



# WILD LANDS ADVOCATE

THE ALBERTA WILDERNESS ASSOCIATION JOURNAL



*Burrowing Owl Family* R. WHITE

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## COVER PHOTO

The burrowing owl (*Athene cunicularia*) is listed as a federally “endangered” species in Canada and as a “threatened” species in Alberta. This tiny raptor is a summer resident on the prairies, living largely in existing Richardson’s ground squirrel burrows. Habitat loss, pesticide use, and increased predator numbers are all suspected to have contributed to the recent sharp decline of burrowing owl populations throughout Canada and the U.S. In 2005, the breeding population in Alberta was estimated at 200 to 400 pairs, down from approximately 800 pairs only eight years earlier. Robin White, co-author with Marian White of *Wild Alberta at the Crossroads* (2007), captured this family on film next to their burrow.

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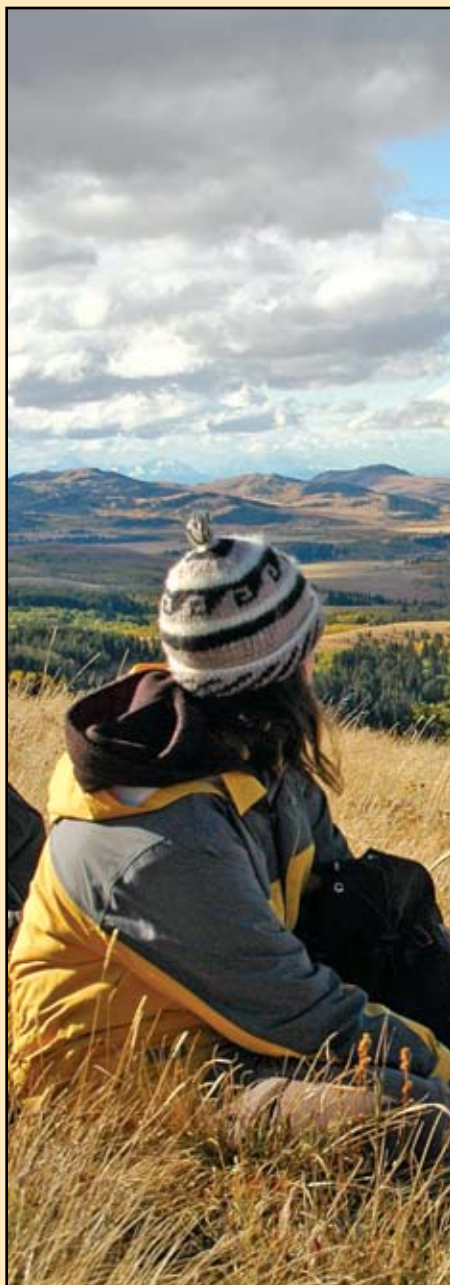
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## “STOP. THINK. PLAN INTELLIGENTLY.”

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Change was in the air when I traveled down to Chain Lakes on Monday evening, December 3. A temperature of minus twenty when I left Turner Valley rocketed to plus four by the time I arrived at Chain Lakes. But that was just a chinook. The real change became clear as the evening unfolded. Two hundred people joined Energy and Utilities Board (EUB) chair Bill Tilleman and 14 EUB board and staff members to hear about their new proposed “Early Engagement Land Pilot Project” for this area of southern Alberta rangelands.

Contrary to what we might have expected from excitable reports of EUB meetings in Rimbey, people sat and listened politely as the EUB laid out their plans. Ten to twelve members of the public would be invited to join a team of EUB and industry reps to chat about how oil and gas development would occur in the region.

What happened next was a breath of fresh air. The first member of the public stood up to say that this part of southern Alberta is a special landscape. It hasn’t yet suffered the ravages that other regions have had to bear and people want to keep it that way. Then the floodgates opened. Speaker after speaker stood up to have a say: landowners, biologists, doctors, lawyers, ranchers, and city folk, all united by a burning desire to see this area protected.

This landscape is different, people stressed. It is the water tower for the prairies, the cultural background of southern Alberta that is celebrated so enthusiastically during the Calgary Stampede. And it is under siege.

The EUB’s pilot project was planned to discuss *how* oil and gas development will proceed on this landscape, but people wanted to discuss *whether* it will take place. This brought things around to the huge elephant in the room – or rather, not in the room – Alberta Energy. Alberta Energy decides, with no public input, whether to sell subsurface mineral rights. Companies buy these with an implicit understanding that they will be able to develop the underground resources, though the owners of the surface rights have no idea that the sales have taken place.

One speaker pointed out that the EUB has been set up as the perfect “fall guy.” EUB representatives have to stand up in meetings like this and listen to people’s frustration, but everything people want to see changed is “outside the scope of this process.”

The EUB’s pilot project, and indeed the entire system of allocating oil and gas development rights, was rejected comprehensively by the participants in this meeting. This didn’t mean though, stressed one speaker, that people want to return to the status quo, which has so patently failed local communities in the past. What is needed is a time-out on development until a plan is developed: a plan to look at all of the activities that are impacting this landscape – including oil and gas, forestry, farming, and residential development – not just a plan to look at where the next gas well is going to go. The government’s Land-Use Framework may or may not turn out to be the tool to achieve this, but it makes no sense to pre-empt this process with another time-consuming stakeholder talking shop.

This was Ed Stelmach’s rural Alberta, speaking up loud and clear, standing up to say again and again that things have to change. In the words of rancher John Cross, all people are asking is that we “Stop. Think. Plan intelligently.” Surely this is not too much to ask.

– Nigel Douglas, AWA Conservation Specialist



## ALBERTA'S WILDLIFE – HOW ARE WE MANAGING?

By Nigel Douglas, AWA Conservation Specialist

**W**ildlife management in Alberta, as much as anywhere else, is a reflection of society's attitudes to wildlife, and management has always changed as people's attitudes have changed. The immense slaughter of tens of millions of bison across North America in the 1800s would be unimaginable today. Even the more recent killing of wolves as "vermin" in Alberta's National Parks in the 1970s seems misguided just 30 years later.

And society continues to change. More and more people in Alberta are living in cities, and so our connection to the land and its wildlife is becoming more diluted. Whether we're birdwatchers, wildlife photographers, hunters, trappers, or fishers, we tend to enjoy wildlife on our own terms, and traditionally we have tended to promote management that minimizes wildlife's interference with our other priorities, such as agriculture, recreation, industrial development, and hunting. With many competing agendas in the province, which ones rise to the top when it comes to wildlife management in Alberta?

When we delve into wildlife management in the province, more and more questions seem to arise. Who, exactly, are we managing wildlife for in Alberta, and indeed, who should we be managing wildlife for? Should we be trying to maximize ungulate numbers? Is it reasonable to poison ground squirrels because they are damaging agricultural crops? In that case, is it acceptable to poison grizzly bears that are preying on livestock?

### Three Contentious Proposals

Three recent initiatives highlight the current state of wildlife management in Alberta, a hodgepodge of often contradictory laws, regulations, and guidelines based partly on science, and partly on who has the ear of politicians.

One new Alberta government project in west-central Alberta is investigating



*Wildlife like this dragonfly have a major role to play in ecosystems, even though their economic impact is difficult to measure.* N. DOUGLAS

killing entire wolf packs except for the dominant pair, which will then be sterilized. Unlike the program that has involved killing wolves in the Little Smoky area for the past three winters, the purpose of this project is not to protect endangered caribou but to increase numbers of common ungulates – deer, moose, and elk. (Not far away – as the elk travels – Parks Canada is considering sterilizing elk around the Banff townsite because their numbers are becoming unmanageable.) While killing wolves to protect endangered caribou may be justifiable (though not scientifically) to some people, killing wolves to increase ungulate populations is another matter.

Dr. Mark Boyce, professor of biological sciences at the University of Alberta, is involved in this project, but he has some discomfort with condoning it. "It's awfully intrusive and intensive management," he says. "I'm not sure it's well justified. The whole issue of this is how we want to manage wildlife."

A second government-sponsored

project is likely to cause even more of a stir. It has reopened the old acrimonious debate about wildlife privatization in Alberta, since it would allow selected large landowners in southern Alberta to acquire a percentage of the allotted provincial hunting tags and sell them to the highest bidder.

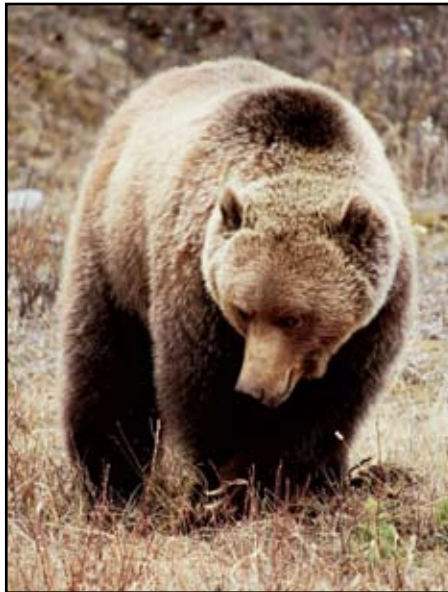
This proposal is part of the Alberta Land and Wildlife Stewardship Project, which admittedly is attempting to address a serious issue. It is billed as a "multi-stakeholder initiative to develop wildlife management programs in Alberta" and will study ways to "provide incentives and rewards to private landowners for wildlife and habitat stewardship on their lands." Society expects landowners to provide essential ecological goods and services, such as clean water and wildlife habitat, but they have little monetary incentive to do so. As one landowner put it at a recent planning forum, "If society wants me to grow burrowing owls, then pay me to grow burrowing owls and I'll grow burrowing owls!"

The project becomes controversial, however, with the suggestion that landowners be allowed to sell hunting tags and allow hunters exclusive access to their land. To many, this is the start of a slippery slope toward privatization of wildlife. Brad Stelfox, a landscape ecologist with formal training as a wildlife biologist, has mixed feelings about the proposal. "My focus is landscape modeling, which is showing we need to start doing things differently," he says. "The current system does not provide either fiscal incentives or appropriate policy for landowners to manage landscape for the benefit of wildlife, water quality, or biotic carbon. If new progressive policies do not emerge, then the continuing loss of wildlife habitat and populations can be expected."

Mark Boyce recognizes the need that the project is trying to address: "I support the concept that we need to engage private landowners to manage wildlife – otherwise why should they bother to maintain natural habitats?" But like Stelfox, he can see that the plan is controversial. "Wildlife is owned by the people: private landowners may be able to limit access, but don't own the wildlife."

In yet another initiative, the Alberta government has requested federal permission to reintroduce 2 percent liquid strychnine to control Richardson's ground squirrels, after a 16-year ban that was instituted in large part because of the incidental mortality of other species (see p. 16 for more). This request has been made despite Health Canada's comments that "possible serious adverse effects to human health and the environment were the basis of the 1992 decision to restrict the availability of 2% liquid concentrate strychnine." Cliff Wallis stresses the importance of managing "systems in decline" rather than managing just ground squirrels, which are the basis of an entire ecosystem, an essential food source for golden eagles, ferruginous hawks, coyotes, and other prairie species, and an important factor in the persistence of endangered burrowing owls. "Ground squirrels are disappearing over large areas of the prairies," notes Wallis, "but they have exploded in agricultural croplands, so everyone thinks they are a huge problem."

Each of these policies reveals contradictions in wildlife stewardship that



*"Here was the living symbol of the mountain wilderness, one giving an impression of power and royalty matched by no other." (Andy Russell, 1967)*

GRRRR! PHOTOGRAPHY

come from concentrating on managing single species without looking at the broader ecological picture. "We should be focusing on managing systems rather than managing wildlife themselves," says Brad Stelfox.

### Wildlife and Economics

Albertans are proud of our wildlife, and rightly so. The website for Alberta Sustainable Resource Development (SRD) proclaims, "Few places in the world have as great a diversity of wildlife as Alberta. The province boasts 515 species that are traditionally considered wildlife, including 10 species of amphibians, 95 mammals, 402 birds, and 8 reptiles." Our wildlife is important to us – the SRD website says it well: "Wildlife add to the quality of life that residents enjoy and living creatures have an economic as well as a recreational value."

In a 2006 brochure, "The Value of

Alberta Parks," the Alberta government refers to a survey which found that "99% of Albertans say protecting natural resources, such as parks, is important to overall quality of life." Our natural areas also contribute considerable economic benefits to the province. Visitors to Alberta's parks generate a province-wide economic impact of \$1.2 billion. In 1996 wildlife viewing expenditures in Alberta were estimated at \$171.6 million; on average, participants spent \$433, or \$23 per day of participation. Similarly, \$147.8 million was spent on recreational fishing and \$71 million on recreational hunting (*The Importance of Nature to Canadians*, Environment Canada).

While our "use" of the wildlife "resource" makes a measurable contribution to the economy, some wildlife species have a minimal economic value, at least according to current economic thinking. Fortunately, some economists are now looking beyond Gross Domestic Product (GDP) as the conventional measure of economic well-being. Economists such as Mark Anielski point out that GDP measures nothing more than a gross tally of the monetary transactions in the nation. As he says in "The Genuine Progress Indicator – A Principled Approach to Economics" (1999), "The ideal economic or GDP hero is a chain-smoking terminal cancer patient going through an expensive divorce whose car is totaled in a 20-car pileup, while munching on fast-take-out-food and chatting on a cell phone. All add to GDP growth."

In 2005, Anielski and Amy Taylor of the Pembina Institute published their updated Genuine Progress Indicator (GPI) account for Alberta, which tracked 51 indicators (economic, social, and environmental) to measure progress. While GDP in the province grew by 483 percent between 1961 and 2003, many of

## AWA's VISION FOR WILDLIFE



AWA is committed to the protection of publicly owned wildlife, wild lands, and wild waters in Alberta. We recognize the inherent value of nature and the myriad benefits humankind derives from it. AWA seeks secure interconnected habitats that are representative of Alberta's natural landscapes and ecological processes, and that sustain the full complement of indigenous wildlife populations.

the environmental indicators – including fish and wildlife, parks and wilderness, and ecological footprint – declined. “While the economic values of fish and wildlife are reflected in the GDP, many would argue that their intrinsic value is far greater,” says the report. For example, “[r]esearch indicates a ‘willingness to pay’ of between \$46 and \$200 a year per Albertan in additional taxes to ensure sustainable caribou populations; \$43 for a program to sustain trout; and \$28 for a grassland/burrowing owl program.”

But even these economic arguments have their limitations because not everything can be assigned a dollar value. Grizzly bears should be allowed to persist on the landscape not only because they provide a financial benefit, but also because they have a right to be there, to have places where they can just be grizzly bears. Some economists refer to this as “existence value,” defined on the Convention on Biological Diversity website as “the value of knowing that a particular species, habitat or ecosystem does and will continue to exist. It is independent of any use that the valuer may make of the resource.”

Although wildlife management tends to focus on large charismatic species such as grizzly bears or caribou, or on species that impact us directly such as ground squirrels or pine beetles, the term *wildlife* covers an enormous array of creatures, from elk to Banff snails and tiger salamanders to mosquitoes. All species are part of the complex ecosystems that we are just beginning to understand and appreciate.

At AWA, we are often asked the question, “Why does it matter if grizzlies die out in Alberta?” Of course, this question can be turned around to “What gives us the right to decide we are going to get rid of grizzlies from Alberta?” but it is a valid question. There are sound economic reasons why grizzly bears should be recovered in Alberta, including the contribution to the economy made by visiting tourists hoping to catch a glimpse of this magnificent predator. A 2000 survey in Banff National Park, for example, found that only 15 percent of respondents would visit a park without grizzly bears.

“In my view it is important that wildlife managers should compute a value where they can,” says Brad Stelfox. But up until now, he adds, “we’ve done

a poor job of using this [economic] argument to benefit species. We have to rethink it and supplement it.”

### **Wildlife Policy and Legislation**

Prior to the 1900s, wildlife was viewed as a “commodity” that was worth more dead than alive. The incentives for marketing in dead wildlife were so high that by 1900, North America’s thriving populations of ungulates, predators, and birds were decimated, and many native species were almost extinct. The last native elk in Alberta disappeared in 1913. Canada and the U.S. worked together to protect wildlife by jointly placing it in the public trust, stopping the trafficking in wildlife parts and regulating hunting. Four fundamental rules were founded that revitalized wildlife in Canada:

1. Protection of wildlife as a public resource
2. Prohibition on markets in dead wildlife
3. Allocation of surplus wildlife by law, not profit
4. Prohibition on the frivolous killing of wildlife

Today, wildlife in Alberta is managed by the Alberta government on behalf of Albertans as a “public resource.” Wildlife management falls under the Ministry of Sustainable Resource Development (SRD); the principal tool is Alberta’s

1984 *Wildlife Act*, which classifies wildlife as game and non-game species, and contains the regulations for hunting, trapping, and possessing wildlife.

Although it has had occasional updates since 1984, the Act does little to address many of today’s wildlife concerns, such as habitat requirements, endangered species, or wildlife privatization. Like so much provincial legislation, it is riddled throughout with the loophole of “ministerial discretion.” In a 1999 paper, “Endangered Species Protection in Alberta,” Wendy Francis of the Canadian Parks and Wilderness Society refers to a 1996 amendment to the Act designed to deal with endangered species. This amendment states that the minister “must” establish the Endangered Species Conservation Committee, but that this committee will “advise” the minister on endangered species and “make recommendations” about species recovery plans. These recovery plans “may” include identification of critical habitats and strategies for population recovery. So in effect, all that the minister is required to do for endangered species in this amendment is to set up a committee: everything else is subject to ministerial discretion.

The last attempt to define the Alberta government’s approach to wildlife management was the 1982 *Fish and Wildlife Policy for Alberta*, which



*While in some parts of Alberta there is pressure to control predators to increase elk numbers, in other areas, such as Suffield, elk are flourishing in the absence of predators.*

R. BLANCHARD

## Recovery Plans and Status Reports

Time and again, government status reports and recovery plans for endangered species in Alberta stress that habitat destruction is the driving force behind struggling wildlife populations. And over and over again, when it comes to implementing recovery plans, little is done to protect habitat.

### *Ferruginous Hawk*

“The lack of strong public lands policy for preservation of remaining native grasslands, and recent public/private land trades leading to net loss of native grasslands, is an ongoing threat to wildlife dependent on native grasslands, including the ferruginous hawk.” (*The Status of the Ferruginous Hawk in Alberta*, January 2006)

### *Burrowing Owl*

“Loss and degradation of suitable nesting and foraging habitat are cited as the most important threats to Burrowing Owls over most of their North American range. Alteration of the native landscape – through widespread cropland development, petroleum exploration and extraction, and urban sprawl – represents the most pressing habitat-related threat to grasslands in Canada.” (*Recovery Strategy for the Burrowing Owl in Canada*, July 2007)

### *Whooping Crane*

“Habitat loss and degradation is one of the major threats to Whooping Crane survival.... Conversion of wetlands for development (be it agricultural, urban, commercial, or recreational), oil exploration, or road construction is the most significant threat affecting the overall vulnerability of cranes.” (*Status of the Whooping Crane in Alberta*, April 2001)

### *Grizzly Bear*

“The greatest risk of habitat loss is the cumulative effects of human activity; hence the need to monitor the footprint and initiate habitat conservation and enhancement as required.... Encouraging Albertans to accept and value bears and their habitat is critical to the long-term survival of grizzly bears.... There is an opportunity to foster and support public good will and adopt enlightened policies to coexist with grizzly bears in Alberta.” (*Draft Alberta Grizzly Bear Recovery Plan 2005-2010*, April 2006)

### *Woodland Caribou*

“Industrial and other human activities on the caribou range must be addressed.... A moratorium on further mineral and timber resource allocation (sales) should be put in place until a range plan is completed, evaluated, and implemented.” (*Alberta Woodland Caribou Recovery Plan 2005* – the Alberta government adopted this plan with the exception of this section.)

### **Habitat, Habitat, Habitat**

If there is one theme that runs through all of the Alberta government recovery plans and status reports produced for provincial and endangered species at risk, it is the importance of habitat. As Mark Boyce emphasizes, “The bottom line in wildlife conservation is habitat protection and habitat management.”

Brad Stelfox’s interests as a biologist led him to concentrate on the ecological systems within which wildlife is an inextricable link. “People would ask me, ‘Why are biologists talking about land use when they should be talking about the biology of garter snakes?’” he says. “But becoming a better life history ecologist isn’t going to solve any of the problems in Alberta. Knowledge of system management is so far behind knowledge

of life history of animals.”

Stelfox’s ALCES model has been used in many studies, including the Southern Foothills Study, to measure human impacts on a landscape scale and to project what such a landscape will look like in the future if current rates of activity are continued. Looking at a 1.22 million-ha area of fescue grassland, foothills, forest, and mountains stretching from the B.C. border east to Highway 2, the Southern Foothills Study found that with current rates of activity (industrial, recreational, and residential), grizzly bears will disappear from the area within 50 years. Without effective landscape management, wildlife management becomes academic.

According to the Alberta government website, “Protecting and maintaining

was prepared in order to “recognize the significance of [Alberta’s fish and wildlife] resources and the enjoyment they bring to present and future generations of Albertans.” The policy refers to wildlife somewhat clinically as a “replenishable Crown resource,” and states that “the primary consideration of the Government is to ensure that wildlife populations are protected from severe decline and that viable populations are maintained.” Since the 1982 policy, periodic updates have been released, principally in the form of *General Status of Alberta Wildlife* reports, but these do little more than list current status of wildlife species without attempting to address management issues. The most recent report, the 2005 *General Status of Alberta Wild Species*, was released in February 2007, along with a rather curious news release trumpeting that “nearly 90% of Alberta’s wild species are in good shape,” which presumably means that more than 10 percent of species are not in good shape! Half of Alberta’s amphibian species and 38 percent of its reptile species are listed as “at risk” or “may be at risk.”

Many environmentalists and biologists working in Alberta believe that we are still paying the price of the drastic 1980s staffing cuts within Alberta Fish and Wildlife, the division of SRD directly responsible for wildlife management. Glen Semenchuk with the Federation of Alberta Naturalists points out that “in the 1980s, whole sections disappeared from Fish and Wildlife, most notably the habitat management section.” Although overall numbers of Fish and Wildlife staff may have remained consistent, the number of communications staff has increased, “but how many professional biologists are there?” asks Semenchuk. “How many habitat biologists?”

Mark Boyce agrees. “The province has been systematically doing less and less on the wildlife side,” he says. “Fish and Wildlife budgets have consistently deteriorated over the past decade.” Boyce sees wildlife funding in the era of Mike Cardinal (Minister of SRD between 2001 and 2004) as “a disaster, even though the province had a huge budget surplus.” But he is much more optimistic about the current minister: “Ted Morton is attracting more dollars to Fish and Wildlife. He is at least thinking about conservation programs.”



*Wolves may have been “managed” more than any other species in Alberta. How do we manage a species that continues to elicit extremes of human passion, from adoration to loathing? GRRRR! PHOTOGRAPHY*

suitable habitat is critical in maintaining long-term wildlife health and viability.” Alberta’s species-at-risk program “relies on sound science plus a realistic understanding of land use and land management.” But these words do not seem to be reflected in any actions to protect wildlife habitat.

The 2004 *Draft Grizzly Bear Recovery Plan*, for example, states clearly that “human use of access (specifically, motorized vehicle routes) is one of the primary threats to grizzly bear persistence” and calls for “open route densities at or below 0.6 km/km<sup>2</sup> in high quality grizzly bear habitat designated as Grizzly Bear Conservation Areas... and open route densities at or below 1.2 km/km<sup>2</sup> in all remaining grizzly bear range.” A recent letter from Minister of Sustainable Resource Development (SRD) Ted Morton, however, waters down these recommendations considerably. SRD will now “identify core grizzly bear habitats with low levels of motorized public access, and examine opportunities to maintain them in a condition that is conducive to the long-term support of grizzly bear populations.” This is a recipe for maintaining the status quo, which is what brought grizzly bears to their perilous state in Alberta: it will certainly not recover them.

Similarly, the *Alberta Woodland Caribou Recovery Plan* was finally published in 2005, but with a surprising introduction: “The Alberta Government

has adopted this plan as Alberta’s Woodland Caribou Recovery Plan with the exception of the recommendation in Section 7.2 relating to a moratorium on further mineral and timber allocations on specific caribou ranges.” Again, serious recommendations to address habitat issues were ignored. “It’s disturbing, when everyone recognizes that the bottom line is the loss of habitat,” says Boyce.

Boyce is also a member of the provincial Grizzly Bear Recovery Team, and his experiences with that process were at times frustrating: “The Grizzly Bear Recovery Team had heavy industry representation. We couldn’t get anywhere unless industry bought off on it.” But even when industry supported certain recommendations, he says, the provincial government could stop them from going forward.

“It’s the same thing with woodland caribou,” Boyce points out. “There is no way that we will rescue the Little Smoky herd if we are not willing to check the industrial deterioration of habitat.” Instead of making real and credible efforts to protect caribou habitat, the focus has been on killing wolves. Wolves are undoubtedly a predator of caribou, but this predation is only significant where industrial roads give them the ease of access to hunt elusive caribou. Wolves are known to respond to increased mortality through culling by producing more cubs. “We know that the

minute you stop controlling wolves, they will bounce right back,” says Boyce. “We won’t want to be controlling wolves for 50 years, which is the time it will take to recover caribou.”

Once again, habitat protection is the only long-term solution. “We need to be doing habitat management up front: we’ve got to be more forward-thinking,” stresses Boyce. He is surprised by the lack of public outcry about the wolf kill. “The environmental community has rolled over on this, because it is directed at caribou. There should be more criticism.” Cliff Wallis echoes these comments: “People should be more upset than they are, and they will be in time.”

### **The Role of Hunting**

On September 22, 2007, Ted Morton, Minister of Sustainable Resource Development, announced Alberta’s first annual Provincial Hunting Day to “promote hunting and hunter awareness and educate Albertans about the important role hunting plays in wildlife management and conservation.” Minister Morton talked about the need to raise the profile of hunters: “We’re losing the next generation of hunters to television, computers and shopping malls. We hope that Provincial Hunting Day will give young Albertans the opportunity to experience the outdoors and build greater respect for wildlife.”

Morton’s fears seem to be borne out by the 2004 Alberta Recreation survey,



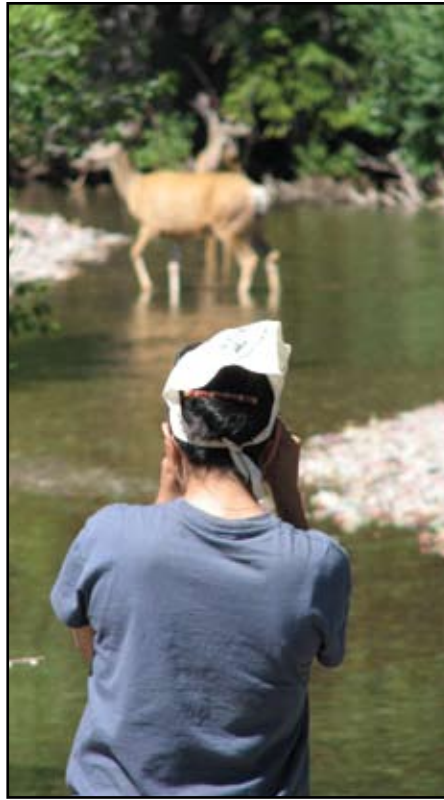
which found that 6 percent of respondents were hunters, down from 9.3 percent in the 2000 Alberta Recreation survey and 11.4 percent in the 1984 report *Status of the Fish and Wildlife Resource in Alberta*. But while most Albertans do not hunt, they are nevertheless supportive of hunting. A 2001 public opinion survey sponsored by Hunting for Tomorrow found that 70 percent of Albertans have a very or somewhat favourable attitude to hunting.

If hunting organizations in Alberta wish to further their cause without alienating this 70 percent of supportive but non-hunting Albertans, they must emphasize the importance of sustainable hunting and the role of hunters as stewards of our wild spaces. Some of them failed in this task during the years of debate over the spring hunt of grizzly bears in Alberta, which continued until 2005, despite the fact that in 2002 the government's Endangered Species Conservation Committee called for the designation of the grizzly as "threatened."

Some hunting organizations continue to lobby to be allowed to hunt grizzlies, despite clear scientific evidence that such a hunt is not sustainable. If pro-hunting associations truly support conservation and stewardship of Alberta's wildlife, then their work is likely to resonate with the non-hunting majority of Albertans; if they are seen to be representing people who simply want to kill for the sake of killing, without regard for the health of ecosystems and wildlife populations, then it will not.

The grizzly situation contrasted notably with the woodland caribou hunt, which was suspended in the 1970s, largely through the actions of responsible hunters who first raised red flags about declining caribou numbers

While hunting has its place in wildlife management, wildlife habitat should not be managed specifically for hunters, as some groups appear to believe. The Utah-based Sportsmen for Fish and Wildlife, for example, sees predator control as a major factor in wildlife management. Hal Herring, in *High Country News* (June 25, 2007), describes this group's "unapologetic demands for maximizing big game herds and hunting opportunities through... changing hunting regulations to favor trophy-sized deer and elk; and spending money on predator control, not just to protect livestock... but to protect



*Wildlife watching and photography are non-consumptive "uses" of wildlife. In the 2004 Alberta Recreation survey, 17.9 percent of respondents listed bird-watching as a favourite activity.*

N. DOUGLAS

and increase wild game herds and game birds."

This way of managing wildlife in an attempt to create unnaturally high numbers of huntable animals by controlling predators is abhorrent to those who want to see the focus of wildlife management shift to managing ecological systems rather than individual species.

### The Future

Brad Stelfox acknowledges that times have changed. "Wildlife biology has evolved," he says. "In the past, wildlife management was equivalent to what you could kill. Now most of the wildlife profession is beyond that."

Stelfox's thoughts echo a growing realization in Alberta that managing individual activities on the landscape without considering the cumulative

way that these activities interact with each other is no longer adequate. One overwhelming impression from the government's Land-Use Framework process during the summer of 2007 was the almost universal acceptance that, as far as land-use planning goes in Alberta, we have been getting it wrong: something has to change. Even Minister Morton stated in a June 2007 Land-Use Framework stakeholder meeting, "The status quo is not an option for me."

Alberta seems to be going through a reflective period, a reassessment of some of the principles and assumptions under which we have been operating for so many years. Ron Bjorge, director of wildlife for the Alberta government, agrees that societal attitudes are changing and points to several government initiatives that are attempting to respond – the Biodiversity Monitoring Program, the Land-Use Framework, and Alberta Environment's Cumulative Effects Strategy. This sense of change in the air is manifesting itself in a number of different ways, including an increased public appreciation of the value of wild lands for producing clean water and a challenging of the assumption that forests should be managed principally to supply timber.

Cliff Wallis points out that government policy in Alberta "lacks a clear value statement about wildlife." He stresses that times have changed since the outdated 1982 *Fish and Wildlife Policy for Alberta* and its definition of wildlife as a "replenishable Crown resource." "What Albertans want is quite radically different from what the government is doing," he says.

Wildlife shouldn't be managed for the benefit of hunters; it shouldn't be managed for the benefit of farmers, or city-dwellers, or oil executives. It should be managed for all Albertans, and for the benefit of wildlife itself. There's no better time than an impending election for Albertans to make sure that their politicians hear this loud and clear.

*"The buffalo is gone, and all of his millions, nothing is left but bones... Those discordant serenaders, the wolves that howled at evening about the traveller's camp-fire, have succumbed to arsenic and hushed their savage music... The rattlesnakes have grown bashful and retiring. The mountain lion shrinks from the face of man, and even grim 'Old Ephraim', the grizzly bear, seeks the seclusion of his dens and caverns."*

— Francis Parkman, 1892



## THE HUNTER-CONSERVATIONIST LEGACY

By Kevin Van Tighem

George Bird Grinnell was one of many eastern North Americans who travelled west and fell in love with the landscapes they found here in the late nineteenth century. He was so taken by the tumbling coulees, layered cliffs, and abundant wildlife of the high country the northern Blackfeet considered sacred that he went back to Washington and lobbied to have it set aside as a national park. He was successful. Today Glacier National Park, in northern Montana, continues to inspire hundreds of thousands of Americans and their visitors each year with its protected mountain landscapes, bighorn sheep, goats, and grizzlies.

North of the Medicine Line, in the young country of Canada, rancher Frederic Godsal saw the same landscapes at the head of the Waterton, Belly, and Castle Rivers. He lobbied his own nation's capital and succeeded in securing the other half of what would become the Waterton-Glacier International Peace Park: Waterton Lakes National Park.

These were important conservation campaigns that left a legacy for all of us. That legacy was more than just the sum of protected acres; perhaps no less important was the inspiration and learning that millions of visitors to those parks have taken home with them in the decades since their establishment.

Grinnell was not content simply to protect a new park in what was then a remote part of the west. He and his friends and colleagues who could see what hasty development and exploitation were doing to the original ecological wealth of North America knew that their raw hybrid culture needed organizations that would promote enlightened conservation and ethical interaction with nature. With Theodore Roosevelt, William Hornaday and other influential individuals, Grinnell helped form the Audubon Society to lobby for wildlife protection laws and wildlife refuges.



*South Sulphur River between Blue Grouse Pass and Marie Lake in Willmore Wilderness. This Rocky Mountain wilderness is vital to our biodiversity and well-being. Its clear waters, lush meadows, towering mountains, and vastness demand self-sufficiency of those who enter it.* R. V. RASMUSSEN – RAYSWEB.NET

They also established the Boone and Crockett Society because, as hunters, they could see a need to promote ethical restraint and respect for animals among the hunting community. Their passion for wild places and wild things, and their insights into conservation and ecology were the product of long hours spent wandering the landscape in search of prey, and evenings together around the campfire, discussing what they had seen.

I think I know how they felt because I too am a hunter. My identity is steeped in memories and reflections that came out of my family's hunting traditions – early dawns eating hot porridge while Dad organized his gear in the corner of our old kitchen; staring in thunderstruck awe as a thousand mallards banked hard, climbing into the last orange light above a sunset prairie slough; breaking out into the timberline meadows an hour before daylight after climbing hard through menziesia-scented fir forest in the dark; sitting down with my wife and children to meals of wild game. I think I know why the wild mattered so intensely to

those early hunter-conservationists like Grinnell, Godsal, Roosevelt, and others – so much that they dedicated their lives to the fight for the protection of wild places, wildlife protection regulations, conservation education, and hunter ethics.

For the same reason, it doesn't surprise me that the Alberta Wilderness Association was founded by hunters like Bill Michalsky who couldn't stand by to watch Alberta's wild landscapes carved up by seismic operations, logging, and the fevered road development of the 1960s. Other hunters like Andy Russell, Aldo Leopold, and Roderick Haig-Brown wrote books that woke up an entire generation to what they stood to lose if we didn't fight to conserve the ecological richness and landscape integrity that were under assault throughout the twentieth century.

Those early hunter-conservationists didn't stand alone. A similar passion for wildness, indigenous ecosystems, and wildlife inspired others who could never bring themselves to hunt or kill wild animals for food. But they stood shoulder

### The Common Goal – Saving Wilderness

AWA supporters come from a range of backgrounds, from city folk to rural dwellers, hikers to horse-riders, hunters to vegetarians. In 1971, then-AWA President Floyd Stromstedt wrote a letter to a supporter, highlighting AWA as an organization of individuals with different interests and backgrounds, but united by an interest in wilderness protection. His words have as much resonance today as they did 37 years ago:

“About 900 individuals feel strongly enough to become members of this group [AWA]. Of these 900 souls we find:

- some who love horses; some who hate horses
- some who hunt; some who hate hunters
- some who fish; some who do not fish
- some who backpack; some who prefer day hikes
- some who paint pictures; some who take photographs
- some lone wolves; some with five children
- some church leaders; some Girl Guides
- some ranchers; some urbanites

and on and on, ad infinitum.

“Now, from my position, supposedly representing these various views, I find one thing of singular importance... **SAVE SOME WILDERNESS!** Protect this wilderness in whatever way necessary, but **SAVE it!**”

“I only ask that we **DO NOT** allow the government to get us fighting among ourselves about secondary objectives, while losing sight of the primary one – **SAVE SOME WILDERNESS!**”

to shoulder in the big conservation battles of the twentieth century because, hunter or non-hunter, they were united in their conviction that we must squander no more of what is wild, and natural, and free. And that was how Alberta, Canada, and North America built its great conservation institutions and won its greatest conservation victories.

So I can't help but be a little bemused, and a lot troubled, when from time to time conservation groups are diverted into debates over things that people do – like hunting or ranching – rather than focussing their collective energies on staving off the permanent loss of the great and threatened places that depend on us for their survival in a world of too much hasty change.

I can't quite make myself an apologist for hunters, because too many who hunt bring the same kinds of exploitative, competitive, or destructive impulses into that activity that they have in other aspects of their lives. Hunting is neither good nor bad – it is simply something that humans, wolves, and other animals do. Humans can choose to hunt with humility, respect, and integrity, or they can choose to abuse and destroy. While most of us strive for the former, too many choose the latter, I'm afraid. But it isn't the activity that has a moral dimension; it is the people who participate in the activity. We humans can be good, bad, great, or hideous in almost anything we do in life. Those who stereotype hunters as somehow morally inferior to others are at best guilty of shallow thinking; at worst, they are guilty of the same kind of labelling and absolutism that gives rise, in other contexts, to things like racism or sexism.

This I do know: many of the most passionate, determined and effective conservationists North America has ever known were hunters. Why? Because those long hours afield studying to find their prey in wild habitats gave them an intensity of experience, a level of engagement with natural ecosystems, and a personal, intimate need for wildness that are hard to come by in any other way, and impossible ever to turn away from.

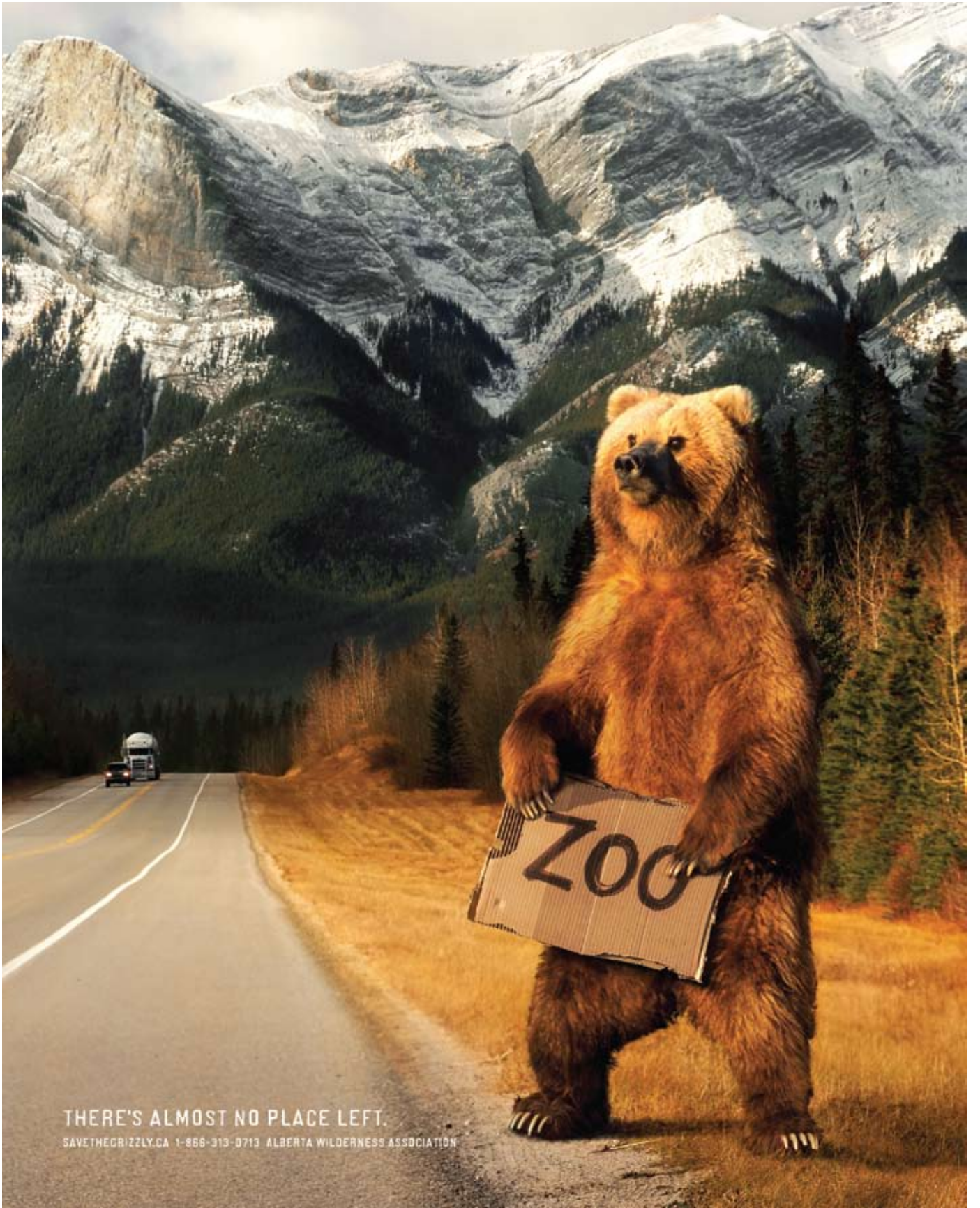
When I hike Glacier National Park's high trails, or watch trumpeter swans lift above the spring green of aspens, or receive my latest *Wild Lands Advocate*, or visit a conservation officer beside a back road, I am grateful to experience

the legacy of other hunters who cared too much to let haste and greed consume Canada's last, best places during the twentieth century. As a hunter-conservationist myself, I can only hope that I will be able to add to that great legacy during the twenty-first century and to do so, as those who came before, in a conservationist movement that comprises both hunters and non-hunters united by our passion for and commitment to the wild.

*Kevin Van Tighem is the author of more than 200 articles, stories, and essays on conservation and wildlife, as well as a number of books. His work has garnered many awards, including the Outdoor Writers of Canada book and magazine awards and the Journey Award for Fiction.*



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## USE PATTERNS BY FEMALE GRIZZLY BEARS IN THE CENTRAL ROCKIES ECOSYSTEM

By *Tony Viveiros*

The grizzly bear (*Ursus arctos*) is considered a species that “may be at risk” of extinction or extirpation in Alberta. The primary source of known grizzly bear deaths in Alberta and B.C. is human-caused mortality and the loss of effective habitat. Although grizzly bears have adapted behaviourally to exploit a variety of habitats through their omnivorous generalist lifestyle, high mobility rate, and intelligence, critical habitat components and diversity are still necessary to enable bears to cope with climatic stresses, human impacts, and changing environmental conditions. These important habitat components include travel areas, feeding areas, denning sites, and sanctuary or security areas.

### Security Areas

Security areas represent habitat where grizzly bears have a low probability of encountering humans and can also meet their daily energetic requirements. Adult females are often the focus of security area analyses because of their slow maturity, low reproductive rate, and role in cub rearing. In the Central Rockies Ecosystem (CRE), secure habitat excludes areas of rock, snow, ice, or bare soil larger than 9 km<sup>2</sup>, as well as habitat within 500 m of high human use (Gibeau et al., *Ursus* 12, 121-30, 2001). Secure habitat is important because it can foster wary behaviour in grizzly bears, potentially minimizing dangerous encounters with humans, and help reduce habituated bear incidence. Along with adequate space and food resources, security is believed necessary to support viable grizzly bear metapopulations: that is, groups of populations that exist at the same time but in different places. Secure habitat is also believed to be particularly important to the survival and reproductive success of adult female grizzly bears.

### Study Design

The objective of my University of Calgary Masters in GIS project was to identify the seasonal importance of security areas in resource selection by adult female grizzly bears of differing reproductive status. The hypothesis that the reproductive status of adult female grizzly bears influences their selection of security areas was tested. Additionally, to account for variation in habitat use through time, the hypothesis that food season (pre-berry and berry) influences the selection of habitat and security by reproductive category was also explored. Eight study categories defined by season and reproductive status were defined for female grizzlies with young-of-year (YOY) cubs, older cubs, all cubs, and no cubs in both the pre-berry and berry seasons.

Resource selection function (RSF) models were developed for each of the eight study categories. Locations from 31 adult female bears radio-collared and monitored between 1994 and 2004 in the CRE of Alberta as part of the Eastern Slopes Grizzly Bear Project were used to define the 4,211 km<sup>2</sup> study area. RSF models represent the relative probability of occurrence of female grizzlies on the landscape. Landscape characteristics used in RSF model-building included elevation, land cover, crown closure, terrain ruggedness, distance to edge, distance to roads, distance to water, and security areas. Models were initially developed without security areas for each of the eight study categories. Security areas were then added to each of the eight RSF models to determine if improvements occurred. Six of the eight RSF models improved with the addition of a security areas variable: YOY cubs in the pre-berry season, older cubs in the berry season, females without cubs in the pre-berry/berry seasons, and females with cubs (YOY + older) in the pre-berry/berry season. Security areas, therefore, were an important predictor of grizzly

bear probability of occurrence for six of the eight categories within the study area.

### Results

Although my results showed security areas influenced seasonal resource selection by female grizzly bears of differing reproductive status, negative security model coefficients, implying security avoidance, existed for all but the two no-cub categories. A number of possibilities could explain these findings. Firstly, my methodology involved pooling all female locations within each category across years. Given the intelligence and individual behaviours displayed by grizzly bears, variation within and amongst bears could be influencing results.

Secondly, the scale of analysis could be a factor. Although Gibeau et al. (2001) reported on the importance and selection of security areas within individual bear home ranges, my findings show that security areas are not positively selected for by females with cubs at the landscape scale. Recent studies have identified the importance of scale on grizzly bear selection patterns. Scale-dependent resource selection could also be occurring within this population.

Finally, the question needs to be asked if sufficient security areas remain. If females with cubs are utilizing non-secure areas, perhaps it is simply too difficult for them to avoid non-secure areas and still meet their daily energy requirements. Only 37 percent of the study area defined by all adult female grizzly bear locations was considered secure, even though 68 percent of the study area fell within parks.

*Tony Viveiros recently graduated from the University of Calgary with a Masters in GIS. This article summarizes his MGIS research project. For more information (including references), visit members.shaw.ca/aviveiros. Tony now lives and works in Winnipeg.*



## CONSERVING ALBERTA'S AMPHIBIANS

By Anna Hargreaves, Centre for Conservation Research, Calgary Zoo

For most Albertans, “wildlife” evokes visions of our impressive megafauna – grizzlies, wolves, moose – whose distant presence causes regular traffic jams on national park roads. Rarely do our thoughts and promotional brochures include our small and often shy amphibians. Lacking the brilliant colouration of their relatives in the tropics, and spending much of their lives in rarely visited wetlands or buried for hibernation, Alberta’s frogs and salamanders are seldom encountered by casual hikers, let alone tourist buses. Unfortunately, this is becoming truer every year.

Amphibians are a diverse class of vertebrates that includes frogs, toads, salamanders, and the strange, limbless caecilians. Amphibians survived massive prehistoric extinction events but are currently experiencing worldwide population declines. Although amphibians pre-date humans by more than 200 million years, they are susceptible to almost every environmental problem we have created, including pollution, ozone depletion, introduced predators, habitat destruction, and climate change. Their current declines are so widespread that scientists believe we are on the cusp of an extinction event unprecedented in human history, rivalling that of the dinosaurs.

### Alberta's Amphibians

Although declines are most severe in the tropics, where amphibian diversity is highest, we in Alberta are not immune. Alberta is home to 11 of the 45 amphibian species found in Canada. As with most northern species, Alberta’s amphibians are wide-ranging, so none are globally endangered. Locally, however, it’s a different story.

According to Alberta Fish and Wildlife’s 2005 assessment, only three of our species are considered secure within the province. Surprisingly, our most threatened amphibian is also one

of North America’s best known: the northern leopard frog. Once common across Canada, northern leopard frog populations in the western provinces crashed around 1979 and have not recovered since. Repeated surveys of their historic Albertan range indicate that leopard frogs have disappeared from up to 80 percent of the sites they used to occupy.

The Alberta declines seem to have been part of widespread northern leopard frog die-offs that occurred across western North America around the same time. Despite significant speculation since the crash, its causes remain a mystery, though drought, disease outbreak, and habitat loss may all have played a role.

### Habitat Loss and Fragmentation

Habitat loss and fragmentation are the greatest global threats to amphibian species (*Global Amphibian Assessment*). They have been linked to northern leopard frog declines in several American states and are almost certainly impacting Alberta’s amphibians. Since the 1800s, more than two-thirds of Alberta’s wetlands have been drained or infilled, primarily for agriculture but increasingly for human settlement. By 1966, roughly 75 percent of wetlands around Calgary and Edmonton had been lost, and the City of Calgary now estimates that number has risen to 90 percent.

Northern leopard frogs are especially susceptible to habitat loss because they require distinct habitats for breeding (fishless ponds), foraging (natural land), and overwintering (moving water; *Northern Leopard Frog Recovery Plan 2005*). Like most amphibians, leopard frogs are poor dispersers, so all three habitat types must be within a few kilometres of each other and connected by suitable corridors. Loss of any one of these habitat types, or the ability to move between them, may cause the demise of leopard frog populations.

Habitat loss alone did not cause the crash three decades ago, but it may



*Ideal northern leopard frog habitat, and the Centre for Conservation Research's main study site* T. DEARLOVE

limit the northern leopard frog’s ability to recover from it. Leopard frogs were once continuously distributed across their southern Alberta range, but the combined effects of local extinctions and habitat loss have left the surviving populations scattered and isolated. Alberta still has areas that could, and once did, support leopard frogs, but existing populations are separated from them by seas of inhospitable land.

If frogs cannot recolonize previously occupied habitat by themselves, one strategy is to reintroduce them there, using animals (eggs, tadpoles, or juvenile frogs) from stable populations or ponds that will dry up before tadpoles mature. Ideally, reintroductions should only take place after the original causes of local extinctions are known and resolved. However, at this point it seems we may never resolve what triggered the die-offs 30 years ago, and reintroductions are currently a cornerstone of Alberta’s northern leopard frog recovery plan.

### Calgary Zoo Conservation Initiatives

The decline of northern leopard frogs and other Albertan amphibians has sparked a growing movement of amphibian research, monitoring, and conservation by both government and non-governmental organizations, including the Calgary Zoo.

Northern leopard frog reintroductions have been attempted several times in Alberta, so far with mixed results. Improving reintroduction success is vital for leopard frog conservation and may require a better understanding of their ecology and behaviour. This is the goal of the Centre for Conservation Research's northern leopard frog program.

Since 2005, CCR Master's student Lynne Fraser has been studying how juvenile frogs emigrate from their natal pond, and whether being handled (as they are during reintroductions) affects this behaviour. Juvenile frogs are often used for reintroductions, but like juveniles of most species, they suffer naturally high mortality. One of the biggest hurdles for young frogs is successful dispersal to good foraging and hibernating habitat, and choosing the right direction to go when leaving the pond may be the deciding factor in their success. Understanding whether handling "disorients" young frogs could suggest ways to improve their post-reintroduction survival, such as guiding dispersers toward suitable habitat.

CCR researchers are also monitoring one of the few healthy breeding populations of leopard frogs in Alberta, since inadequate monitoring still presents a challenge to assessing amphibian conservation needs. Because northern leopard frogs return to the same breeding pond each year, counting breeding adults will enable us to compare overwinter survival between years. We also catch, mark, and photograph young frogs as they leave the pond to assess the population's reproductive success. A frog's spot pattern is as individual as a human fingerprint, so the combination of colour marks and photos enable us to follow individuals across years and sites in order to assess their longevity, survival, and dispersal. Preliminary data show that the number of young frogs can vary a hundred-fold between years, but happily there is no sign of overall decline at this site.

CCR biologists have also been collecting samples for disease testing



*An example of the permanent colour marking used to track juvenile frogs*

A. HARGREAVES

by Dr. Doug Whiteside, veterinarian at the Calgary Zoo and member of Alberta's Northern Leopard Frog Recovery Team. Globally, amphibian diseases have been implicated not only in local population declines, but, in the case of a fungus known as "chytrid," in extinctions of entire species. When Dr. Whiteside started investigating, only one or two isolated cases of chytrid had been reported in Alberta, but its presence in our neighbouring provinces and states made him suspect it was more widespread than previously thought. Indeed, a preliminary survey of four Alberta sites showed that the fungus was present at three. A survey of 28 sites was undertaken in 2007, the results of which will soon reveal the extent of this potentially deadly pathogen in Alberta, with an even larger survey anticipated in 2008.

An essential component of protecting Alberta's amphibians, and of any reintroduction program, is to stop the loss and degradation of habitat and restore it where possible. Although amphibians require appropriate terrestrial as well as aquatic habitat, wetlands are the most threatened piece of their habitat mosaic. To facilitate local wetland conservation, the Calgary Zoo is joining forces with the Toronto Zoo to promote the national Wetland Guardians Registry. The Registry is an online database designed to connect community groups that want to preserve or restore their local wetlands. Anyone can register any wetland and

search the database for conservation strategies other communities have used, including petitions, surveys, and litigation. Such community-based efforts are increasingly important as Alberta's rapid urban expansion swallows natural areas in its way.

Unlike our famous megafauna, amphibians require relatively little space, and it is entirely possible for us to live literally side by side with them. Just as grizzlies demonstrate the need to preserve vast expanses of wilderness, amphibians remind us of conservation needs on a scale we sometimes neglect, demonstrating the importance of small wetlands, streams, and natural areas, and of keeping these places connected.

### What Can You Do?

#### *Register and protect a wetland*

All wetlands, including the artificial ones created in many new suburbs, are potentially biologically important and can be registered. The Wetland Guardians Registry can be accessed through the "Year of the Frog" link on the Calgary Zoo's website: [www.calgaryzoo.ab.ca](http://www.calgaryzoo.ab.ca).

#### *Volunteer amphibian monitoring*

Community participation has been essential in finding leopard frog populations and in monitoring reintroductions. Information on how to volunteer as an amphibian monitor, as well as a full teacher's activity guide, are available from the Alberta Conservation Association website (link also available from the Zoo's "Year of the Frog" page).

#### *Year of the Frog*

Get involved in the 2008 Year of the Frog campaign, designed to raise awareness about amphibians' global plight. More information about local and global amphibian conservation action is available on the "Year of the Frog" page of the Calgary Zoo's website.

*Since completing her MSc at the University of Calgary, ecologist Anna Hargreaves has been working at the Centre for Conservation Research at the Calgary Zoo, conducting fieldwork for an ongoing northern leopard frog monitoring project and working on the 2008 Year of the Frog campaign to raise awareness about global amphibian conservation issues.*

# GOVERNMENT APPLIES FOR STRYCHNINE BAN REVERSAL

By Joyce Hildebrand, AWA Conservation Specialist

The Alberta government has applied for federal permission to reintroduce a lethal 2 percent liquid concentration of strychnine to kill ground squirrels that are “infesting” certain areas of Alberta. Strychnine is acutely toxic to all species, including humans. Although the two main areas affected are Central Alberta and the Westlock area northwest of Edmonton, the request is for the entire province.

In 1992 Agriculture and Agri-Food Canada restricted availability of strychnine to 0.4 percent ready-to-use impregnated bait and eliminated the sale to end users of the much more powerful 2 percent liquid strychnine concentrate. Both provincial and federal governments were concerned about risks to human health and the environment, and Health Canada used reports of unintentional and intentional poisonings of domestic pets and wildlife in their re-evaluation of strychnine use.

If the 2 percent strychnine ban is removed in Alberta, the “incidental poisonings” could have devastating effects on numerous species at risk in our province, including the burrowing owl, swift fox, and ferruginous hawk. In its 2005 “Re-evaluation of Strychnine Document,” Health Canada’s Pest Management Regulatory Agency (PMRA) reported that “strychnine poses a high to very high acute risk... to species that prey on or scavenge animals that have been poisoned by strychnine.” However, despite its conclusion that “[t]he current use of strychnine to control ground squirrels is a concern from an environmental perspective,” the PMRA proposed “that the use of [ready-to-use] strychnine to control ground squirrels be maintained for the short term.” Although less toxic and more economical chemicals are available for use, they are more time-consuming and less effective, so strychnine remains the control tool of choice.

In March 2007 Health Canada published an “Update on the Re-evaluation of Strychnine,” concluding the following: “Possible serious adverse effects to human health and the



*The Richardson's ground squirrel is considered a keystone species on the prairies because its presence is central to the continued existence of the entire ecosystem.*

R. BERDAN

environment were the basis of the 1992 decision to restrict the availability of 2 percent liquid concentrate strychnine.... Restricting user access only to 0.4 percent strychnine bait formulations was considered at that time, and is still considered to be, a prudent approach.” Five months later, in August 2007, Health Canada’s PMRA granted emergency use of 2 percent strychnine in Saskatchewan for a one-year period.

Health Canada’s ruling in Saskatchewan, and Alberta’s request for a similar approval, come as the project of PMRA’s Richardson Ground Squirrel Integrated Pest Management Steering Committee nears completion. Established in 2002, this committee has been researching ground squirrel control methods and is to provide advice on sustainable control of this species on the prairies. Their report is to be completed in 2008. Health Canada’s 2007 update, referred to above, states: “A final decision on the use of strychnine will be made after consideration of the ongoing work by a national expert committee to identify, develop and promote a pest management control strategy for Richardson’s ground squirrels.” The department appears to have jumped the gun with the approval in Saskatchewan.

AWA opposes the reintroduction of 2 percent liquid strychnine sales to end users, a short-term management “solution” that threatens the health of humans and wildlife, and could have negative effects on our water and land as well. Most of Alberta’s species at risk are prairie-dependent – approving the strychnine request would increase the growing threats to their existence. More sustainable approaches might include improved range management (overgrazing increases ground squirrel habitat) and providing habitat for predators of small mammals. For example, ground squirrels constitute nearly 90 percent of the ferruginous hawk’s diet in Alberta – while raising their young, one pair consumes an average of 480 ground squirrels.

Please consider expressing your opinion about the reintroduction of 2 percent liquid strychnine. AWA encourages you to contact the following:

- your MLA and MP
- Liberal MLA Hugh MacDonald, Shadow Minister of Agriculture and Food
- Agriculture and Food Minister George Groeneveld
- Health Canada Minister Tony Clement



## Headwaters Workshop, Fall 2008

Most of southern Alberta's surface water originates from runoff out of the Rocky Mountains. It is crucial, not only for healthy aquatic ecosystems but for human health, that we place the best possible protection at the headwaters to maintain healthy water quality and quantity.

To support this goal, AWA is working with other non-government organizations and representatives from several provincial and federal government departments to organize a science and policy workshop called "Our Place in the Headwaters: Managing the Commons." It will take place in early November 2008 in Cochrane. The focus will be on the North and South Saskatchewan River watersheds.

We are hoping that local and provincial government decision makers, industry players, and media will attend, as well as those involved in watershed management and stewardship. Our objective is to raise awareness of groundwater and surface water interactions in the headwaters and how various human activities affect these water flows. Just as important, the workshop will link the scientific information presented to policy and management choices for our communities.

A key element of our planning includes a Next Steps/Legacy Action Committee. We are committed to concrete follow-up actions arising from the workshop to increase the uptake of the ideas presented. Legacy actions that we are considering include capacity building and outreach on applying best management practices, a fund for practical infrastructure projects, and a manual or "toolbox" to showcase best practices and policies. We will keep members informed of this important work.

— Carolyn Campbell

## Tourism Leases Leading to Unbridled Development

Recent developments along the Panther River in the Eastern Slopes of the Bighorn should have Albertans worried. In late November, after members of the surrounding community contacted AWA with concerns over recent construction activity, we visited the area along the Panther River west of Mountain Aire Lodge to examine the intensity of development. We found a staggering level of expansion on the four Alberta Tourism Recreational Leases (ATRLs) along the river's southern bank, where businesses offer services ranging from trail riding to whitewater rafting.

ATRLs, overseen by Alberta Sustainable Resource Development (SRD), originated from the older miscellaneous leases created to meet the need of trail riding outfits to have a seasonal base camp with temporary fences to corral horses. Far from the original wooden fences dismantled at the end of the season, Panther River leaseholders seem to have free rein to build any number of permanent structures with concrete foundations and adjacent amenities. They also now offer year-round services such as lodging, RV parking, and horse boarding – all on public land and regardless of season.

The ongoing urbanization of Alberta's backcountry, exemplified by the Panther River case, is happening largely behind closed doors. In 2006, AWA, along with many others, expressed objections to the expansion of one of the Panther River leases. Despite the outcry, the applicant was quietly granted the expansion in early 2007 without those who objected being notified. In several other instances where AWA has opposed the granting of leases, SRD ignored our objections and did not inform us of the process or the final decisions.

At the beginning of December, following the visit to Panther River, AWA wrote two letters to SRD Minister Ted Morton. As we go to press, we have received no response to either letter. To learn more about the oft-hidden development of Alberta's wild places,

read the four-part article, "The Quiet Urbanization of the Backcountry" (*WLA*, Dec. 2005 – Apr. 2006), available at [www.AlbertaWilderness.ca](http://www.AlbertaWilderness.ca).

— Chris Wearmouth

## Alberta Water Council Update

In late November 2007, AWA participated in its first meeting as a Board member of the Alberta Water Council. The Council is a key multi-stakeholder policy advisory group to the Alberta government on the *Water for Life* policy. AWA will work closely with the other environmental non-government organization members of the Water Council to ensure a strong consistent voice for better aquatic ecosystem protection.

On January 30, the Water Council released its *Water for Life* renewal recommendations to the Government of Alberta. AWA is encouraged by the Council's call for adequate funding of *Water for Life* and by the strong consensus that emerged on the importance of safeguarding Alberta's source water and aquatic ecosystems.

As well, the Council has indicated it will support and encourage provincial government actions toward strong integration of land and water management. In October 2007, as part of the Land-Use Framework process, Sustainable Resource Development released the results of a spring 2007 public survey on land-use issues. This report revealed a striking level of public concern over water protection. More than 3,100 Albertans completed the survey. The issue receiving the highest number of "very concerned" responses, over 70 percent, was the "failure to consider the impacts on the water supply during land-use planning."

Another extremely important initiative of the Water Council is developing recommendations for a province-wide wetlands policy. Currently no wetlands policy exists to provide direction for wetland conservation in the Green Area – the huge, mostly non-settled public lands areas of Alberta's boreal forest and mountain foothills. According to the Alberta Water Council's

wetland consultation workbook published in September 2007, “the rate of wetland loss in the Green Area is unknown.” In February 2008 the Council will consider draft recommendations from its Wetlands Policy Project Team.

— Carolyn Campbell

### **Run-of-the-River Project Threatens the Peace**

Glacier Power Ltd. has reapplied to the Natural Resources Conservation Board and the Energy and Utilities Board (EUB), now the Energy Resources Conservation Board, to build a run-of-the-river hydroelectric facility on the Peace River in northwest Alberta. The project involves building a 12-metre-high weir across the river two km upstream from Dunvegan Provincial Park on Highway 2. The weir will raise the water level six and a half metres, creating a headpond that will run for 26 km upstream and flood between 106 and 215 ha of land, depending on the fluctuations of the river.

The Peace River is one of the most diverse and productive river valleys in Canada’s Parkland and Boreal Forest Natural Regions. It is a nationally significant waterway that supplies water to the Peace-Athabasca Delta, one of the largest freshwater deltas in the world. The river valley provides key habitat for bear, moose, elk, and birds of prey such as golden eagles.

Run-of-the-river hydroelectric projects are often presented as a low-impact green energy source. While they allow for normal river flow rates and do not involve flooding an extensive area for a reservoir, they do have potentially serious environmental impacts. Of primary concern is how the project will affect the local fish populations. While Glacier is planning to build ramps and bypasses, and to use “fish friendly” turbines, the project’s application states there will be a “significant adverse effect” on the local population. The possible introduction of invasive plant species to the valley is also a concern. Furthermore, the project could set a precedent for similar developments along the Peace River, resulting in further loss of wilderness. AWA is opposed to this development.

The project was denied in 2003 by the EUB and NRCB when the joint panel decided the cumulative economic,

social, and environmental effects clearly outweighed the project’s benefits. A public hearing will be called but at the time of writing no date has been set. To obtain copies of the project’s Environmental Impact Assessment and other documents, visit [www.canhydro.com/projects/dunvegan](http://www.canhydro.com/projects/dunvegan).

— Chris Wearmouth

### **Public Hearings for EnCana’s Drilling Plan in Suffield National Wildlife Area**

The federal-provincial Joint Review Panel (JRP), established in November 2006 to assess the environmental effects of EnCana’s proposed drilling project in the Suffield National Wildlife Area, has set the dates for public hearings into the project. The hearings will begin in Calgary on March 10, 2008 and in Medicine Hat on March 25. AWA is part of a coalition of groups jointly opposing any further drilling in Suffield National Wildlife Area, including the 1,275 wells proposed in EnCana’s application.

The hearings are open to the public – anyone who would like to observe and/or provide input may do so. To register to make an oral presentation and/or to file a written submission, contact Jeff Davis, JRP Secretariat, (613) 948-1362, [comments@SuffieldReview.ca](mailto:comments@SuffieldReview.ca). The deadline for written submissions and registration is February 18. For information about hearing procedures and submission criteria, go to the Joint Review Panel website: [suffieldreview.ca](http://suffieldreview.ca).

The Canadian Environmental Assessment Agency website states that when the Suffield National Wildlife Area (NWA) was established in 2003, “the site was recognized as having nationally significant environmental features which include the unique contiguous block of native prairie, sensitive dune habitat and a high density of species at risk.” Sixteen federal species at risk have been documented within the NWA. The environmental coalition believes that it is inappropriate to even consider allowing this level of intrusion in this nationally protected area of relatively undisturbed native prairie, one of the world’s most threatened ecosystems.

EnCana’s Environmental Impact Statement (EIS), released in May 2007, elicited a flood of responses, many of which revealed its inadequacy. In a December 13, 2007 letter to the Panel, the Department of Justice says that “the

federal authorities remain of the view, as stated in our letter of July 26, 2007, that the EIS including responses to the [Supplementary Information Requests] submitted do not adequately address the requirements set out in the [Panel’s] Guidelines.

The hearings will begin just six days after EnCana’s third court appearance on March 4, 2008 related to a charge of violating the *Canada Wildlife Act* for allegedly installing a section of pipeline in the NWA without a permit. The case has been adjourned twice, on December 6, 2007 and on January 17.

— Joyce Hildebrand

### **Petition to Auditor General about Athabasca River Pollution**

On January 7, 2008, Peter Cyprien of Athabasca Chipewyan First Nations, a member of Keepers of the Athabasca Alliance, filed a petition with the federal Auditor General. The petition notes the high incidence of rare cancers and autoimmune diseases in Fort Chipewyan reported by physician Dr. John O’Connor and summarizes a recent scientific study on water and sediment quality in the Fort Chipewyan area by ecologist Dr. Kevin Timoney.

Based on this research, the petition calls on the Minister of Fisheries and Oceans Canada to investigate whether the federal Fisheries Act has been contravened by the contamination of water, aquatic species, and sediments in the Athabasca River downstream from Fort McMurray and throughout Lake Athabasca. The petition also demands that Health Canada thoroughly research human exposure to contaminants from drinking surface water or consuming fish and wildlife in the vicinity of Lake Athabasca and the lower Athabasca River.

The mission of the Keepers of the Athabasca is to unite the peoples of the Athabasca River and Lake Watershed to secure and protect water and watershed lands for ecological, social, cultural, and community health and well-being. AWA supports the efforts of the Keepers and will keep our members informed of their activities.

— Carolyn Campbell



## FANTASYLAND ENGINEERING – TIME TO MAKE WAVES ABOUT McCLELLAND WETLANDS

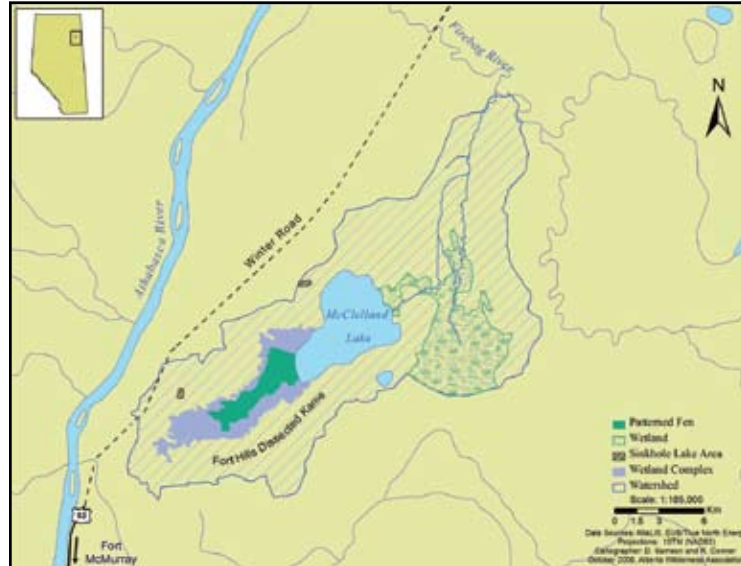
By Carolyn Campbell, AWA Conservation Specialist

**M**cClelland Lake and Wetlands Complex is located 90 km north of Fort McMurray, just east of the Athabasca River. Significant for its patterned fen features, plant biodiversity, and migratory bird habitat in its groundwater-charged peat wetlands, McClelland Wetlands was protected by a 1996 Integrated Resource Plan for the area. However, in 2002 this plan was amended by Alberta Sustainable Resource Development with minimal public consultation or environmental impact review to allow open-pit oil sands mining.

In the past months, activities of two major oil sands leaseholders – Petro-Canada to the west and Synenco to the east – are cause for heightened concern about McClelland Wetlands' future.

The Fort Hills Oil Sands Project, now owned by Petro-Canada, UTS, and Teck Cominco, was given Alberta Energy and Utilities Board (EUB) approval in 2002 to mine the southwestern half of the wetlands, putting the lake and entire northeastward-draining watershed at risk. The proviso to this approval is that a Sustainability Committee is required to develop a management strategy to sustain the unmined eastern portion of the wetland.

An important indication of the strategy that will be proposed has been revealed. In September 2007 Petro-Canada released its 2007 "Closure, Conservation and Reclamation Plan" (CCRP) for the Fort Hills project. This was a requirement of project approval. The CCRP's mining schedule section confirms that the south mining portion will open first, in 2011, and in the year 2021, mining operations will shift to the north mine area – where the McClelland Lake watershed will be affected. Interestingly, the north mine area is described as that part of the project where costs are highest and oil sands grade is lowest, begging the question why significant boreal peatlands are being



sacrificed for it.

Farther on in the CCRP, a Schedule of Reclaimed Area Extents outlines a fantasized timeline of reclamation activity for the 18,900-ha project. Starting between the years 2011 and 2020, reclamation unfolds efficiently in the alternate universe of this schedule: at no time will there be a net disturbance of more than 6,300 ha, it claims. By the year 2085, 77 years from now – as far from 2007 as was the year 1930 – the schedule concludes with a tidy “zero” net hectares disturbed: all is reclaimed. The note immediately below this Schedule advises: “The accuracy of the estimated disturbance area in the first ten years of bitumen production may be higher than the periods following. Net disturbance calculations through the life of the mine are thus subject to change.” Translated, this schedule is sheer guesswork.

From a wetlands preservation perspective, a noxious principle guiding this reclamation plan is that of “reclaiming land to an equivalent capability.” The CCRP envisages an engineered utopia after the year 2084 where constructed flood plains, constructed wetlands, and four constructed lakes replace the natural watersheds. “The total area that will be productive for forestry... will increase by

6,738 ha, largely due to the fact that significant portions of non-productive Class 4 and 5 soils will be reclaimed to Class 3 soils.... Class 5 wetland areas will see a decrease of 2,785 ha.” Yet it is precisely the intact groundwater-charged wetlands that provide the

prime wildlife habitat of the McClelland watershed today.

While the Fort Hills project poses the greatest threat to the McClelland watershed, AWA is also very concerned about drilling activity underway directly east of McClelland Lake. Synenco Energy Inc. is conducting another winter drilling season. Twenty core holes will be drilled on this lease, adding to the dozens already drilled. To date, drilling results on this eastern adjacent lease have not yielded evidence of high enough quality bitumen samples to proceed with mining plans. Even if this lease is not developed, however, the main road supplying Synenco’s approved Northern Lights mining project cuts through the northern part of the lease. The noise and pollution disturbance from travel to this large mining site and the increased ease of access to sensitive wetlands afforded by the road will increase pressure on the wetlands complex.

Please add your voice of concern about the future of these wetlands during this election season. There is no more likely time for those aspiring to political office to respond to public pressure: now is the time to make waves about McClelland Lake and Wetlands.



## NEW U.S.–FORT McMURRAY HIGHWAY PROPOSAL BAD NEWS FOR NATIVE PRAIRIE

By Joyce Hildebrand, AWA Conservation Specialist

A proposal to open the Wild Horse border crossing for 24-hour service and expand a north-south transportation corridor along the eastern border of the province would have dramatic negative environmental effects on the southeast corner of Alberta. The proposal includes expanding Highway 41, which extends from the U.S. border to just south of Lac La Biche, into a major corridor that would link the U.S. and Fort McMurray in order to transport heavy equipment to the tar sands via a route other than the existing corridor through the Coutts border crossing.

“The Cypress Hills-Sage Creek area is internationally significant as one of the largest and least disturbed blocks of mixed grassland on the northern glaciated plains of North America,” says AWA Vice-President Cliff Wallis. “If the proposal is approved, this landscape will suffer environmental impacts, with the local communities receiving minimal or zero economic benefit.” About 80 percent of Alberta’s species at risk are located in the southeast corner of the province – this is one of the largest concentrations of species at risk in Canada.

### Potential Effects on Wildlife

One of the many species at risk that would not welcome 24-hour traffic is the swift fox. Extirpated from Canada by 1938, this species was reintroduced in the 1980s, but the population remains small and the species is listed as “endangered” in Canada. The area around Highway 41 South is prime swift fox habitat, and according to the World Conservation Union (IUCN) status survey and conservation action plan, “Collisions with automobiles are a significant mortality factor for young animals [swift foxes] in some landscapes.” But swift foxes forage mainly at night, and with the Wild Horse crossing currently closed during the hours of darkness and night traffic on Highway 41 virtually non-existent, they are relatively safe at the moment.



The consequences of 24-hour heavy truck traffic would greatly impact this species, as well as the many other species at risk who rely on this area, such as the mountain plover, sage grouse, and burrowing owl.

“Many of these species are sensitive to human activity, and increased traffic will result in increased mortality of species at risk as well as alienation of habitat for many wildlife species,” says Wallis. The swift fox isn’t the only animal that often meets its end under the wheels of a truck. The prairie rattlesnake is listed in Alberta as “may be at risk” due to accumulated anecdotal evidence that the species is declining in the province. A number of reports on rattlesnakes have listed mortality associated with roads as a current threat to the provincial population (e.g., Alberta Species at Risk Report #76; Alberta Wildlife Status Report #6).

Species like mule deer and pronghorn would also be impacted if this proposal were approved. Recent research has revealed that pronghorn migrations are much more extensive than previously thought, and that migration is getting more difficult every year due to land development that is putting obstacles such as major roadways in the path of migration corridors (*Smithsonian*

*Magazine*, January 2007). In winter, pronghorns migrate into southeastern Alberta in huge numbers. Some of the possible routes being considered for the new Highway 41 corridor go through critical wintering pronghorn habitat, with great potential for disturbance, including road mortality.

### Provincial and State Support

Cypress-Medicine Hat MLA Len Mitzel has spent considerable energy pushing the crossing/corridor proposal forward over the last few years. His Motion 506 – passed unanimously in the Alberta legislature in April 2006 – proposed to “promote the use of Highway 41, up to and including Highway 63, from Wildhorse to Fort McMurray, as an alternate north-south transportation corridor from the United States.” The bi-national 14-member Wild Horse Border Committee was struck in November 2006 with the mandate to promote the 24-hour Wild Horse crossing. Co-chaired by former Mayor of Medicine Hat Garth Vallely and Havre Mayor Bob Rice, the Committee includes Mitzel, several southeastern Alberta mayors, and representatives from the Alberta Chamber of Commerce, the Palliser Economic Partnership, and the Economic Development Alliance of Southeastern Alberta.

On January 10, 2007, Mitzel led an Alberta delegation to Montana to attend a hearing of the state House Transportation Committee and voice support for the 24-hour crossing bill that was before the House of Representatives. The delegation included Canada’s Minister of Citizenship and Immigration, Monte Solberg. A month later, the bill was approved by the Montana Senate. A year later, on January 17, 2008, officials from Texas arrived in Medicine Hat to promote the crossing/corridor proposal.

Border crossings are a federal issue, however, and the U.S. Customs and Border Protection division of the Department of Homeland Security has reportedly said “that the number of

vehicles using the port doesn't justify any changes in the hours" (*Havre Daily News*, November 5, 2007). But the Wild Horse Border Committee is pushing forward: Medicine Hat Mayor Boucher informed AWA that the Committee will be meeting with Homeland Security later this spring.

The Committee is also lobbying Canada's Public Safety Minister, Stockwell Day, whose department is responsible for border crossings. According to the Alberta Chamber of Commerce website, "The minister's first response noted a lack of resources to address the issue, but a subsequent letter opened the door to working with the regional director towards the goal." Mayor Boucher told AWA that Minister Day has conveyed in a letter to the Committee that his department is considering a review of the proposal.

### Another Oil Sands Highway

When AWA spoke with Mitzel, he insisted that "there would be no need to upgrade at all" because semis already use the highway. The current highway, however, was not built to accommodate the amount of truck traffic that is expected to use this corridor should the proposal be approved, and more truck traffic is exactly what the proposal is about. On the same day AWA interviewed Mitzel he was presenting the proposal's merits to truckers: he spoke at the January 17, 2008 monthly meeting of the Alberta Motor Transport Association (AMTA) to provide "further insight into the business case to support a 2nd North-South Corridor 24 hour Border Crossing within Alberta" (AMTA Agenda). AMTA represents all sectors of the highway transportation industry, including truckers. Furthermore, when Mitzel presented his Motion to the legislature in 2006, he stated: "Highway 41 has relatively low traffic volumes and can therefore support *an increase in traffic by these heavy, wide, and slow-moving vehicles*" (*Hansard*, April 10, 2006; emphasis added).

According to the *Havre Daily News*, "The [Wild Horse Border] committee also wants to change the port, now open to commercial traffic only by permit, to commercial status, which would allow trucks to cross at the port without needing a special permit" (November 5, 2007). Senator Jon Tester, when he introduced the new crossing legislation



*The swift fox is one of the many species at risk that will suffer increased mortality if Highway 41 becomes a major truck corridor to the oil sands. C. WALLIS*

in Montana, emphasized "the need for a second 24-hour port as Alberta develops its Oil Sands region. The project requires heavy machinery to cross the border" (*Helena Independent Record*, November 6, 2007). Obviously the primary intent of the proposal is to accommodate a large increase in heavy truck traffic.

Discussion with the Minister of Infrastructure and Transportation has already taken place. Jerry Lau, an Alberta Infrastructure planning engineer, told AWA that feasibility studies for upgrading and realigning Highway 41 are in process: "If the port becomes 24 hour, we would look to see what kinds of upgrades are necessary."

There has been talk of a variety of possible routes for the new north-south corridor, using Highway 41 in conjunction with other less used roads in the area, including Highway 501 and the Black and White Trail (see map). This would prevent trucks from having to go over the Cypress Hills.

A December 2006 Medicine Hat Chamber of Commerce article waxes enthusiastic about the corridor/crossing proposal, "with a focus on heavy truck traffic shipping oil and gas supplies north to the oil sands." The smaller rural communities in the area may have a very different perspective: does the prospect of 24-hour heavy truck traffic through their previously quiet communities fill them with enthusiasm for the project? Even if only half of the 2,000 trucks per day that go through the existing 24-hour crossing at Coutts decided to use the new route, quality of life for both human and non-human communities would be eroded.

Upgrading the roadways in this corner of the province to accommodate

24-hour heavy truck traffic would be phenomenally expensive. Albertans need to consider whether they want their taxes to pay for infrastructure that may benefit a small minority and will have large, irreversible environmental and social costs. If nothing else, we must demand a full economic analysis, including the costs to prairie ecosystems and wildlife, the local communities, and average Albertans. "Logical north-south transportation routes already exist via the Coutts/Sweetgrass border crossing within less sensitive landscapes," argues Cliff Wallis. "These should be emphasized rather than increasing traffic and disturbance within environmentally significant areas."

AWA encourages you to express your views on the proposal. Write to Alberta's Minister of Infrastructure; your MLA and MP; MLA Harry Chase, Shadow Minister for Infrastructure and Transportation; and federal Minister of Public Safety Stockwell Day.

On January 29, 2008, the Government of Alberta released its "20-Year Strategic Capital Plan to Address Alberta's Infrastructure Needs." Among the "Medium-Term Plans and Priorities" are the following:

- Reconstruct Highway 41 at Cypress Hills Provincial Park southwest of Medicine Hat to meet current highway standards and to ensure traffic safety and operation
- Help facilitate a 24-hour port-of-entry at the Wild Horse Border Crossing on Highway 41, at the Alberta-Montana border south of Medicine Hat



## BIGHORN USERS SEEK BETTER MANAGEMENT TO PROTECT WILDERNESS VALUES

*By Chris Wearmouth, Conservation Specialist*

Backcountry recreationists are hoping for better management to protect the pristine wilderness of the Bighorn, according to a recent survey of users in the area.

Last summer, Alberta Wilderness Association (AWA) surveyed individuals and organizations active in the Bighorn to find out where Albertans' values and concerns lie when it comes to enjoying this magnificent mountain and foothills region in the west-central part of our province. The survey results show that almost half of the individuals and a third of the organizations believe that the most important goal for the future of the Bighorn is protection of its natural, wild character. Management issues topped the participants' list of current and future topics to be addressed, followed by issues of access, including access by motorized recreationists.

"Unless the regulators make a serious effort to protect the Bighorn, it will be lost as a valuable asset for Alberta, Canada and the World," wrote David Hatto of Wandering Waters Canoe Tours, which operates heritage canoe trips and winter adventures in the Bighorn.

The wilderness character of the Bighorn and its importance to Alberta's watersheds has long been recognized by the people of this province. Lying just east of Banff and Jasper National Parks, much of the Bighorn was designated as Prime Protection and Critical Wildlife Zones in the Government of Alberta's *Eastern Slopes Policy*, which included extensive public consultation. Its numerous rivers bring water to more than a million Albertans while the 7,000 km<sup>2</sup> of surrounding lands provide extensive and relatively intact habitat for mountain and foothills wildlife.

The area presently maintains its ecological integrity primarily because of a lack of development and an absence of roads. In 2002 a new management strategy was implemented with the designation of six Forest Land Use Zones



*AWA volunteer Stephanie Whitehead surveys a couple enjoying the Bighorn.*  
C.WEARMOUTH

(FLUZ) and the naming of the "Bighorn Backcountry." Each of these six FLUZs covers a specific geographic location and comes with its own regulations and permissible activities. The name itself is merely a convenient moniker and does not provide protected area status.

Following the designation of the FLUZ system, AWA began conducting trail monitoring research in the Bighorn area. It wasn't long before we recognized the need for an informed body of knowledge about the area's primary users – recreationists looking

for a wilderness or backcountry experience. From May to September of 2007, the survey was conducted through on-the-ground solicitation at campgrounds, trails, and other gathering places for people enjoying the area. This was complemented by mailouts to organizations and AWA members in the area.

The individual participants, whose names were not required in the survey, came from a wide background, ranging from those on their first trip to those having spent more than 50 years in the area. They represented many different user groups from motorized recreation to climbing. Likewise, the organizations contacted represented different interests, including recreation clubs, hunting, and equestrian outfitters, as well as campgrounds, lodges, and outdoor education groups. In total, 158 individuals and 22 organizations representing groups ranging in size from a single operator to more than 9,000 members responded to the survey.

The individual survey shows that by far the largest group of users believe the priorities for the Bighorn are pristine wilderness and fish and wildlife habitat. Echoing this opinion, organizations also ranked these priorities as being in the top three, adding as their number one priority the area's importance as a source of clean water. "This valley has the opportunity to become a prototype for land use/water planning if done in the near future,"

### AWA's VISION FOR BIGHORN



The Bighorn area contains wilderness that must be given Wildland Park designation according to the boundaries delineated in 1986 by Minister Don Sparrow. Protection must ensure, in perpetuity, the security of the Bighorn's wild land, wildlife, and wild waters. Wildland Park status must preclude motorized access. The adjacent Bighorn area east of the Wildland Park must be managed to the highest standards of practice by all who use the area including industry and recreationists.

wrote Jeff Wilson, owner/operator of Klondike Ventures, a local adventure tourism company.

At the top of the list for changes that people wish to see in the Bighorn now and in the future is the issue of managing effectively for these priorities. “Wake up, Alberta government, the Bighorn is a world-class destination,” wrote one survey participant. “In any other country or province, the Government would invest in, and manage for sustainable uses, a jewel like this.”

Other issues identified as important under “management” are more enforcement of rules, the creation of a management plan, and improved trail management.

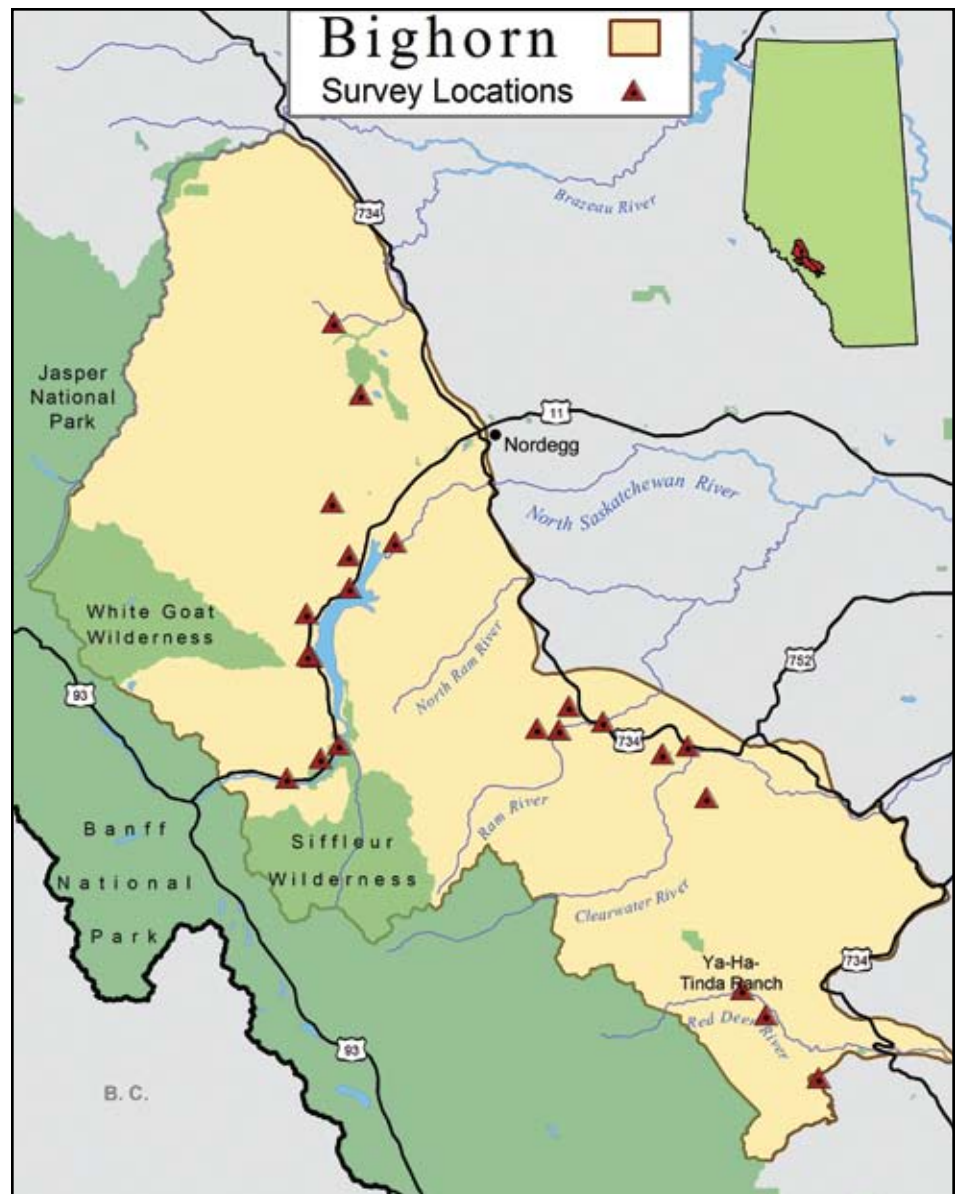
Second to management was a concern among individuals and organizations about access to the area, most often in regards to motor vehicles including off-highway vehicles (OHVs). As another respondent wrote, “I wish our government would have the vision to see that motorized vehicle use is going to eventually destroy the wildness of this area.”

In the December 2007 issue of the *Wild Lands Advocate*, we reported this year’s findings of AWA’s Bighorn traffic monitoring project: the volume of traffic and illegal activity along the trail system near the Hummingbird Forest Recreation Area is increasing. It is highly questionable whether this intensive use by high-impact recreation is suitable for an area that has been designated Prime Protection and houses the drainage for the Ram River, one of the major tributaries of the North Saskatchewan River.

However, a proportion of those surveyed felt that wilderness values have to be balanced with allowing access to the area for all user groups. One individual noted that “things always get better when there is a need or want to use them,” adding that OHV users should be included in the future of the Bighorn.

While there are hopes of balancing wilderness values with access, and voices in favour of motorized recreation within the Bighorn, most who provided their views on the subject saw the need for OHV use to be prohibited or limited in order to protect the natural character of the area.

AWA’s vision for the Bighorn is supported by the outcome of this survey. As the results show, many of



*Map of the Bighorn showing the boundary of AWA’s Area of Concern and locations of the on-the-ground survey*

those who are active in the Bighorn want the area to be managed for wilderness and conservation values. AWA believes that this would be best done through the creation of a Wildland Provincial Park with boundaries that follow the general outline of the Prime Protection and Critical Wildlife Zones. With the addition of an appropriately administered transition zone to the east of the proposed park, the interests of motorized recreationists and industry could be balanced in the Bighorn with the priorities identified in the survey.

In fact, an equivalent protected area was promised by the Government of Alberta in 1986. Officials went so far as to identify the area on government maps, but the legislation was never put in place to fully protect the area; the plans for

protection were eventually replaced by the current FLUZ system. It is our hope that this survey will be part of the process that will lead to the belated fulfillment of this promise. The future of the Bighorn depends on many longstanding policy challenges that need to be resolved by Albertans. If not confronted, these issues will continue to slide and we could lose one of our province’s great wilderness areas. And as one respondent said, “Once it is gone, it will be gone forever.”

The complete survey report, “Recreational User Perceptions of the Bighorn,” is available on our website. For an in-depth look at the Bighorn, read the August 2007 issue of the *Wild Lands Advocate*, available at [www.AlbertaWilderness.ca](http://www.AlbertaWilderness.ca).



## EVALUATING RECLAMATION SUCCESS IN THE CASTLE

By Reg Ernst

*Twenty years ago, Shell Canada announced its plans to drill for gas in the Prime Protection Zone on top of Prairie Bluff in the Castle region of southwestern Alberta (see Wild Lands Advocate, June 2006). During public hearings in 1987, Shell committed to revegetating some of the disturbed areas adjacent to the well sites, including an old truck trail that had been used to service a communications tower on Prairie Bluff peak. Reclamation of this trail was completed in July 1991. Botanist Reg Ernst conducted research with AWA to determine the success rate of the reclamation.*

The old truck trail under examination starts in the lower subalpine, winds through the upper subalpine past Waterton #52 well site, and terminates in the alpine area on top of Prairie Bluff peak. In the upper subalpine, the trail splits into two separate, parallel disturbances (braids). The alpine portion above the well site received no active reclamation treatments. Both portions of the trail in the upper subalpine (adjacent to Waterton #52) were seeded with 40 lbs/acre of a grass mixture, including two non-native fescues, three native wheatgrasses, and native alpine bluegrass. The west braid also received 200 lb/acre of fertilizer.

Since the seeding, no monitoring has been done to evaluate success. This article summarizes the results of field sampling done in 2007 to evaluate the success of this seeding project completed in 1991, and compares reclamation to the natural revegetation of the nearby linear disturbance in the alpine on Prairie Bluff.

### Subalpine Site with Treatments

Five 30 m linear plots (transects) were surveyed for each of the three sites (two treatment sites plus an adjacent undisturbed site) and cover data were collected from ten 20 cm x 50 cm plots (0.10 m<sup>2</sup> quadrats) for each transect. Canopy cover for each species occurring

within each quadrat was estimated using cover classes.

Of the six grass species seeded on the disturbed sites, only the fine (non-native) fescues (sheep and hard fescue) were observed on the study area (apparently the wheatgrasses and the alpine bluegrass failed to establish). Canopy cover of fine fescues was 7% higher on the fertilized site compared to the seed-only site (19% versus 12%) and 15% higher compared to the undisturbed site (19% versus 4%). The higher cover of fine fescues on the fertilized site may be a result of the fertilizer treatment or it could be from other factors such as degree of exposure, amount of moisture, and relative amount of disturbance.

Total canopy cover including grasses, forbs, shrubs, sedges, and club-moss cover was also higher on the fertilized site (36% versus 21%), but again it could be environmental rather than treatment factors. Rough fescue and Idaho fescue were the only fescues observed on the undisturbed site, with the highest total canopy cover at 41%.

### Alpine Site with No Treatments

The portion of the old truck trail above the well site was abandoned in the late 1980s and allowed to revegetate naturally. It has since received some hiker and horse use, as well as occasional motorbike use violating the access management plan. The substrate both on the old trail and on adjacent undisturbed areas is mainly scree and cobbles. Most of the study area of about 1,500 m in length is exposed to the harsh, windy alpine conditions on Prairie Bluff.

A series of step point transects (linear plots) were walked both on the old trail and on transects running parallel to the trail (control). Four hundred data points

(sub-plots) were collected for both the disturbed area and the control. The data were then categorized and summarized as follows: scree (includes rock and bare ground); forbs; graminoids, including Idaho fescue, northern smooth brome, rough fescue, sedges, and Scribner's wheatgrass (*Agropyron scribneri*); shrubs; club-moss; lichen; and litter.

Scree was highest on the disturbed site (84% versus 57% for the control site) while total cover on the control site was 35% versus 16% for the disturbed site (Table 1). Two plants on the Alberta Natural Heritage Information Centre (ANHIC) list of rare plants were observed on the study area: Scribner's wheatgrass and alpine townsendia (*Townsendia condensata*).

Although soil development is lacking on the disturbed site, the very coarse substrate may reduce erosion while providing safe sites for plants to become established. About 20 years after the truck trail on Prairie Bluff was abandoned, the disturbed area is revegetating naturally without any human inputs. This shows that, given time and in the absence of non-native plants, narrow linear disturbances will revegetate naturally. Fortunately, alpine systems are still relatively pristine because conditions there are too harsh for non-native plants. Global warming could change that, however. Future restoration projects in the alpine may require inputs of resources to promote recovery of native species while controlling invasive species.

*AWA appreciates the support of Shell Canada for the research we are conducting in the Castle area on reclamation.*

Ground cover values on the Prairie Bluff alpine site

Site	Scree	Forbs	Graminoids	Shrubs	Clubmoss	Lichen	Litter	Total Cover
Disturbed	84%	13%	2%	1%	0	0	0	16%
Control	57%	21%	4%	4%	5%	1%	8%	36%



### Public Lands Access – A Rancher’s Perspective

I support AWA in most of their actions and always enjoy reading the *Wild Lands Advocate*. I do, however, have a different opinion on the subject of Crown grazing leases than the one expressed in “Locked Out” (October 2007).

I speak as someone who walks both sides of the fence. I hold a Crown grazing lease, and I also enjoy recreation that leads me to seek access to other leases. Some neighbours allow me access to their leases, while others do not. I’ll be honest. I am not happy about being denied access, but I think the rancher’s perspective on this issue needs some explanation.

Public authorities have retained ownership of many resources while allocating certain privileges in exchange for obligations. There is a long list of “public” assets where some enjoy rights that the remaining 30 million or so don’t. The authority entrusted with public housing, public schools, and military bases, for example, may exclude activities they consider incompatible with that use. I am therefore not allowed unrestricted access to apartments in public housing projects or to army bases.

Even without accessing them for recreation, the public benefits from agricultural leases. Wildlife enjoys habitat that might otherwise be compromised. Fire hazard to neighbouring properties is reduced by the grazing of tall grass. Albertans enjoy high quality food at low cost, produced sustainably and locally. Lastly, the public benefits from the services of a custodian, who not only is required to maintain the land to a set standard, but is obligated to pay the province rent and the municipality property taxes.

If the leaseholders are not empowered to exercise reasonable control of the lands under their care, who will be? Will it be conservation officers, who are already incapable of effectively policing the Green Area of the province? Ms. Hildebrand’s faith in the public’s wise and respectful use of the land might be shattered were she to visit



*Public lands along the South Saskatchewan River* N. DOUGLAS

McLean Creek or Indian Graves on a long weekend. Indeed, many *Wild Lands Advocate* stories chronicle the abuses of an unthinking public on a fragile land. Somebody must decide what access is reasonable, and they must be close enough and care enough to enforce it. If not the leaseholder, who?

It is the leaseholder who will be rounding up livestock that escape through the gate left open, who must clean up the garbage from the people who couldn’t quite make it all the way to the dump, and who are left without pasturage when a carelessly tossed cigarette starts a grassfire. This is not a relationship of equal risks. The non-leaseholder might have to go elsewhere for recreation when confronted by a rude or inconsiderate rancher. The leaseholder, on the other hand, has his entire livelihood endangered by inconsiderate people accessing the land.

Reconciling the interests of the “public,” which is populated by both sages and idiots, and my desire to preserve and protect land I hold dear is no easy task. What is the answer? I tried posting “Use Respect” signs by all gates giving access to my lease. The signs all disappeared within a year, perhaps by natural forces, although I can’t help but think that there are people who found the concept of using respect to be offensive.

I would encourage all AWA members to think of the leaseholders as volunteer wardens who do it for love of the land and the small economic benefit from grazing livestock on it. In so many ways

we share the same objectives and are infuriated by the same transgressions. Like all agents of the Crown, some are better, more approachable, and more accommodating than others. But the only way that a responsible hiker, rider, or hunter can distinguish him or herself from the brainless variety is by making personal contact. Without that, you are likely to be viewed with suspicion and hostility. At 300 yards you look a lot like that guy who made a huge mess last year.

— Neil MacLaine, Bragg Creek

### Business As Usual Not an Option on the Eastern Slopes

*This letter is an edited version of a response to a meeting on December 3, 2007 at Chain Lakes between the Energy and Utilities Board (EUB) and interested stakeholders concerning a proposed “pilot project” for further oil and gas development along the Eastern Slopes. This pilot is universally unpopular amongst landowners and environmental groups. William Tilleman was the EUB chair at the time of the meeting.*

Dear Mr. Tilleman,

When Bill Newton (South Porcupine Hills Stewardship Association) asked just who is meant by the public in “public interest” or Gordon Cartwright (Pekisko Group) spoke about the diametrically opposed perspectives of regenerative practices (ranching, food production) as against extractive (mining, oil and gas) or John Lawson (Livingstone Landowners’ Group) articulated the inanity of trying

to slough off people's concerns as being somehow merely "emotional responses," a deeply rooted point was being made, a point stubbornly and consistently missed, or perhaps willfully ignored, by those who govern the hydrocarbon industries in this province.

How can we make it any simpler? We are threatening the very lifeblood of not only the southern Eastern Slopes of the Rocky Mountains but increasingly the biosphere of the planet itself. Surely prudence is the order of the day. Surely some more comprehensive understanding of the overall cumulative effects of anticipated human activities is called for, and "business as usual" is no longer even a distant option.

When we look up the chain of command of agricultural practices, especially those we refer to as sustainable or regenerative, we pass through the various levels of regulatory apparatus and legislative bodies and arrive, finally and absolutely, at the seat of Nature itself. The capital investment that is used as collateral for these activities is cyclical and governed by the rotating seasons and the capacity of the earth to process solar energies into food – a fantastic and marvellous thing. Increasingly we are realizing that by jeopardizing this capacity, we jeopardize the very foundation stone of our well-being. This is a fragile fabric that can be torn in many ways. It is a fool's game to target those who express concern for this as being in any way "unrealistic." Quite the opposite. Such people are being hyper-realistic.

Bill 46 has just about made people crazy. That's your boss who threw that firecracker into the movie theatre. How contemptuous! And how transparent! There's a job to do, Energy Minister Knight is saying, a Big One, which is getting the appropriate energy sources out into the marketplace where they can be accessed accordingly by the engines of the economy. Clearly the thing to do is get the wild card (aka the people of Alberta) out of the mix and get on with the job in the capable hands of the folks who know best, our betters uptown who have a much more professional and grown-up regard for how the world works. How patronizing! How sad! What a sorry state of affairs. And what a troubling commentary on the state of our democracy.

We simply do not believe that your hands are tied. Go to your bosses and share with them what you must surely know. The regulatory capacity of the EUB has become a sham, a hollow reflection of what it was meant to be as so clearly articulated by EUB Information Letter 93-9. Nobody ever said any of this was going to be easy but there is nothing easy about good stewardship. The extent to which you disregard the interests of those who most love this land is directly and inversely proportional to the success of our universal venture – none other than our survival in this beautiful and troubled world.

Please embrace your mandate. It's a worthy one. Reference was made last night to your having inherited a poison chalice. Get rid of the damn thing. But don't offer it to us. We're sick of swallowing all this bile.

Respectfully,  
*Phil Burpee*

#### **What Should We Protect?**

"What Shall We Defend" (*Wild Lands Advocate*, December 2007) is a cleverly worded but illogical attempt to rationalize hunting. Most opponents of hunting are so because of relentless overhunting that is not based on scientific population studies by independent third parties. The lack of funding for quality, independent research is inexorable, especially in Alberta, where the vast wealth of oil and natural gas revenues easily enable governments to fund studies and apply high quality conservation measures. We should be alarmed by the massive lack of scientific information due to governments failing to properly fund their own biologists, other scientists, universities, and conservation groups to determine and assess wildlife populations, habitat conditions, and mortality issues.

Killing and removing wildlife unbalances the natural predator-prey relationship, removes vital eco-system fertilization-pollination, introduces manmade chemicals into pristine eco-systems, and reduces the possibility of seeing wildlife alive in its natural habitat. Every prey animal killed by humans deprives a natural predator of essential food, while destroying predators prevents natural checks on wildlife prey populations. Hunting is no substitute for natural predators because humans

seek the healthiest animals, whereas natural predators kill the weakest, often taking out diseased animals before they infect others.

Governments must better defend long-term wildlife conservation over short term economics and re-election pandering to hunters concentrated in rural areas. Hunters must be willing to give up short-term pleasures to allow wildlife populations to recover and be scientifically studied to ensure long-term healthy wildlife populations. Public lands managed by government provide wildlife habitat areas that should not be privatized.

To amend our unbalancing of Nature, hunting should only be allowed every two or three years when wildlife populations (including predators) have recovered to healthy levels. "Recovery seasons" would enable animals to breed and mature so populations could recover to more healthy natural predator-prey balances. At the very least, across the province, hunting regions should be divided in half to give wildlife a local safe haven with safe access to food and water. Hunting for animal trophy heads, horns, or other body parts (bear gall bladders, pelts) should be banned.

Wildlife is vanishing worldwide. It will be the eternal shame of government and irresponsible hunters that the few remaining stands of pristine wilderness and the wildlife therein are destroyed forever simply to kill because one is given a legal right to do so. We must ensure a positive future with abundant, healthy wildlife in their natural habitats. It is clear that if we leave hunting management to hunters and the Government of Alberta, wildlife populations will continue to decline.

– *Dan Onischuk, Edmonton*



© D. ATFIELD

# ROCKIES DRAW WILDLIFE ARTIST TO ALBERTA

By John Geary



Artist David Atfield

Ever since he can remember, David Atfield was wandering around in the woods and fields, enjoying nature. The Magrath artist turned that love of nature into artwork, also at a very early age. “I started drawing comics in Grade 3,” Atfield says. “I turned to painting when I was about 12.”

That was when he decided to concentrate on depicting the natural world. Growing up in Brantford, Ontario, he found he could relate to the birds and animals he encountered while enjoying his sojourns in nature.

Atfield did not take much formal training, but he did rely extensively on books to learn about how to paint: in particular, how to paint wildlife. Although he works mainly in oils, he also paints with acrylics and watercolours. Because many of his paintings are very large, he finds that oils work much better, as some colours do not always come through as well in acrylics. He tends to do his smaller works, especially when the subject is small birds like chickadees, in watercolours.

Other interests drew him away from painting during his adolescence, but once he was married and working full time, he picked up his brushes and began to paint again. At that time, he did not sell many paintings; instead, he gave many away.

That has changed, and he now sells both commissioned paintings and those that are based on subjects of his own choice.

After his sabbatical, Atfield found that the more he immersed himself in painting, the more interested he became in painting birds, especially raptors. “I love the shape and symmetry of falcons,” he says. “I’ve painted many of those.”

He also loves grizzly bears. When he retired and moved from Ontario to Alberta in 1983, he had the opportunity to see them in the wild and capture them on film and in his paintings. Initially, he had to overcome his fear of bears in the wild. “When I came out to Calgary, I had a bear-phobia,” he says. “But as soon as I started taking pictures of them, I realized what they’re really like. They’ll leave you alone most of the time.”



© D. ATFIELD

One of his most memorable wilderness experiences involved a berry-munching bear he met during a hike in Kananaskis. He started taking pictures, but almost had a close encounter of the ursine kind when the bear noticed he was not alone. “He started coming towards me. I began to back up and I tripped,” Atfield says. “I thought that was it. But the bear stopped when I fell, and believe it or not, I laughed a bit, and was able to get up and get out of there, and he went

back to eating berries. He was more interested in them than me.”

Another of Atfield’s more memorable experiences involved literally seeing the world from a raptor’s-eye view. “One time, I climbed up into a golden eagle nest, abandoned at the time, and got to see what it looked like from up there.” He has also observed golden eagles in the nest from close proximity.



© D. ATFIELD

His move to southern Alberta resulted from a visit with his daughter in Calgary in 1981. Like many who see them for the first time, Atfield fell in love with the Rocky Mountains. He decided to move out west permanently two years later so he could experience their majestic beauty and wonder on a regular basis. “I’d seen them on TV so often, but I’d never been near any real mountains and I was really attracted to them. The wildlife here is phenomenal compared to what I experienced back in southern Ontario.”

Along with the joy of painting nature, Atfield also derives a great deal of satisfaction from helping other people connect with nature through his artwork. “People always ask me about the birds I’ve painted,” he says, “and I enjoy talking to them about that, explaining things to them.”

When it comes right down to it, though, the joy of experiencing the wild keeps Atfield searching for more nature to paint. The love of that experience continues to call to him, and even after 75 years, he never tires of answering that call. “The colours, the shapes, the wind and the sun, and the isolation of it, with all these wild creatures – I really love being outdoors, photographing them. It’s the height of living. I never tire of it.”

## ADOPT-A-PLANT ALBERTA LAUNCHES ITS THIRD FIELD SEASON

By Kelley Kissner

From Medicine Hat to Fort McMurray, Albertans are keeping their eyes open for rare plants and collecting information to help conserve Alberta's biodiversity. These individuals are volunteers for Adopt-a-Plant Alberta, a program that trains plant enthusiasts to identify and record observations of rare native plants in the province. "I loved every minute of it," says Sharon McGonigal, a volunteer from Edmonton who took part in a 2007 workshop. "I had my eyes opened to a whole new exciting world."

The program was founded in 2005 by professionals from the Alberta Native Plant Council, Alberta Natural Heritage Information Centre, Alberta Species at Risk Program, Northern and Prairie Plant Diversity Centre, Federation of Alberta Naturalists, and an independent lichenologist. These individuals were concerned about the large number of plants considered rare in Alberta but about which there was insufficient data to determine whether they were at risk of decline or loss. Until data are available, these species will receive little attention or protection.

Volunteers "adopt" one or more rare plants that occur close to their communities or in areas where they are likely to venture during the summer. They search for new locations of their adopted species or monitor the species



*Adopt-a-Plant volunteers counted western spiderwort plants in the Pakowki Lake Sand Hills near Medicine Hat in July 2007. L. MATTHIAS*



*Professional botanist Dana Bush (centre) training volunteers at a technical workshop in April 2007. K. KISSNER*

at locations where it has been previously recorded. Robert Grey, a volunteer from Fort McMurray, has been with the program since 2006. "The main satisfaction I get in doing all this," he says, "is being part of a large program aimed at preserving the biodiversity of our natural world."

Several group field events occur each summer to allow volunteers to assist resource management agencies, private stewardship organizations, and plant-species-at-risk recovery programs with specific conservation or habitat stewardship initiatives. In 2007 events included a rare plant survey of a Nature Conservancy of Canada property and population surveys of at-risk species, including western spiderwort, western blue flag, and tiny cryptanthe.

Data collected by volunteers are provided to the Alberta Natural Heritage Information Centre (part of NatureServe), which stores information on Alberta's plants and animals. Here the data are made available to resource managers for use in formal conservation status assessments, and to land users for flagging locations of rare plants in order to mitigate potential effects of developments.

There is no fee to join the program and training is provided to volunteers through their participation in a technical workshop hosted each spring (one in northern Alberta and one in southern Alberta). Professional botanists and resource managers donate their time to train volunteers to identify and survey for their adopted species, to learn how to use a GPS and maps, and to learn about field safety methods.

In its first three years, the program has received financial support from the Government of Canada Habitat Stewardship Program; Alberta Sport, Recreation, Parks and Wildlife Foundation; Alberta Sustainable Resource Development; TD Friends of the Environment; and Shell Canada. The program also receives a tremendous amount of logistical support from professional botanists and resource managers, and from a wide variety of resource management agencies, conservation organizations, and private land stewardship organizations.

Adopt-a-Plant Alberta is set to launch again in April 2008 and welcomes new and past volunteers. Dr. René Belland, Chair of the Adopt-a-Plant Alberta Steering Committee, insists that "the program is open to anyone with a keen interest in native plants." Since rare plants occur throughout Alberta, the program needs the support of individuals across the province. For more information or to join a mailing list to receive updates on when registration will begin and when/where training workshops will be held, please contact Kelley Kissner at (403) 313-3138 or by email at [kkissner@afhe.ualberta.ca](mailto:kkissner@afhe.ualberta.ca). Information is also available on the program website at [www.ab.adoptaplant.ca](http://www.ab.adoptaplant.ca).

*Kelley Kissner is the program coordinator for Adopt-a-Plant Alberta. A biologist by training, she has worked on initiatives involving rare or at-risk species in Alberta for the past eight years. Kelley lives and works in Calgary.*

### **AWA's Board of Directors**

At the November 17, 2007 Annual General Meeting, AWA's board was elected. The board members and executive are the following:

President, Heinz Unger  
1<sup>st</sup> Vice-President, Vivian Pharis  
2<sup>nd</sup> Vice-President, Cliff Wallis  
Secretary/Treasurer, Jim Campbell  
Past-President, Richard Secord  
Director, Frank Calder  
Director, Hyland Armstrong  
Director, Owen McGoldrick  
Director, Ian Urquhart  
Board Member Emeritus, Herb Kariel

### **Masters of Teaching Extends AWA's Mandate**

Since 1999, close to 20,000 school children have benefited from classroom presentations as part of AWA's involvement in the University of Calgary's Masters of Teaching (MT) program. Fall 2007 marked the ninth year of AWA's involvement as a Community Placement organization in the program.

The 19 new student teachers hosted by AWA in this year's program had a wide variety of educational backgrounds, from kinesiology to music to drama.

But for their placements with AWA, they became immersed in conservation. They spent the first two days of their 10-day placements at the AWA office, learning about "Alberta's Watersheds: The Source of our Water." For the remainder of their placements, they formed into groups and traveled to schools throughout Calgary and the surrounding area to deliver classroom presentations based on this theme.



*Masters of Teaching students play a major role in AWA's outreach and education work.* N. DOUGLAS

The student teachers presented the information to a wide range of ages in a number of different schools. "I got the opportunity to practice teaching in a variety of different classroom settings, from Kindergarten to Grade 9," says MT student Jennifer Foisy. The students' challenge was to adapt their teaching techniques to these different audiences while helping them learn some important concepts about watersheds.

The MT program allows AWA to contact more children than our limited resources would otherwise allow; at the same time, it provides a valuable opportunity for student teachers to develop their teaching abilities with children of different ages in a variety of school settings. "By allowing me to plan and implement a lesson, AWA has given me the opportunity to become a more confident teacher," says Foisy.

AWA hopes that school children, student teachers, and classroom teachers will benefit from these presentations for many years to come.

— Nigel Douglas



AWA FILES

On February 2, 2008, we were thrilled to join with friends and colleagues to honour Martha Kostuch

## CELEBRATING MARTHA KOSTUCH

at a reception in Calgary. Some call her an eco-warrior; others, a mentor. She is phenomenal, inspirational, and there is no doubt in anyone's mind that she has been a visionary and successful activist in a league of her own through the past four decades. While Martha's health is failing, her ability to inspire us and to challenge us to continue making a difference and to stand tall in our vision of wild Alberta has never been stronger. She is a dear friend and will be sorely missed. As we search the records in our Wilderness Resource Centre, reviewing the history and learning about the ideals that have shaped

our thinking, Martha's presence and influence is well documented. AWA is proud to recognize Martha for all she has done and for the legacy she leaves to those who will carry on her work. In her honour, AWA has renamed our annual lecture the *Martha Kostuch Annual Wilderness and Wildlife Lecture*. As this event always challenges our thinking and our actions, this is a fitting tribute for someone who has challenged all who know her.

— Christyann Olson

## EVENTS

### TUESDAY TALKS

*Pre-registration is advised for all talks.*

Location: AWA Office,  
455 - 12 St. NW, Calgary

Time: 7:00 - 8:30 p.m.

Cost: \$5 per adult, \$1 for children

Contact: (403) 283-2025

1-866-313-0713

Or register online:

<http://shop.albertawilderness.ca>

Tuesday, February 19, 2008

#### **On Wolverine Conservation: A Letter from a Naturalist to His Colleagues**

*With Jonathan Wright*

Don't miss this unorthodox glimpse inside the world of a legendary and fascinating animal – and the scientists and fur-trappers who chase it. Jonathan Wright, fur-trapper, falconer, singer-songwriter, writer, fitness instructor... the list goes on... will also explore some interwoven solutions to what he sees as our current conservation and social crises.



J. WRIGHT

Tuesday, March 4, 2008

#### **Oil Sands Development: An Unnecessary Evil**

*With Dr. Noel Keough*

Our urban lifestyles and urban planning decisions drive oil sands development, so how can we organize Calgary differently and craft more fulfilling lifestyles so tar sands extraction can become an unnecessary evil? Join us for an informative and challenging evening as Noel Keough, Assistant Professor of Sustainable Design at the University of Calgary and Senior Researcher with Sustainable Calgary Society, leads us to some solutions.



A. FRANKE

Tuesday, March 18, 2008

#### **Fantastic Falcons**

*With the Peregrine Project*

For the past few years, a breeding pair of peregrine falcons has lived atop a University of Alberta building, raising chicks under the eyes of three webcams and millions of online viewers. Every step in their life cycle is recorded, from the laying of eggs, to hatching, to feeding, to fledgling, to migration. Learn more about the biology, history, and success of these charismatic creatures from the project participants (the people, that is) at this interactive presentation.

Tuesday, April 8, 2008

#### **Bulldozers, Bio-Invasions, and Birdhouses**

*With Andrew Stiles*

The explosion of non-native invasive plant species is turning the Calgary region into the heart of new Mongolia. We face profound challenges to the continued survival of the diversity of species we have enjoyed until now. What is the answer? Come for a look at how our landscape is changing and to be encouraged by the grassroots efforts underway in this province. But beware – Andrew's enthusiasm for pulling weeds to give native species a hand up is infectious!

### WINTER HIKE

Saturday, February 23, 2008

#### **Sheep River Valley:**

#### **A Guided Winter Hike**

*With Nigel Douglas*

We tend to do much less hiking in the winter, but winter hiking has much to offer. Snow-covered mountains offer a spectacular backdrop; animal trails criss-cross the landscape, waiting for those who know how to read them.

The Sheep River Valley, west of Turner Valley, is a forgotten corner of Kananaskis Country, but a stunning area, particularly in the winter. Join us for a hike in the valley, and a chance to make the most of this spectacular time of year. No experience needed.

Cost: \$20 per person (AWA members)

\$25 per person (non-members)

Contact: (403) 283-2025

1-866-313-0713

Or register online:

<http://shop.albertawilderness.ca/>

Pre-registration is required.



N. DOUGLAS

## Climb and Run for Wilderness – Mural Competition

Saturday, March 8, 2008

Alberta Wilderness Association and Calgary Tower will host our annual Earth Day Celebration with the 17th Annual Climb for Wilderness and 6th Annual Run for Wilderness on Saturday, April 19, 2008. This event has more than 1,200 participants of all ages climbing the 802 stairs of the Calgary Tower.

In the past, posters and signs have decorated the walls up the stairwell, but in 2003, contestants began creating more permanent artwork on some of the staircase landings. This year, we invite you to create your own personal masterpiece on one of the remaining landings – it's time to get organized, polish up your ideas, and warm up your paint brushes.

The mural theme for this year is Alberta's endangered wildlife within its habitat. Full details and registration forms are available at our Climb and Run website:  
[www.climbforwilderness.ca](http://www.climbforwilderness.ca).



## Anticipating Summer Hikes

We hope you're out enjoying the great winter opportunities in our wild places. But don't forget about the exciting weekly adventures coming up in Alberta's wilderness this summer.

Join AWA as we

- hike the badlands of Dry Island Buffalo Jump
- canoe the northern waters of McClelland Lake
- backpack along the Continental Divide
- and explore many other Alberta gems

Watch our website – a full schedule will be available at the end of February!

## Keeping Alberta Wild, One Volunteer at a Time

AWA needs your help. If you're feeling a bit blue about Alberta's poor grades in Environmental Stewardship 101, "engagement therapy" might be the way to climb out of the doldrums. Not only will you meet some great, like-minded people – you'll also be making a difference.

"There is no better place to be an environmentalist today than in Alberta!" declared Alberta's best-known environmentalist, Martha Kostuch, during the celebration in her honour on February 2. So why not get in on the excitement!

If you would like to help out with events such as the Tower Climb, the Tuesday Talks, or AWA displays in various venues, or with some of our other initiatives, give us a call or fill in the volunteer form at [albertawilderness.ca/AWA/Volunteer.htm](http://albertawilderness.ca/AWA/Volunteer.htm). We'll find an opportunity to use your skills and interests.

## IN MEMORIAM

Daniel Nicholson, father, partner, son, brother, and uncle, a loyal friend – Danny, and Champion of the World – passed away on December 31, 2007. Daniel lived in many parts of Alberta and loved this province. Daniel's family and friends have made donations in his memory to help make a difference toward preserving our earth and helping others appreciate its tremendous beauty. In Daniel's memory, his family chose the following quote by John Burroughs: "To find the universal elements enough; to find the air and the water exhilarating; to be refreshed by a morning walk or an evening saunter; to be thrilled by the stars at night; to be elated over a bird's nest or a wildflower in spring – these are some of the rewards of the simple life." AWA offers sincere sympathy in the loss of Daniel Nicholson.

# CLIMB & RUN FOR Wilderness

APRIL 19  
CALGARY TOWER

CLIMB 802 STAIRS  
OR  
RUN 1 KM & CLIMB 802 STAIRS

Learn about wilderness and wildlife in Alberta at one of the best Earth Day events in Canada!

CELEBRATE WILDERNESS!

- CLIMB THE CALGARY TOWER
- GET YOUR HEART PUMPING
- MAKE NEW FRIENDS
- HAVE LOTS OF FUN

OUTSTANDING PRIZES & ENTERTAINMENT ALL DAY

RACE (1 KM RUN & CLIMB) 8:00 AM  
CORPORATE TEAM CHALLENGE 8:15 AM  
PUBLIC CLIMB 8:30 AM

REGISTER AT [CLIMBFORWILDERNESS.CA](http://CLIMBFORWILDERNESS.CA) OR 403-283-2025

**CHALLENGE YOURSELF**  
ALBERTA WILDERNESS ASSOCIATION

Return Undeliverable Canadian Addresses to:



**Alberta Wilderness Association**  
Box 6398, Station D  
Calgary, Alberta T2P 2E1  
[awa@shaw.ca](mailto:awa@shaw.ca)

