



## GRIZZLY BEARS IN ALBERTA: A CRISIS OF COMMITMENT AND INACTION

By Dr. Brian L. Horejsi

In 1754 when Anthony Henday and his crew forced their canoes up the North Saskatchewan River into what later became Alberta, grizzly bears ranged freely throughout every landscape. They occupied the prairies, foothills, parklands, mountains and boreal forests; Alberta presented 661,000 square kilometres of occupied grizzly bear habitat!

I produced a basic estimate of the size of the grizzly bear population at that time to provide a starting point from which Albertans could measure the impact on grizzly bear populations of the European settlers who chose Alberta. I simply extrapolated to a province-wide habitat scale the upper end of bear density estimates now reported for interior grizzly bear populations in North America. That would be 15 to 25 bears per 1,000 square kilometres. The resulting estimate is 9,920 to 16,525 grizzly bears. In the format of today's more detailed statistically-derived bear population estimates, my estimate translates to 13,222 grizzly bears plus or minus 25 percent. This calculation's accuracy is roughly equivalent to that reported by government departments even after considerable effort spent on statistical manipulation. Even the upper limit of my estimate is realistic since at least one million bison ranged across the central and southern biomes of the province offering tens of thousands of calves and carcasses to grizzlies annually.

Today various estimates suggest there are from 400 to 600 grizzly bears distributed over about 350,000 square kilometres of remaining available habitat; this translates to just over one bear per 1,000 square kilometres. To many Albertans these numbers may be incomprehensible, difficult to put in context. But think about it this way – Calgary is roughly 800 square kilometres in area. The city has over 20 high schools with as many or more students than Alberta has grizzly bears. For example,



*When Wilderness Disappears So Will He.* PHOTO: A. CAREY

Bowness High School in Calgary had 434 Grade 12 students in 2009. In Edmonton, Ross Sheppard high had 735 Grade 12 students. All of Alberta's grizzly bears could be packed into a gym that would hold just one grade from those high schools!

If we use the most favourable numbers, Alberta's grizzly bear population has declined by 94% (600 now, 9,920 then). It should be emphasized that this decline was not linear; by 1885 the bison had been slaughtered and by 1915 the natural landscapes of Alberta's prairies, foothills, and parklands had succumbed to the ravages of farming,

ranching and settlement.

When Alberta gained provincial status in 1905 there were about 300,000 people in the province. By the end of World War II Alberta's population had grown to 820,000. Today we number 3.7 million beings. We also rank amongst the world's most gluttonous consumers; Wilson and Anielski estimate the ecological footprint of the average Albertan to be 8.8 global hectares (gha) although Calgaryans embarrass themselves with an average of 9.8 gha (Edmontonians average 8.5 gha). The Canadian average is 7.3 and the world average is a mere

2.3 gha. While realtors and chambers of commerce may gloat about this largess it means that, for example, the metropolitan area of Calgary requires a land base 122 times as large as the city to support “its” people. And the worst is yet to come; between 2001 and 2009 Alberta suffered a population growth rate of 22 percent, much like some third world countries. Almost each one of these people feels entitled to, and has falsely been promised, “their” 8.8 ha of biocapacity. Whether they recognize it or not, each of these people has a very heavy footprint, one whose “reach” extends far into grizzly bear habitat!

A person would have to be foolish, or an ideological zealot of the worst sort, to claim that grizzly bears, albeit only one example of biological diversity, have gotten a fair shake during the course of Alberta’s industrialization.

In the 125-year history of land use and exploitation in Alberta, never, and this requires emphasis, never, have regulators, officials, or politicians ever made a land-use decision that favoured grizzly bears. In this period tens of thousands of small and hundreds of major decisions have cumulatively degraded the integrity of grizzly bear habitat and the viability of grizzly populations.

### **If Alberta’s Grizzlies Could Emigrate –They Should Move South!**

Our neighbour to the south experienced much of the same kind of destructive growth in the early part of the 20th century. But beginning in the 1960s some American citizens and the U.S. federal government have instituted measures that have played out for grizzly bears markedly differently than events in Alberta and Canada keeping in mind that what appears on the surface to offer success has not survived the test of time. In 1973 the U.S. Endangered Species Act (ESA) was passed overwhelmingly in the U.S. Senate and House of Representatives 447 to 4; Schwartz recently labeled it the world’s most powerful environmental legislation, although sound and comforting evidence supporting this favourable view remains forthcoming. Complementing this legislation – I would even say it superseded ESA in significance and certainly set the stage for the ESA and its embrace by progressive American citizens and organizations – was the ground-breaking National

Environmental Policy Act (NEPA) of 1970. This act was a masterful expression of the democratic process, of freedom of the people; it mandated Environmental Impact Statements and defined procedures for their execution; it directed “systematic use of science;” it exposed government agencies to public and scientific scrutiny and questioning and it opened the door to participation by all Americans. This latter aspect made NEPA a truly beautiful measure. It neutralized many of the sociopsychological traits that divide Americans and it eliminated the “hand picking” of “public” participants. It exposed and reined in (at least partially) the disproportionate influence of special interest groups, including some environmental organizations, who have managed to curry favour with agencies and politicians and thus move themselves onto the “insiders” list.

There have been other legislative advances that have proven to be hugely important to the effort of citizens to restore viable grizzly bear populations in the U.S. The most significant of these is the Wilderness Act of 1963. In the absence of this Act and the lands it has protected, grizzly bear populations, as tenuous as their status still is, would not be present in two of the five ecosystems occupied by bears in the U.S. The largest grizzly population, the Northern Continental Divide population that borders on the far southwest corner of Alberta (and southeastern British Columbia), would have essentially been exterminated were it not for the presence of three grand wilderness areas established between 1964 and 1978. They constitute the famous Bob Marshall, Great Bear, and Scapegoat complex that prohibits industrialization, motorized and mechanized access, and grazing in 6,214 square kilometres of the Rocky Mountains. Bordering this remarkable area is Glacier National Park that adds another 4,103 square kilometers of protection; by 1978 Americans had protected significantly a block of land 34 times as large as Waterton Lakes National Park.

Then the situation took a turn for the better! In 1997 a 10 year oil and gas-leasing moratorium was placed on over 141,000 square kilometers. The moratorium covered all federal lands outside designated wilderness. It was enabled almost entirely by the existence

of NEPA, which the public and the local Forest Supervisor took to heart. In January 2007 federal legislation made permanent the moratorium that prohibits any new leasing on all the acreage and in a nearly 10-kilometre buffer onto private land. That law also placed a permanent moratorium on hard rock mining. This rather amazing initiative grew out of extensive public comment and support and gained significant strength from the full environmental impact statement required by NEPA. It stands out as an exceptional ecological, social and cultural achievement that protects an area 80 times larger than all public green zone (locally known as “forest reserve”) land in southwest Alberta.

The Alberta and federal governments have, on the other hand, wilfully chosen to ignore these progressive initiatives and actions.

One of the early measures that flowed from the Endangered Species Act in the U.S. was the formation in 1983 of the Interagency Grizzly Bear Committee (IGBC), a combination of state and federal agencies responsible for land and wildlife management in and around grizzly bear ecosystems. Almost three decades later, Alberta has no such internal committee, does not have representation on any active interprovincial committee, and rarely has sent an observer, let alone a committed participant, to IGBC meetings (Even B.C. has done so!).

As a brief aside, I recall attending an IGBC meeting many years ago, on a rare occasion when an observer from the Alberta government attended; I could not help but smile at the utter astonishment and disbelief on his face when the meeting was terminated because a lawyer for a public interest group demanded to see a copy of a document that was being circulated to the various government agents. When copies were not made available the meeting was cancelled; that was it – over!

The Interagency committee guidelines for grizzly bear recovery included designating habitat for various levels of management in order to provide grizzly bears with adequate security and habitat. These designations were then incorporated into each National Forest management plan. These habitat management areas – designated Management Situation (MS) 1, 2 and 3 apply to Federal public lands in the five

ecosystems in the U.S. that still have at least a remnant grizzly bear population. These management designations, enforceable through administrative appeal and the courts, give to grizzly bears, in the case of MS1 and 2 areas, certain “rights”, albeit rights that must be spoken for by citizens, activists, and lawyers. MS1 areas are those where land “management decisions will favour the needs of the grizzly bear when grizzly habitat and other land use values compete” and “land uses which can affect grizzlies and/or their habitat will be made compatible with grizzly needs or such uses will be disallowed or eliminated.”

According to the 1985 Flathead National Forest Plan in Montana, part of a forest that supports an international bear population shared by Alberta, there are 7,783 square kilometres designated MS1, 451 square kilometres in MS2 and 86 square kilometres in MS3 for a total of 8,320 square kilometres of occupied grizzly bear habitat on the Flathead. There are apparently 23,000 square kilometres of occupied grizzly bear habitat in the entire Northern Continental Divide ecosystem that includes two other National Forests besides the Flathead. The latter forest alone provides a useful level of conservation management to over 33 percent of the National Forest land base and yet the viability and recovery of the grizzly bear population remains in doubt!

Now jump quickly from the frying pan to the fire, that is to Alberta’s Forest “reserves,” where there is no legally mandated habitat protection similar to Management Situations 1 or 2. In fact, Alberta has no designated recovery area and no habitat protection standards of any sort (legal or otherwise).

Either of these above two habitat measures (MS1 and 2) would be useful in Alberta and might begin to turn the runaway train of grizzly bear population and habitat destruction away from “Kamakaze downslope” toward a glimmer of optimism.

### **Grizzlies Need Roadless Habitat**

Alberta has precious few roadless lands and even fewer designated wilderness areas yet it is these very kinds of land that protect and retain “ecological power,” land status that is an essential foundation for grizzly bear conservation. In two U.S. ecosystems, where habitat is anchored by roadless lands, Yellowstone



*Though it remains unprotected, the 4,000 square kilometre Bighorn area still contains enough wild country to support grizzly bears. Relatively low grizzly densities may be a function of human activity in the area. AWA has been working for decades towards better protection in the Bighorn to allow wilderness denizens such as the grizzly to persist. PHOTO: N. DOUGLAS*

and the Northern Continental Divide, the latter shared with Alberta, there are even encouraging indications of recent but marginal recovery in grizzly bear numbers and distribution.

I don’t mean to even imply that Americans and their governments have rescued grizzly bears, their habitat and the integrity and wholeness of public lands from the ecological and regulatory crises created by the great acceleration of collective consumption and corporate domination that has characterized the last third of the 20th century. But at least they have, so to speak, “put a horse in the starting gate,” something that neither Alberta nor Canada has done. In my view, the race to prevent the extinction of grizzly bears has only now taken on a potentially fatal “all or none” reality.

Barely ten years ago, Alberta Environment calculated that only approximately 400 square kilometres of the nearly 95,000 square kilometres covered by Alberta’s foothills had been spared from logging, oil and gas exploitation, or linear disturbances.

Yet, there does not exist in Alberta a single initiative, outside of my proposal in a 2004 report to implement legal measures to protect roadless areas. I would like to suggest at this time that progressive Albertans who prefer to think for themselves, as opposed to being told by government what to think, take the time to review a copy.

My investigation revealed that, in southwest Alberta, from 43 to 78 percent of the south and north blocks, respectively, of habitat south of Highway

3 is within 500m of a road! I proposed that 950 square kilometres of roadless habitat, in not more than 10 blocks, would be necessary (as one measure only) to provide a reasonable expectation of grizzly bear population viability in southwest Alberta. To date there has been no formal or informal government or public initiative to protect roadless lands in any part of Alberta.

One proposal for “wildland status” for public land in the southwest corner of Alberta is circulating; it has troublesome aspects to it, including the prospects that extensive off-road vehicle use, continued grazing and defence of livestock, and various levels of industrial (oil and gas) intrusion would become entrenched in law! The capitulation to grazing private livestock on public lands is particularly counterproductive and ignores the proposal I outlined in my 2004 report to buy out the 33 leaseholders who have these privileges. The failure of this initiative to deal with grazing impacts, bear mortality and management costs is alarming and indicates that the participants are unaware of or are simply unprepared to deal with a history of regional environmental degradation, the tightening choke hold of a growing industrialized society, or the regulatory calamity that has engulfed Alberta. If grizzly bears (along with bighorn sheep, elk, wolves and wolverine) are to cling to the remnant public lands in southwest Alberta, the removal of all livestock is essential. Bob Marshall, one of North America’s great wilderness activists, said it well in a speech at the founding of the Wilderness Society in 1936: “Let there be no straddlers in the defense of wilderness.” Alberta activists had better reconsider and take these words to heart.

Contrary to the state of affairs in Alberta, in 2001 the Clinton administration, driven by public initiative and comment, introduced “the Roadless Rule” to protect about 60 million acres of America’s public land from industrialization. The rule prohibited road building, road upgrading, and logging. The usual and expected assortment of interests fought this initiative to a draw until the federal courts came to the defence of the public and more or less cemented it in place in 2009.

A legally mandated public initiative/comment process does not exist in Alberta; environmental rule making that

legally establishes management direction does not exist in Alberta (or Canada); Albertans are also denied an appeal to the courts for failure by land and wildlife managers and agencies (the Forest Service and Fish and Wildlife Service) to thoroughly, publicly, and scientifically evaluate the consequences of commercial activities on the public interest, before they rubber stamp their approval.

U.S. courts have noted that “there can be no serious arguments that restrictions on human intervention in the wilderness areas will not result in immeasurable benefits from a conservationist standpoint” and they have supported a 2002 U.S. Forest Service determination that roadless areas act as “biological strongholds for populations of threatened and endangered species.” A virtual mountain of scientific evidence from around the world supports these conclusions.

A further threat to the future of grizzly bears in Alberta is the noticeable absence of the federal government, which in the U.S. has been the driving force behind grizzly bear conservation efforts and successes, however limited they might be. This serves to highlight the gross inadequacy of the federal Species At Risk Act (SARA) and the total failure of the federal government to act to protect biological diversity, grizzly bears and their habitat included. One would expect federal involvement, particularly in the management and conservation of international populations such as the Northern Continental Divide ecosystem grizzly bear population that Alberta and B.C. share with Montana, or the Selkirk and North Cascades bear populations. All but the most obtuse of observers are inclined to expect that international issues and “problems” should automatically kick-in federal oversight and involvement. Once again the Canadian government has failed to step up on behalf of Canadians.

In 2003 David Boyd, university environmental lawyer, concluded in his book *Unnatural Law: Rethinking Canadian Environmental Law and Policy* that: “The Canadian system of environmental law is weak, inconsistent, narrow, unscientific, plagued by discretion, undermined by budget cuts, inadequate enforcement, and a lack of effective checks and balances, and subject to manipulation by society’s most powerful interests.” This, of course,

was not news to serious activists and independent scientists.

Alberta’s *Wildlife Act* does have a minor section (a mere one page out of 41 pages) that references endangered species; the latter is buried within and overpowered by the Act’s “kill and control” emphasis that reflects a long history of “occupy and mop up,” a land pioneering mentality that still cripples the province’s willingness to deal with advanced environmental problems. The Act lacks the essential tools for dealing with the contemporary world of threatened and endangered species and spaces; it fails to include measures like a legal process that empowers the public to petition for listing of threatened and/or endangered species and populations. It has proven to be of virtually no positive value to grizzly bears.

As the gap widens between what Albertans need to defend themselves from the escalating exploitation of public resources, of which grizzly bear habitat and its ecological effectiveness are but one part, and those few measures they have, nothing short of regulatory, land-use, economic and political insurrection will prevent the functional extinction of grizzly bear populations before we close the doors on this century.

Given the historical and near complete breakdown between research results (evidence) and legal and regulatory action in Alberta it would have been vastly more effective to spend not a penny on the recent grizzly bear population DNA census (approximately \$2.5 million) and reallocate that money to habitat acquisition via some combination of easements on or outright purchase of private land and buyback of grazing privileges and land-use permits (drilling and logging permits and licences). While this would draw the wrath of the usual list of suspects (ranchers, private property fanatics, the oil and gas and timber industries), it would go down in the books as a benefit to the people of Alberta and, specifically, to the prospects that grizzly bear population viability might be possible in this province.

By way of contrast, and a stark one it is, the U.S. Fish and Wildlife Service is in the process of acquiring surface conservation easements, with a goal of 80,900 square kilometres under legal commitment, along Montana’s East Front. This habitat is similar to the swath



*A subadult male tests the breeze for signals.* PHOTO: B. HOREJSI

of land running from Bragg Creek (near Calgary) south to Waterton. The U.S. recently spent \$5 million dollars on DNA inventory of bears just south of Canada but they did so not in isolation from the relatively aggressive and significant habitat protection measures I have discussed above. That is the difference that makes Alberta's conduct so unpalatable.

Many Albertans and, to my continuing dismay even some environmental groups and activists, fail to link the dramatic social, industrial, economic and regulatory changes occurring in Alberta to the decline of the both their own and the natural environment, let alone grizzly bears specifically. Yet these are, in the words of Perrow, "unfolding trends that are catastrophic in their accumulative consequences."

The notion that environmental groups can bring about change (and I make here a highly questionable assumption, that being that they all do want real, material change) through collaboration, round tables, or nonsense like "innovation," places them in a very long line of failures standing quietly at the doors waiting to be let in to the real world. The vast majority of Albertan and Canadian environmental groups and activists have been spatchcocked by a world dominated

by conservatism, corporations and a fraudulently labeled "free" market system that responds only to resistance.

In far too many cases these sometimes well-intentioned individuals and organizations have failed to provide even a modicum of resistance to the behemoth of growth, consumption and extreme individualism that has smothered democratic processes along with scientific processes and evidence. Such resistance is essential if we are to slow the destruction of Alberta's public lands and offer a future for grizzly bears.

It is equally obvious that Albertans entered the conservation-awareness generation with the province in an ecologically, regulatory and democratically desperate state. It is also a certainty that the days of old are never to be recovered. But there exists still a foundation, as ragged as it is, on which Albertans could build a system of checks and balances that might prevent the loss of our remaining wild natural heritage.

This brief summary shines the light on the path, one that has existed for decades, to the recovery of grizzly bear population viability and habitat integrity. Albertans will not turn the tide of losses engulfing grizzly bears and their habitat today unless they succeed in achieving:

1. Stand alone Endangered Species legislation that;
  - a) recognizes separately various bear populations when required, and
  - b) contains citizen lawsuit provisions that allow citizens to sue corporations and governments,
2. Sunshine laws that expose the public service and corporate "environmental" consultants to public and legal accountability,
3. Firewall legislation that separates wildlife and land researchers and managers (in government and academia) from industry and corporate money spooled out by those who governments are expected to regulate,
4. Legislated Environmental Impact Assessment processes that incorporate public hearings and mandate the use of the best available science.

There are many other failures of governance that demand attention in this province but recovery of grizzly bear populations and habitat viability will happen only if there are activists, citizens and groups who have a very clear view of the ecological value of wilderness and roadless areas. It will only happen if these people provide united, unequivocal resistance, and I repeat for emphasis, resistance, to the destructive present day agenda of growth, consumption and privatization.

There is little reason to believe, and virtually no evidence to indicate, that Albertans, environmental organizations included, are or will shoulder this task. Many Albertans, I suspect, are indifferent or intimidated and do not have the discipline and grit required. But we have always had the occasional rose rising – shining – above the muck and I expect there will be others. With the crises of man-made and living systems now descending upon us, opportunities will arise. Albertans had better be there and ready when they do. 🐾

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