as deserving inheritors of their benediction. Newton acknowledged his debt to the past with his "I stand on the shoulders of giants." But his taking from the past was extremely selective. Like us, when harvesting the past he took only the beneficial, avoiding its burdens. Whatever bad happened in the past we dismiss as "That was them, then." We detach from it as if it were leprosy. While sitting comfortably on aboriginal or bison lands, we recents say that the genocidal treatment of first Americans, the biocidal treatment of the bison or many other past wrongs are not our problems. Ethical burdens we shift to our forefathers, saying they were unsophisticated, ignorant or even evil, back then. In this high-grading, a form of time-externalization, the benefits remain untainted and current, while the guilt and burdens sediment out in the past. Take the gold, leave the slag.

What about time-neighbours to the future? Equipped with another beer, they get sort of fuzzy in my mind. I know the party line. They are not really there, but I wonder. With no future, what happens to now? Is the present not diminished without a future? And if the future for future people is terrible because of us now, ought there not to be a future reckoning, now? This intergenerational equity thing is all new and no one has it figured out yet. We live on Groucho Marx's insight—"Do something for posterity? What have they ever done for me?" Or we use Newtonian shoulders to help

us shrug; tomorrow's people will have the shoulders of our giants to stand on. With this handy time warp, today's people glory in making a better world for next generations.

It seems grossly unfair. A bunch of people present now can exploit and pillage the only life-sustaining system, nature—the mother of mankind and every other kind—and leave another bunch of neighbours—future neighbours—without, just because of the iron shackles of unidirectional time. What a getaway, “You won’t get me because I passed on. Ha ha!” Of course when I walk by the mirror I cringe; I am a product and practitioner of nearly everything I rail against. Past-exploiting, future-forgetting; it is pretty much all there.

On sunny Saturday afternoons I relax around the yard with a gin and tonic, and revel in nature. Kind of harmonizing. Big black squirrels (melanistic greys) hang out, looking cute, helping you feel a part of nature, waiting for a handout or testing you for what they can steal. Over 60 years ago these husky rodents captured the fancy of a traveller in eastern Canada who felt sure he could improve on Calgary’s nature. Why not displace the more retiring red squirrels by bringing a volley of these fearless, prolific rodents to Calgary and release them at the Calgary Zoo? They now have the run of the city.

Kids like them until bitten. Adults go into some kind of trance when they are around, a time-place transport back to Eden’s harmony. Feed a squirrel and achieve oneness with God and nature. Grey/black squirrels know a good thing when they find it, so they happily dispense indulgences to these desperate, not too clever beasts, urban humans. A neighbour, more forthright than most, calls them bushy-tailed rats. A congregation of them invaded her attic.

I lift world-weary eyes from a fresh gin and tonic to observe another neighbour’s handiwork. Adroit with the saw and hammer and longing for the halcyon days of youth when he trudged the dusty streets of some prairie Mecca or from furrow to furrow on a rural monoculture, this neighbour has created a half-metre-high grain elevator birdhouse. He raised it high above the clothesline pole, positioning it so that no cats could prey on its precious feathered tenants. What a nexus, nostalgia for his past prairie youth coupled with a lost Eden, architecturally provided for in a miniature grain elevator. Of course, the inhabitants are not local yokels but those feisty continental sojourners, English sparrows. These tiny Churchills dominate this and nearly every other elevator in the land.

A few blocks away is one of those boutique stores that sells wild bird stuff; feeders, feed, decoys, wind chimes and other wholesome and backyardsy clutter. Birdseed sells by the wagonload, but do feeders do any

good? One winter I bought a backyard bird feeding station. Its remnants still litter the area. I should clean up better. Think of it—shivering, starving cold little birdies, without anyone to care for them. They needed me. I took a stand for Mother Nature. I would right the imbalance, defend the wild kingdom. I put out a pile of seeds on this store-bought, guaranteed to bring the birds, sure to make me harmonize with nature, feeding station.

The squirrels got the good stuff first. English sparrows and starlings performed cleanup. There may have been leftovers for that connoisseur of songbird eggs, the blue jay, but for our other wild local friends, the ones in desperate trouble, nothing. And worse! For the few remaining local songbirds, the bird feeding station operates as a bird sink, a feline feeding station. Warblers make a colourful entree. Some think an exotic is as good as a wild native animal, and, in practical ways, domestic animals have greater rights than wild animals, so they like this affirmative action program for introduced English sparrows, starlings and neighbourhood cats, but I prefer the finches and true sparrows. As predators go, give me a good short-tailed weasel.

While there are more jays around my neighbourhood, there are wildly more of their cousins, the magpies. A population explosion is under way, directly related, I suspect, to ambient garbage, unprotected dog food dishes and fast-food outlets. Also, magpies relish a fresh roadkill. About this time of the year, early fall, there are lots of those. The annual population bomb of grey squirrels explodes on the city. Carrying capacity exceeded, parents drive their children off with no invitation to return. "Go out into the world, son, and make your fortune, but be wary, the journey is dangerous." Streets and automobiles get most of them. Tires squash squirrels and a horde of magpies squawk and flap to the feast. I sometimes think of lawyers when I see this snappy, flashy, black and white attired, loquacious, opportunistic, somewhat clever and always aggressive flock arrive at a fresh roadkill. I know it would offend some, but it does take me back to disrobing in the barrister lounge at the courthouse.

Two blocks north is a schoolyard. At summer's end, before the fall migration, the schoolyard is the ring-billed gull's meeting place. They stand out there feeding and squawking all day—at least until the football team comes along—likely discussing matters of importance, like the abundance of worms, the laziness of their younger generation or competition from starlings. Inside the school, educators instruct young humans that they must be more competitive; that the young in other lands learn to produce more, faster, and consume more, faster. If you want more, which you must, you must get rid of the stuff in your education that limits your ability to be good producers and consumers—distractions like art, poetry, literature,

philosophy and such. Be an engineer, be in management, be any factor of production that you want but forget this being a being stuff.

Living close to the centre of the city makes for convenient exploration of its fauna and flora. Sometimes I bicycle or jog along the river. People connect to nature down by the water, feeding mallards, about the only waxing species of duck, and the wildly prolific Canada geese. The zoo is a few kilometres away along river paths. I have a membership so I get one kind of nature on the way there and another inside its gates. I go to the zoo mostly for the people. Young women with large families tend to go, perhaps some atavistic need to connect with non-human life. It must be disappointing for them because you do not really find much non-human life at the zoo. Young people on their first few dates go, I presume to show how sensitive and loving they are; a kind of foreplay. Christian families go on Sundays, undoubtedly expressing their love of God's creation with little or no remorse over their blessed killing of it. And then there are the macho guys with tattoos and tarts, going from cage to cage, fascinated in their boyish minds with what they would do to this beast or that one, if they only had their gun along.

Meanwhile, the zoo itself, forgetting the bloody past of zoos and uncritical of their present roles, preaches a limited conservation—one that largely ignores habitat and ecosystems, praises direct human intervention and sustains the idea that it is good enough if we maintain biodiversity, if only in zoos. They also provide a delightful and forgiving stage for industry to throw a few dollars at the zoo in a public gala, while trashing the world outside. Kind of like Jack the Ripper's \$5 donation to a women's abuse shelter. The part I like best is the human's cage. Above the bars is the caption "World's most dangerous animal."

Closer to home now, two doors down and across the street is another schoolyard. It has an old school, built in 1920, and a yard that is bounded on the west by a bushy escarpment that separates my transitional neighbourhood from the rich and famous in Calgary's Mount Royal. One hundred years ago the hillside was full of splendid native vegetation. Now exotic grasses, shrubs and trees have taken over. Itinerant, urban poor sometimes dwell in the bushes. You can tell by the remains of their scavenged garbage bags, empties and used hypodermic needles. Contemporary hunter-gatherers. Teenage kids go into the bushes for their first sexual encounters; used prophylactics indicate that. But at a distance this hillside still looks nice.

Farther along the hill, one little patch of native shortgrass prairie remains. It is small, very small, perhaps only a few hundred metres square now. Every year runaway crabgrass and shrubs encroach, looming in from all sides. It still has a startling array of autonomous and fragile flowering

herbs in the spring—crocus, shooting stars, yarrow, buttercups and one little pincushion cactus. I could not find the intensely brilliant pinkish, purple cactus blossom this year. I could not even find the cactus. Gone, I guess.

At its top, near the path, is a shrinking bed of the most exquisite, and by context, resilient, gentian. How they remain mystifies me. It fills me with hope that somehow beauty will survive. But every year, as this abused bed of bliss shrinks, so does my hope.

At noontime, children from the school play on the hill. These coddled little animals scour its magic side, a jungle, desert or mountain, to fight the Hun, pirates and cavalry. All dwell there in their mindscapes. But they are killing the last of the grass and the fragile gentian. Sometimes I think if justice was limited to here, now and humans, it is all right that these kids stomp these remnants because their forefathers stomped most other things. I want to tell these children to fight for their gentian and native shortgrass. I want them to know that the new ice age is looming over them and it is unlike the others; not a cycle in nature, but out of nature. It is a dangerous experiment that affects all life, including theirs. But I know that they would not understand and I do not want to end up like Holden Caulfield. So what to do?

OF ICE AND MEN

Later, in my study, I open E.C. Pielou's *After the Ice Ages*⁴, in which she tells of the ending of North America's last great glaciations and the return of life. Her story stops short at the most recent invasions—waves of Eurasian peoples flooding in—but as her prologue indicates, her concern does not:

The development of human history has always been governed by the setting—the natural environment—in which it has taken place. In the past this setting changed so slowly that it could be regarded as static. Predictions about humanity's future did not need to take account of changing climate, spreading deserts, rising sea levels, disappearing forests and the like. Now, as we are all aware, changes of these kinds are likely to affect our future profoundly. We are now well into the population explosion that has threatened us at least since the time Thomas Robert Malthus (1766-1834) first published his dire warnings, and the exploding population is quickly degrading its own environment.

She ends her book on this troubling note:

From the time the European invaders of North America established themselves . . . the natural history of northern North America began to deviate from its "natural" course. The continent was no longer isolated. The foreign invaders multiplied rapidly, destroying native ecosystems at an ever-increasing rate. In time, the byproducts of technology began to poison earth, water and air and have now begun to influence the climate. The measured responses of biosphere to climate, and climate to astronomical controls have, for the foreseeable future, come to an end. And the story told in this book comes, at least temporarily, to a close.

The arguments presented in the following pages also begin with the end of the recent ice age, but have a different focus.

Early this century the Russian scientist Vladimir Vernadsky used the term "Biosphere" to indicate the realm of autonomous life (nature) and "Noosphere" to indicate the human managed realm, the anthropogenically altered world. This story spans three recent Alberta morphological influences—ice, life and human—the period from the end of the ice age to the most recent convulsion, the "development of Alberta." It observes the retreat of the Biosphere and the advance of the Noosphere, changes resulting from anthropogenic influences. 