



A WILD LANDS ADVOCATE

THE ALBERTA WILDERNESS ASSOCIATION JOURNAL



Woodman Lake Area, Canadian Shield Natural Region PHOTO: C. WALLIS

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COVER PHOTO

Cliff Wallis took this spectacular photo during field surveys in the northeast corner of the province in 1983. Woodman Lake is part of a complex of lakes and wetlands lying just west of the Colin Lake region in the Canadian Shield. Located east of Wood Buffalo National Park, this remote, diverse area of rock outcrops, sand plains, extensive wetlands, and interconnected lakes remains largely intact 25 years after the photo was taken.

Robin White's cover photo for the February 2008 WLA is one of his many wildlife photos, available for viewing at NatureWatch Partners' website: www.naturewatchworld.com.

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THE ELECTION IS OVER — NO TIME TO CRY IN OUR BEER!



Giant pinedrops (Pterospora andromedea)
PHOTO: C. WALLIS

Along with just over 40 percent of eligible Alberta voters, I did my civic duty March 3 and voted in the provincial election. I was hopeful that Albertans who care about the environment would stand up, be counted, and receive a pleasant surprise late Monday evening. I honestly can't say I was shocked, but I was obviously disappointed by the poor voter turnout and the election results.

Perhaps we are too content as we slide back in the comfort of our easy chairs, living in the land of milk and honey with money flowing in, knowing our environment is being well cared for. Whoa ... really? Rewind and play back that last thought. Surely Albertans don't believe that! Has our head-of-the-class economic position clouded our minds to what is really happening in our own backyards? Did almost 60 percent of Albertans not care enough to vote?

I have three observations. First, not everyone who voted PC wants to ruin the environment. Second, a very significant number of Albertans who believe that the wanton destruction has gone too far voted against the PCs. Although the three parties ranked highest by the Conservation Voters of Alberta (NDs, Liberals, and Greens) for their progressive environmental platforms garnered almost 40 percent of the popular vote, they captured only 10 percent of the seats. Third, a larger number of concerned Albertans believe that the system is broken and just stayed home.

Polls clearly show that most of us (including PCs) don't like what we are doing to Alberta's land, air, and water, as well as the wildlife that are dependent upon them. The essentially one-party system that works against environmental protection and that we constantly re-elect in Alberta is not a function of an uninformed electorate. It simply seems impossible for "conservation" voters to achieve adequate representation. The current system engenders grossly disproportionate representation on a broad range of issues that voters care about, including the environment.

The election results crystallize in my mind the need to focus political efforts in two areas: first, continue pushing the PCs to revamp their environmental platform and, second, advocate for some type of proportional representation. It is outrageous that 22 percent of the electorate can determine who fills 88 percent of the seats. Without proportional representation, the conservation voice will continue to be drowned out by the development voice. This kind of electoral reform is a long-term effort and outside the mandate of charitable organizations like AWA. It is perhaps best advocated by individual citizens and emerging groups such as the Conservation Voters of Alberta (www.conservationvoters.ab.ca).

In the meantime, the development onslaught continues unabated. AWA and other groups are facing a deluge of work on the conservation front — integrating approaches to land and watershed management; completing the protected areas network; and addressing Alberta's contribution to climate change.

There is also the inevitable bumper crop of brush fires to put out — the Dunvegan hydropower project on the mighty Peace; the proposal for a 24-hour international trucking corridor through the wildest prairies of southeastern Alberta; the continuing destruction of critical caribou habitat in the foothills and boreal forest; and the 1,270 shallow gas wells proposed to be drilled in the Suffield National Wildlife Area. It has never been busier or tougher for AWA to defend Wild Alberta, but this is no time to cry in our beer over the election. We need to re-energize, roll up our sleeves, and get back to work!

— *Cliff Wallis, AWA Vice-President*



ROOM TO ROAM

By Mike McIvor

Concerns about wildlife corridors cluster around one fundamental principle: whatever their means of propulsion — legs, fins, wings — animals need to move. Ecological conditions that meet requirements for food, shelter, and the opportunity to reproduce are distributed unevenly across landscapes. They change through the course of a day, a season, a year, decades, or centuries. The ability to move is what enables each species to obtain resources vital for survival. Until the recent past, until humans came to dominate so much of the landscape, animals simply moved. Now, in many places, they can move only if we allow them to, and we'll decide where. This is what wildlife corridors are about.

Extent of movement varies according to species. It may be measured in centimetres or the span of continents; it may be frequent or once in a lifetime. Bull trout move more than snails, mule deer more than long-toed salamanders, and wolves more than ground squirrels, but none of these will travel nearly as far as many migratory birds. Motivating factors could be time of day, seasonal food supply, access to mates and breeding sites, avoidance of risks such as predation, depth of snow, natural or human-caused disturbance, or the inclination to disperse.

Habitat Fragmentation

The enemy of wildlife movement is landscape fragmentation. This comes in a variety of forms, some of which are natural, such as rivers or cliffs, but more and more are human built, such as reservoirs, fences, mines, clear-cuts, roads and highways, towns, and cities. Problems caused by the outright destruction of wildlife habitat and the threats posed to the capability of some species to survive, let alone thrive, have been acknowledged for a long time, although government land managers have been shamefully slow to respond.



Along with the Trans-Canada Highway and the CPR rail line, the town of Canmore takes up most of the Bow Valley, squeezing wildlife into narrow strips of habitat.

PHOTO: M. SHUSTER

Fragmentation is more insidious: rather than obliterate habitats, it carves them into pieces. It may occur in one grand gesture or it may take the form of incremental changes that increasingly restrict travel options for wildlife.

Recognition has slowly dawned that if humans want other species to persist in the long term, habitat must be protected, but so must the ecological processes in which these animals are so intimately engaged. Movement is one of these processes. Herbivores, or plant eaters, such as deer and elk must have access to feeding sites, and carnivores must have access to herbivores. Predator-prey relationships are crucial in properly functioning ecosystems, but the fundamental process underlying the search for food — the chase, the meal or the escape, and their endless repetition — is movement.

The importance of wildlife corridors is a reflection of the way the world has changed — or to be more precise, the

way humans have changed the world. An original matrix has been flipped. For millennia, humans in this place we now call Alberta, their possessions and constructions, existed in a context of surrounding wilderness. This is not to deny a growing realization of the significant role Aboriginal Peoples may have played in the landscape, or the extent to which they manipulated it, but no one would argue the scale or relative permanence of their influence compared to that wielded by contemporary society.

But now, we find wilderness and wildlife habitat shrinking, increasingly surrounded and isolated by a storm of human enterprise in myriad guises. The islands created as a result provide habitat for many species. In fact, for some species they may contain the only viable habitat remaining in a human-dominated landscape. Yet as the human footprint grows, the islands become smaller and the distances between them greater. And if individual islands, or habitat

patches, are not large enough to meet all life requirements for some species, and we know most are not, means must be found to connect the patches. Where we have created islands, we must create connections between them. The primary purpose of wildlife corridors then, in the artificial sense, is to combat the effects of artificial fragmentation.

To whatever extent the question of wildlife corridors has entered public and political consciousness, those affecting large mammals in the mountains probably have the highest profile. Here the effects of natural fragmentation presented by fractured geography are compounded by human developments. The towns of Banff and Canmore, for example, have covered crucial parts of the rich, productive habitats in the valley bottoms and bulge upward onto adjacent slopes. The ecological heart of the Bow Valley is plugged at these locations; not only has prime habitat been destroyed, but wary wildlife must constantly seek new routes to move up, down, or across the valley, or into tributary drainages such as the Cascade and Spray Rivers.

Picture yourself standing on a height of land above these towns — perhaps on the Spray Lakes Road above Canmore, or on the top of Tunnel Mountain or Sulphur Mountain. Looking at the valley below, imagine you are a grizzly bear, cougar, or wolf wanting to keep your distance from those pesky two-legged critters, but needing to travel. The obstacles are formidable; the options, limited. This is the problem that designation of wildlife corridors is intended to solve.

The Bare Minimum Rule

Efforts have been made, and are continuing, to protect wildlife corridors in areas where opportunities for movement are most at risk. The hopes and best intentions of corridor proponents, however, have been hampered by the Bare Minimum Rule (BMR). To understand the BMR, it is necessary to know what is meant by the term “wildlife corridor” when it is used in the sense of formal designations such as we have seen in parts of the upper Bow Valley. Many people take solace from the fact that these corridors have been delineated, mapped, and in some cases, properly protected.

But it is important to be honest about what actually has been accomplished because there may be a perception that

these corridors — designated through land-use planning and management exercises with guidelines prepared by biologists for width, length, shape, density of forest cover, and levels of human use — are places wildlife really want to travel and therefore represent acts of human generosity toward fellow creatures. In reality, what we most often refer to as “wildlife corridors” are sandwiched between the newest subdivisions on one side and steep slopes on the other. They are not traditional, preferred routes, since those most likely are under pavement; they are the last, narrow strips with movement potential that humans belatedly, even grudgingly,



Despite research showing that human use is the primary factor deterring wildlife from using these highway underpasses, Parks Canada has not instituted an outright closure, preferring this plea for cooperation instead.

PHOTO: D. MCIVOR

have bequeathed to the original occupants.

Typically, these corridors are designed not to be generous to wildlife but to be as stingy as possible. The BMR insists that rather than connecting patches of habitat in such a way as to offer the least energy costs to wild, four-legged travelers, corridors should have the least negative impacts on human convenience, profits, and recreation. Land management agencies encourage research in ever-finer detail, not so much to enhance protection as to ensure that targeted species are granted no more than absolutely essential space. (None of this is intended to disparage the bare minimum accomplishments. Given the complicated dance conservationists have been forced

to perform with governments, developers, and recreationists, their achievements are significant; those who have devoted tremendous amounts of time and energy to this cause deserve our gratitude. Indeed, thanks to their perseverance, it now looks as though the South Canmore corridors will exceed the bare minimum.)

Beyond the Minimum

It should be possible to be realistic about the current state of consideration for wildlife movement — small gains come about through long, painful struggles and losses are ongoing — without succumbing to the debilitating force of cynicism. Without being overly naïve in the face of rampaging bulldozers in Alberta, why shouldn't we think well beyond compliance with the Bare Minimum Rule? Today protection of wildlife corridors may be seen as experimental: time will tell if they are adequate for meeting conservation objectives in the long term. Could their establishment be seen as a way in which modern society is playing catch-up after our uncaring haste to overwhelm the planet? To the extent that their functionality is dependent on people constraining themselves, perhaps they are a form of penance.

Humans have spent the last several hundred years taking the world apart. At this point, should we be satisfied with salvage operations or should we demand a new beginning? With wildlife corridors, no matter how stingy and flawed, there is hope — hope of sustained ecological connections. Without them, there is none. Whether the connections we make are acts of maintenance or restoration, whether they take the form of highway crossing structures or routes around human communities, maybe we should view them as the tentative beginning of our own movement in a different direction. A way of returning. Small, initial steps toward putting the world back together.

Mike McIvor calls the Bow Valley home, having lived in Banff for over 40 years. He is president of the Bow Valley Naturalists, a group that has been active in the Banff-Canmore area since 1967. He served on the AWA Board of Directors for 13 years, stepping down in 1994.



WILDLIFE CORRIDORS — THE CANMORE EXPERIENCE

By Heather MacFadyen

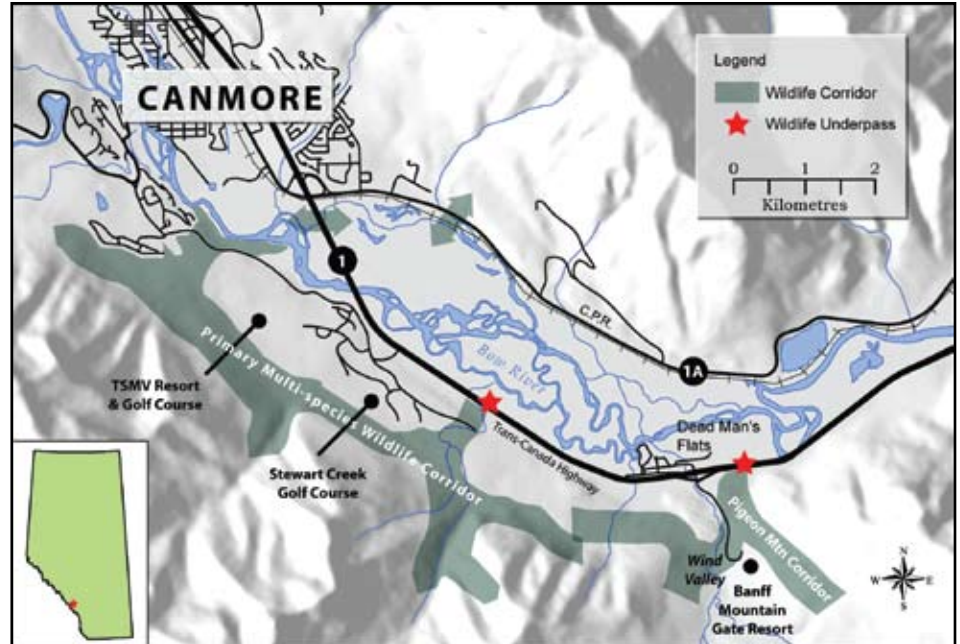
In the 2006 census, the permanent population of Canmore was estimated at 11,599, with non permanent residents at 4,818. Between 2005 and 2006, the permanent population increased by only 1.4 percent, while the non-permanent population burgeoned by 27 percent. If this trend continues, the maximum build-out over the next few years will far exceed these numbers. The non-human population, on the other hand, has not been subjected to a census — that would be difficult for a number of reasons, not the least of which is its extreme mobility. And therein lies the challenge.

The Bow Corridor's deep valleys create only narrow ribbons of habitat useable by both humans and non-humans: how are those ribbons to be shared among species? Human movement and settlement is limited by geography and transportation infrastructure. Wildlife movement and viability is impacted by human infrastructure and use. And Canmore, the fastest growing urban centre in the Corridor, is one of three immediate "pressure points" (the others being the Banff and Lake Louise areas).

For 15 years, local and regional conservation organizations and their members, scientists, and government agencies have been exploring the design and viability of wildlife corridors in the Bow Valley. It is now imperative that the one wildlife corridor in the Bow Valley that has the potential to exceed the minimum standards for functionality for wildlife be protected from human overuse.

The South Canmore Primary Corridor

The Southern Canmore Region is a 1.5-km-wide strip of land along the south side of the Bow Valley. This narrow strip is part of one of the most important wildlife movement corridors in the region, providing connectivity between the Kananaskis Valley and Banff National Park, and beyond. Stretching 10



The South Canmore Primary Wildlife Corridor in the Bow River Valley.

COMMISSIONED BY BOWCORD, 2008

km from the Wind Valley Natural Area to Canmore Nordic Centre Provincial Park, it is bounded by steep mountain slopes on one side and the Trans-Canada Highway on the other, both of which act as barriers to wildlife movement.

The South Canmore Multi-species Primary Wildlife Corridor is the only wildlife corridor in the Bow Valley that has any hope of meeting the standards for a functional wildlife corridor. Corridor functionality depends on such factors as corridor width and length, slope steepness, hiding cover for animals, and amount of human use.

In its entirety, the South Canmore Corridor extends through interconnecting sections from Wind Valley, Pigeon Mountain, and Dead Man's Flats at the eastern end, through the Stewart Creek and Three Sisters Resort sections at the western end, to connect to Banff Park. Most of the South Canmore Corridor lies within the Three Sisters Mountain Village resort (TSMV). For wildlife movement in the Bow Valley to be viable — which entails maximizing the success of wildlife management and minimizing injurious

or fatal human-wildlife encounters — it is imperative that this corridor finally be designated as functional.

The Battle Begins

The South Canmore Wildlife Corridor saga began in 1992, when public opposition to Three Sisters Resort's proposal to develop the Wind Valley resulted in a hearing before the Natural Resources Conservation Board (NRCB). Interveners included the Bow Corridor Organization for Responsible Development (BowCord), Canadian Parks and Wilderness Society (CPAWS), Bow Valley Naturalists (BVN), and Alberta Wilderness Association. The developer's application was denied, and the Wind Valley was established as a conservation area. The Three Sisters development was displaced to the Bow Valley, with the legal requirement to provide a multi-species wildlife corridor on its property to connect the Wind and Bow Valleys through to Banff National Park.

Following the hearing, a 15-year public battle ensued, with those

concerned about establishing a functional wildlife corridor in the Bow Valley pressuring the Province to apply the necessary scientific guidelines.

The NRCB legal conditions and undertakings clearly state that these corridors are to be protected “in as undeveloped a state as possible,” should consist “largely of trees, shrubs and shrub meadow,” and should not allow “activity of any kind on the Easement Lands which has or may have an adverse impact on wildlife use and travel through the Primary Corridor and Easement Area.” The NRCB also called for the formation of a regional Ecosystem Advisory Group to develop criteria for the South Canmore Corridors.

In 1995, the Bow Corridor Ecosystem Advisory Group (BCEAG) was established. Comprising representatives from the MD of Bighorn, Town of Canmore, Town of Banff, Banff National Park, and provincial government, the group began to develop corridor guidelines according to the requirements of the NRCB decision.

It took until 1998 to develop the BCEAG guidelines for a functional corridor with adequate width, slope, and hiding cover. It has taken another 10 long years of pressure by conservation groups and the Alberta public to convince the provincial government to apply a rough equivalent of the BCEAG guidelines to the TSMV Resort Area in South Canmore.

By 2000, most sections of the primary wildlife corridor were still largely designed by the developer, with golf fairways and facilities planned in those sections. To determine just how dysfunctional the corridors were, conservation groups commissioned the Herrero/Jevons report to apply the Province’s BCEAG guidelines. The 2000 report, “Assessing the Design and Functionality of Wildlife Corridors in the Southern Canmore Region,” found the corridors to be deficient in width, slope, and hiding cover at different points. However, the Province’s 2000 draft Conservation Easement for the corridors in the TSMV Resort Area did not apply the BCEAG guidelines, allowing the developer to retain its plans for fairways and facilities in what were essentially “golf corridors.”

Following the outcry of conservation groups and the public, the Province

withdrew this Conservation Easement. Still unwilling to apply the 1998 BCEAG guidelines, the Province agreed to collaborate with the Town of Canmore and TSMV to commission an independent report to recommend land uses for corridor functionality that were acceptable to provincial biologists and a number of independent scientists. The result was the 2002 Golder Report.

In place of the 1,050-metre-wide corridor calculated using the BCEAG guidelines for a 10- to 12-kilometre corridor (as opposed to the minimum 350 metres width allowable for a short corridor section), the Golder Report recommended reducing the width in the TSMV Resort Area to 635 metres (including a 35-m corridor buffer), protected in perpetuity under a conservation easement. To compensate for the narrow corridor, land uses downslope were to provide a seasonal buffer, which would increase the functional width of the corridor similar to that recommended using the BCEAG guidelines. Golder recommended that a natural walking trail, low-density, and then higher-density land uses be zoned sequentially further downslope from the corridor.

After many petitions to the NRCB from conservation groups calling for functionality criteria to be applied to the Canmore Corridors, these efforts were rewarded when in 2004 the NRCB

instructed TSMV that the Board requires “the application of more recent scientific thought in relation to wildlife corridor design.” This legal requirement ensures that the Province and the developer have to provide corridors that are functional according to scientifically defensible criteria. The functionality of the South Canmore Corridor was also enhanced by the 2002 federal G8 Legacy gift of two wildlife crossing structures at either end.

In 2003 the Province signed a Conservation Easement Agreement with TSMV that was substantially revised. The corridor had been widened, the golf fairways and facilities originally planned inside the corridor boundaries had been removed, and 600 metres of the 635-metre effective corridor width recommended by the 2002 Golder Report were protected in perpetuity. Through land use bylaws supported by the public at many municipal hearings, the Canmore Council of 2003-2006 applied zoning appropriate for corridor functionality in the Three Sisters Resort Area. In 2007 a separate Conservation Easement Agreement was signed with TSMV to protect the remaining 35-metre corridor buffer.

This 15-year campaign to establish a corridor that goes beyond what BVN President Mike McIvor refers to as the “Bare Minimum Rule” has relied on the extensive and ongoing efforts of BowCord, CPAWS, BVN, Defenders of



One of the “amenities” sought by those moving to the Canmore area is scenes like this one of Mt. Lougheed by moonlight. The burgeoning human population, however, makes the protection of wildlife corridors in the Bow Valley more urgent than ever.

PHOTO: R. BERDAN



The cougar is one of the many species, including humans, sharing the Bow Valley.

PHOTO: R. SINCLAIR

Wildlife, Grizzly Bear Alliance, Bow Riverkeeper, the Town of Canmore, and the Alberta public. These positive efforts and outcomes have been documented by Stephen Kennett in the 2005 publication of the Canadian Institute of Resource Law, entitled “Wildlife Corridors and the Three Sisters Decision” (www.ucalgary.ca/~cirl/pdf/OP163Sisters.pdf).

Now, after years of public hearings, open houses, and the ruling of the NRCB in 2004 that “more recent scientific thought” be applied to the designation of the corridors, the South Canmore Wildlife Corridor is well on its way to setting a standard significantly above that which the Province was prepared to accept in 2000. This standard will now become the minimum for the remaining sections of the corridor.

However, even within the past six months, against the recommendations of the Town of Canmore and the opposition of conservationists, the provincial

government sold public land to a private developer, Banff Gate Mountain Resort, on property adjacent to the Wind Valley section of the South Canmore Wildlife Corridor. The Province is in the process of revoking the lease of 240 acres of public land and has reduced the sale close to the resort’s current development footprint. However, the sale or development of any land adjacent to the South Canmore Corridor is premature until either the BCEAG or Golder guidelines have been applied to establish maximum functionality.

What remains to be accomplished by the Province is to apply the 1998 BCEAG guidelines, or their equivalent, to the rest of the South Canmore Wildlife Corridor, east of the TSMV Resort Area. This includes the following:

1. Keeping human use and development as far as possible from the Stewart Creek segment of the corridor and extending the 35-metre corridor

buffer, protected under a conservation easement.

2. Designating the rest of the corridor, east beyond the Stewart Creek area, using the BCEAG guidelines or their equivalent to achieve functional corridor width, slope, and hiding cover. In this way the current disconnect between the west and east sections of the corridor can be effectively addressed.

3. Widening the corridor at pinch points such as that at the Wind Valley end of the corridor.

4. Expanding the functional width of the Wind Valley end of the South Canmore Corridor by returning to the corridor and habitat at least the 57 acres previously leased by Banff Gate Mountain Resort from the Province, along with two parcels of land currently owned by TSMV, which lie between the Wind Valley Corridor and Bow Valley Wildland Park.

5. Realigning the corridor to effectively connect with the existing Stewart Creek wildlife crossing under the Trans Canada Highway.

Over the past few years, with the persistent pressure of conservation organizations and the active efforts of the past Canmore Town Council, most of the land uses sequence recommended by the 2002 Golder Report, along with conservation easements on the core wildlife corridor and the west and east corridor buffers, have been established on the Three Sisters Resort Area of the South Canmore Wildlife Corridor.

Without the effort of conservation organizations and the public, there would not be a chance for a viable wildlife corridor in the Bow Valley. Now the imperative lies with the current Canmore Town Council, in conjunction with the Province and the developer, to extend corridor functionality and protection to the rest of the South Canmore Corridor all the way down to the Wind Valley.

Since 2000, Dr. Heather MacFadyen has coordinated the campaign to establish corridors functional for wildlife in South Canmore. She has served on the Board of Directors of CPAWS, of Bow Riverkeeper, and now of the Bow Corridor Organization for Responsible Development. Previously on the University of Calgary Medical Faculty, Heather is now a psychological consultant in Canmore.



BANFF PARK HIGHWAY CROSSINGS BENEFIT WILDLIFE AND HUMANS

By Andrew Bennett and Adam T. Ford

Alberta is the proud site of North America's premier experiment to reduce roadkills and encourage connectivity. The 40-km stretch of the Trans-Canada Highway (TCH) in Banff National Park (BNP) between Canmore and Castle Junction is fully fenced, includes 24 underpasses and two overpasses, and has been continuously monitored for wildlife activity since 1996. The short story is simple: mitigation works.

Increasing traffic through the 1970s convinced transportation planners to twin the Trans-Canada between BNP's East Gate and the Banff townsite. Early mitigation attempts sought to reduce wildlife-vehicle collisions by erecting fences, while passage across the highway was made possible with six underpasses. Crossings were placed at common roadkill sites, but it wasn't known if the underpasses would be effective. After the project's completion in the early 1980s, it was soon obvious that elk and deer were quick to use the crossings. This finding was corroborated in the late 1980s when Phase 2 of construction extended mitigation to the Sunshine overpass.

By 1996 Phase 3A of construction was complete and included the 18 km of twinned highway from the Sunshine overpass to Castle Junction. More fencing and underpasses had been added, as well as the two overpasses that stand as the project's most visible icons. The time had come for a rigorous long-term study of the crossing structures to answer many pressing questions. For example, we know ungulates use the structures, but how effective is the mitigation in reducing roadkill? Do carnivores use the structures? What kinds of crossing architecture do different species prefer?

For the past 12 years, Dr. Tony Clevenger has guided an enthusiastic team of researchers ever deeper into the complications of road ecology. The answers have been revealing.

Mitigation reduces ungulate collisions



Two elk contemplate using one of the underpasses in Banff National Park to cross the Trans-Canada Highway. PHOTO: A. FORD/WTI

by 80 percent, despite increases in traffic volumes.

Not only do carnivores use the crossings frequently, but they also have distinct preferences. Grizzlies and wolves tend to choose wide open culverts or overpasses, while black bears and cougars prefer tight concealed passageways.

Use of the crossings has increased over time. Grizzly bear crossings, for example, increased from seven in 1996 to more than 100 in 2006. This shows that animals take time to become accustomed to the structures and to incorporate the passages into their trail networks. Perhaps the most important lesson for wildlife conservationists is the paramount importance of long-term studies.

Current research is directed at questions of population and individual use of the crossings. Using bears as a model, PhD candidate Mike Sawaya from Montana State University in Bozeman is taking DNA samples from hair obtained at the crossing structures and in the backcountry of BNP. Combined, these two pools of DNA data will reveal which individuals are crossing the highway and how populations separated by the highway are mixing genetically. By ensuring that highway mitigation is performing as planned, we are helping to

maintain viable populations of rare and wide-ranging species.

In the coming years, Dr. Clevenger and his crew plan to study how birds use crossing structures and how small mammals respond to culverts and fences. Studies are currently addressing the feasibility of mitigating sections of Highway 93 South through Kootenay National Park as well as the TCH through the Kicking Horse Pass in B.C.

Like it or not, we must recognize that roads are here to stay. Nevertheless, as we understand how wildlife respond to roads and through efforts to mitigate the negative effects of roads, we can work to create a smarter transportation system that allows people and goods to move safely throughout the country while having a negligible effect on wildlife.

Andrew Bennett (left) is the Banff Wildlife Crossing Project's research technician. After completing an MSc in plant ecology, Andrew moved west to enjoy a winter of skiing, snowshoeing, and home-brewing. Adam T. Ford (right), a former AWA conservation specialist, is a research associate with the Western Transportation Institute at Montana State University, Bozeman. Banff is teaching Adam to enjoy winter outside of a hockey arena.



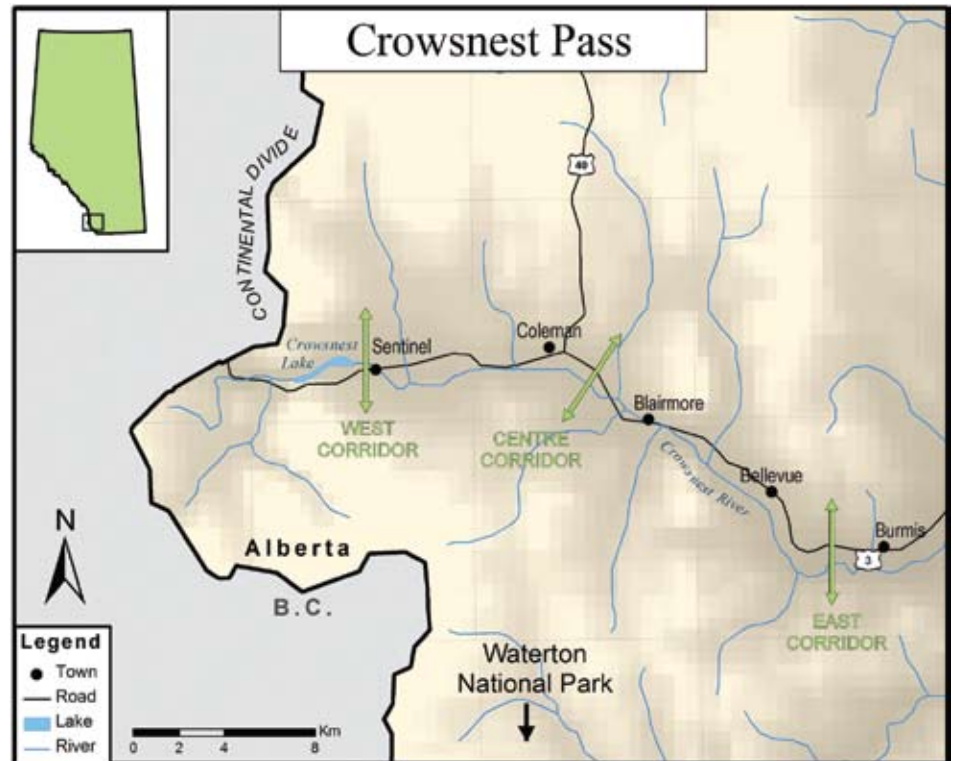
CARNIVORE CORRIDORS THREATENED IN THE CROWSNEST

By Barbara D. Janusz

The section of the southern Canadian Rockies between Banff National Park and Glacier National Park supports the most diverse, intact system of carnivores in North America. Carnivores are at the top of the food chain and tend to influence the behaviour of their prey, interactions among other animal species, and supporting vegetation. For conservation planning, carnivores serve as an appropriate focal species. The lack of resilience of some carnivore species in the midst of intense human pressures was, therefore, a primary factor contributing to their selection for a study designed to determine existing options that would facilitate and preserve connectivity of wildlife populations through changing landscapes. The study was led by Drs. Clayton Apps and John Weaver, in partnership with the Wildlife Conservation Society and with funding from the Wilburforce Foundation.

A team of five researchers identified the important core areas and linkage zones for carnivores in the southern Canadian Rockies, with emphasis on landscapes bisected by the Crowsnest Highway (Hwy 3). To gather data on the viability, security, and movement of carnivore populations in the region, the researchers selected six carnivores indigenous to the southern Canadian Rockies — grizzly bear, wolverine, badger, wolf, bobcat, and lynx. They conducted modeling and field research during 2001-2004 to determine the impact of Hwy 3 on habitat and connectivity, and in September 2007 released *Carnivores in the Southern Canadian Rockies: Core Areas and Connectivity across the Crowsnest Highway* (the Carnivores Report, www.wcscanada.org/media/file/crowsnest_web.pdf).

Hwy 3, running east-west, bisects several conduits for wildlife movement in the Rocky Mountains. The natural



The Carnivores Report identified three wildlife corridors in the M.D. of Crowsnest Pass, referred to as West, Centre, and East. MAP: AWA FILES

connectivity in the southern Rockies for the six carnivore species chosen for the study is becoming increasingly vulnerable to fracturing not only by Hwy 3, but also by the Canadian Pacific Railway, other intersecting roadways, and expanding human development and recreation. Hwy 3, however, poses particularly difficult challenges to carnivores due to the narrowing of the valley at this juncture, the high volume of traffic, negligible conservation management in the region, and the high concentration of private and corporate ownership of land abutting the transportation corridor, which raises the potential for development that may further fracture populations of wide-ranging species.

As this network of human development intensifies, carnivore populations are increasingly subjected to fragmentation into smaller and more vulnerable units, reducing the flow of individuals and genes as necessary to

maintain populations that are healthy and resilient, and that can shift in response to climate change.

For each of the six species, the researchers developed and applied regional models to identify likely areas of core habitat and security throughout the region, and potential zones of population linkage across Hwy 3. They then sampled actual occurrences of grizzly bears and lynx within a 10- to 20-km zone, adjacent to and including Hwy 3. The report describes the results and conservation implications of this research.

To shed light on the potential impact of future human development on carnivore populations in the Crowsnest Pass, this summary of the project's conclusions will be restricted to the three wildlife corridors identified in the Municipality of Crowsnest Pass, on the east side of the Continental Divide, referred to as the Crowsnest Municipality West, Centre, and East corridors.

The West Corridor

The West corridor facilitates wildlife circumvention of the western edge of Crowsnest Municipality and passage across Hwy 3. The study concludes that “[m]ajor residential developments in this area would likely hinder any remaining options for the carnivore movements through this corridor and would likely generate more human activity in Crown lands in the nearby core areas” (p. 87). The West corridor was rated by the researchers as having “high conservation significance, high limitation to passage, and very high vulnerability.”

Currently, no more than a dozen residences are located in Sentinel — a hamlet on the shore of Crowsnest Lake, adjacent to the Crowsnest River, and within the identified West corridor. In September 2005, however, Bridgecreek Development purchased a 26-acre parcel of land in Sentinel, with a view toward constructing a \$1.5 billion resort complex (the largest in Canada) next to the lake. The developer has yet to break ground on the shores of the lake, but according to Gordon Lundy, Chief Administrative Officer of the municipality, engineering drawings for extension of the municipal water and sewer lines to facilitate development of the proposed resort are nearing completion. Dorothy Lock, with Alberta Environment, confirmed that, as no upgrades to the municipal water treatment plant are planned, provincial regulatory approval for such infrastructure extension is not required.

In a telephone interview, Dr. John Weaver, one of the authors of the Carnivores Report, confirmed that the West corridor is the most viable of the three conduits. He stated that the Bridgecreek lake development will likely result in displacement of carnivores. He also cautioned that not only is the increased volume of highway traffic a cause for concern, but spin-off activity such as the use of hiking trails, caving, and rock climbing, could also further restrict carnivore movement. Requests for feedback from Bridgecreek Development regarding the corporation’s position on the resort’s potential impact on wildlife corridors have remained unanswered.

The Centre Corridor

A potential carnivore movement option between Coleman and Blairmore is highly tenuous because this second



The dry open grassland north and south of Highway 3, near Lundbreck, Alberta, is excellent habitat for the badger, one of the six species chosen for the carnivore study.

PHOTO: C. WERSHLER

conduit, the Centre corridor, is characterized in the report as having “less security cover, more human activity and greater distance to core habitat than the previous one to the west.” Accordingly, this conduit was rated as having “low conservation significance, very high limitation to passage and very high vulnerability.” Dr. Weaver also stated that the highly tenuous nature of this corridor has already resulted in displacement of carnivores to the adjacent West and East corridors. The “very high limitation to passage” rating is likely to become exacerbated by the recent approvals of six developments in the area.

In Coleman, south of Hwy 3 on the Parks Canada historic site of the Coleman Collieries, Luscar Ltd. (Canada’s largest coal producer) has recently conveyed 297 acres of land along the Crowsnest River to Green Mountain Company, an Edmonton developer. On October 9, 2007, with a view toward achieving a higher standard for reclamation of the site, Municipal Council passed a resolution to rezone this parcel of land to “residential.”

Also in Coleman, Municipal Council, despite local opposition, recently voted in favour of rezoning a 40-acre site “residential” to pave the way for the Sawback Ridge development along the Kananaskis-Highwood Road (Hwy 40). Slated to accommodate 27 residential lots and 78 condo units, Sawback Ridge is across the road from another development, Kananaskis Wilds, a

condominium project of 77 lots, which in 2006 ignited similar opposition from the same acreage owners.

According to Shane Stewart, a Crowsnest Pass resident and president of Stewart Investment Capital, one of the developers of both Sawback Ridge and Kananaskis Wilds, “The economic reality of development in the mountains is that without affordable density, you can’t afford to build.” Stewart is open, however, to Town Council addressing wildlife corridors in the development planning process, since wildlife and preservation of natural habitat is a key environmental amenity luring investors to the Crowsnest Pass.

Stewart Investment Capital’s Ironstone Lookout Condominiums, located along the north side of Hwy 3 in Coleman, was the first Crowsnest Pass project to actually break ground. Ironstone is a \$35-million project consisting of 70 duplexes and four-plexes, and an 80-unit condominium complex.

Further east, in Blairmore, the 100-acre Southmore subdivision is projected to accommodate 300 single-family dwellings. And a second Bridgecreek Development project, River Run, has progressed beyond the planning stage to excavation of the site in preparation for construction of a hotel and a combination of multi- and single-family dwellings.

Despite the Centre corridor’s very high limitation to passage, it should not be overlooked that “the entire Crowsnest Pass as a unit forms an integral landscape link for low-elevation, east-west movement of animals, plants, weather systems, etc. This is lowest pass in the southern Rockies” (Kevin Timoney, 1998, *Environmentally Significant Areas Inventory of the Rocky Mountain Natural Regions of Alberta*). Approval for rezoning by Municipal Council is only the first step in the development process. Subsequently, development plans are submitted for approval to a development officer and the Subdivision and Development Appeal Board, and at this stage, public input is crucial to ensure responsible density development.

Town Councillor David Cole says that the municipality’s Land Use Bylaw could be amended to require that Council address wildlife corridors when considering an application for rezoning.



The Crowsnest Centre wildlife corridor, with a view from northwest to southeast over Coleman (foreground) and Blairmore (background). PHOTO: C. APPS

Cole envisions a formal delegation of citizens and other interested parties appearing before Council to request such an amendment. Once such an amendment has been passed, Council can make appropriate recommendations to ensure that development proceeds in a manner consistent with preservation of identified wildlife corridors.

Kirk Olchoway with Fish and Wildlife in Blairmore would welcome such an amendment, as the potential for encounters with carnivores is likely to rise with development in the Pass intensifying. Olchoway also advised that his office does not have any current plans to facilitate wildlife crossings until the Department of Transportation and Infrastructure decides whether Hwy 3 through the Pass will be diverted or twinned. Metal culverts and bridges, according to Dr. Weaver, do not generally work well for carnivores, and Olchoway believes that the Canmore solution to establish 50-metre right-of-ways to accommodate wildlife movement through developments is simply ineffective.

The East Corridor

Although the East corridor is distant from core habitats for grizzly bears, the Carnivores Report concludes that it might facilitate north-south movement of cougars, badgers, bobcats, and wolves between the two communities of Bellevue-Hillcrest and Burmis. This

corridor is rated as “having moderate conservation significance, but with high limitation to passage and high vulnerability.” While the East corridor is not experiencing the same pace of development as the Centre corridor, in Bellevue, north of Hwy 3, two subdivisions of 30 lots each and in close proximity to one another have been approved for development.

Report Recommendations

To foster carnivore conservation and connectivity across Hwy 3, the Carnivores Report makes the following recommendations:

1. *Continue to maintain a network of core areas with a high level of security.... Important considerations include access management... and avoiding excessive mortality through appropriate hunting and trapping regulations.*
2. *Develop a proactive conservation plan to maintain connectivity across and around the Crowsnest Highway. This plan should consider assessment and planning of possible highway expansion, incentives for land-use covenants, and other practices.*

Some positive actions are already taking place in the municipality. One such effort is the ongoing work of Road Watch in the Pass. A project initiated by a local coordinator and the Miistakis Institute, Road Watch collects, analyzes, and communicates information highlighting

wildlife crossing locations across Hwy 3. In a January 2007 update they report 30 carnivore observations since November 2004, 17 of which crossed or were seen within 100 metres of Hwy 3. Also, between November 2004 and June 2007, Road Watch collected 226 bighorn sheep observations within 100 metres of Hwy 3. Their data highlight two key crossing areas, one near the Blairmore east access and the other at the west end of Crowsnest Lake. Both areas, for the time being, are devoid of inordinate human development, and it appears that wildlife is using these corridors to circumvent human activity.

The Karelian dog initiative, adopted in 2002 by the Fish and Wildlife office, is the first of its kind in Canada. Its aim is to reduce human-caused mortality of bears and to eliminate the need for relocation and extermination. The aversive conditioning techniques of associating people with discomfort and noise was pioneered by Montana wildlife biologist Carrie Hunt. The Karelian dogs – a breed originating in Finland, where it was used to track “nuisance bears.” After being sedated and kept overnight in a trap, the bear is conditioned to become averse to human contact by wildlife officers inciting the dogs to chase it back into the wild. More recently, wildlife officers have reduced roadkill of bighorn sheep near the Blairmore east access by training the Karelians to shepherd the ungulates across the Crowsnest River, beneath the bridge, and to condition them to avoid crossing the highway in order to connect with the southern wildlife corridor.

Ted Morton, Minister for Sustainable Resource Development, recently announced that “the major uses for the Eastern Slopes of the Rockies will be for watershed and recreation, with all other activities accommodating the priority uses” (*Calgary Herald*, January 12, 2008). It is incumbent upon us to appreciate, however, that recreation in affluent Alberta generates development, which significantly impinges on wildlife habitat, and that protection of such habitat safeguards the watershed and the wildlife that is increasingly being pushed to the brink of extinction.

Barbara D. Janusz is a lawyer, educator, poet, and freelance writer residing in the Crowsnest Pass.



SKY CORRIDORS — BIRD MIGRATIONS ALONG THE SPINE OF THE CONTINENT

By Nigel Douglas, AWA Conservation Specialist

Standing in a small hay meadow at the foot of Kananaskis Country's Mount Lorette, Peter Sherrington can give you a pretty good idea of what the conditions were like in Alaska this past summer. Or in Mexico last winter. How does he know this? The eagles tell him.

Since 1992 Sherrington and volunteers with the Rocky Mountain Eagle Research Foundation (RMERF) have been studying the golden eagle migration. Every spring, thousands of golden eagles leave their wintering grounds in the southern and western U.S. and Mexico, and follow the eastern slopes of the Rockies, all the way north to their breeding grounds in Yukon and Alaska. And every fall, they head south again. For 16 years, researchers have been there to count them on their way. "This is the longest running systematic study of raptor migration in Western Canada," says Sherrington.

Wind lift is thought to be the main reason why migrating eagles stay so close to the Rockies. "The westerly and southwesterly wind dominance is amazing," says Sherrington. "It gives the birds a continual lift as the air rises off the mountains."

So how does counting eagles in Kananaskis allow one to make complex projections about conditions from Alaska to Mexico? In fact, the principle is very simple.

If the proportion of young eagles heading south in the fall is high, the breeding conditions in the far north were good. In fall 2000, for example, the immature to adult ratio was 0.4 (or almost one immature bird for every two adults), which would suggest that most paired adults raised young. Sure enough, Carol McIntyre from Alaska's Denali National Park reported that roughly 80 pairs of eagles produced 69 young.

Conversely, if few young birds come north in the spring, then winter survival



The eagles use rising air currents to soar in circles, effortlessly gaining height until they are little more than pinpricks. They then break off with a slight tilt of the wings and gather momentum until they are gliding at up to 120 kph. PHOTO: C. HANSEN

in the south has been poor. Spring counts from the Mount Lorette observation site suggest a 60 percent loss of young birds from the fall; this tallies with the Denali figures, which point to a 65 percent loss of juvenile birds. This is quite a high rate. Young eagles are particularly vulnerable to winter mortality, partly because they haven't yet developed the required survival skills in a dangerous world, but also because their black-tipped white tail feathers are particularly attractive to human collectors.

Breeding success of golden eagles is very much dependent on numbers of snowshoe hares in their northern breeding grounds, particularly soon after the eagles' arrival in the spring, but snowshoe hare populations are notoriously susceptible to boom-bust cycles. If hares are plentiful, the newly arrived eagles quickly reach peak breeding condition; if hare numbers are low, the eagles may not breed at all. In 2003, just three years

after the Denali eagles produced 69 young during the "up" cycle of hares, the hare numbers had crashed and the eagles produced only three young.

While the initial focus of the migration counts was on golden eagles, the researchers have always recorded all wildlife, including other raptor (bird-of-prey) species; to date, 18 species of raptor have been recorded at the Mount Lorette site. And the importance of the mountains and ridges for bird migration doesn't stop with raptors. A total of 245 bird species have been recorded at the site, not to mention grizzly bears, wolves, and lynxes.

Since 2006 a new raptor observation site has been monitored in the Crowsnest Pass, at the southern tip of the Livingstone Range. Interestingly, the traditional name for the site is Piitaistakis, or "Place of the Eagles." Here a number of north-south running ridges converge, and different streams



The Rockies lead the migrating eagles straight to their destination. Raptors have been monitored at Mount Lorette (#1) since 1992 and at Piitaistakis (#2) since 2006. SATELLITE IMAGE: GEOGRATIS / DETAILS ADDED BY C. WEARMOUTH (AWA)

of migrating birds converge toward one relatively narrow area. This may be the reason for a record count of 5,445 golden eagles at this site in fall 2007.

In 2007, between the end of August and the beginning of December, a total of 11,188 finches of nine species was recorded migrating along the ridge at Piitaistakis. “Early in the morning, there is a significant movement of sparrows, warblers, and thrushes on the ridge,” says Sherrington. Meanwhile, at the base of the same ridge, there may be very few records, despite the presence of birdfeeders and people watching for birds. “On one day, I recorded 1,000 redpolls on the ridge, and they recorded none at the bottom.”

Once again, this migration of small birds has not been observed before, perhaps simply because nobody was watching. “No-one has stood up on a ridge for months and counted dickie birds,” observes Sherrington. The early morning movement of small birds takes place possibly because there are fewer predators around at that time.

The ridge tops seem to be a significant habitat for migrating birds. It is likely that the early morning sunlight hits the tops of the ridges first, stirring into activity the insects upon which many birds feed. For the seed-feeding birds, pine trees along the ridges are an important food source. Pine trees that are more stressed by climatic conditions — lack of water or high winds — tend to produce more pine cones as a long-

term survival strategy. Sherrington has observed that trees on these exposed ridges do appear more productive than trees lower down.

The newly discovered movement of small birds along the ridges has other implications. Not far from the Piitaistakis site stand the serried ranks of wind turbines, a prominent feature of the landscape west of Pincher Creek. “Raptor studies have been done as a background to the siting of wind turbines, or microwave towers,” says Sherrington. “But it is also important to consider migrating songbirds, which could also be at risk from impacts with such installations, especially at night.”

Similarly, Micrex Development plans to locate a new magnetite mine just to the north of the Piitaistakis site. The new discovery of just how many songbirds are migrating along these ridges raises the question of just what the impacts of the proposed mine would be.

The importance of this Piitaistakis observation site is reflected in the fact that it will soon feature in a new National Geographic tourist map of the Crown of the Continent.

One of the most striking things revealed by RMERF’s observations is that every spring and fall, up to five thousand golden eagles migrate up and down the Rocky Mountains, but until 1992, nobody had really noticed. This is, remember, a bird with a seven-foot wingspan! Before then, although some



The red-tailed hawk is among the many raptor species using the Rocky Mountain migration corridor. PHOTO: C. OLSON

Numbers of migrating raptors counted at Mount Lorette Site, spring and fall combined, 1992-2007

Golden eagle	108,982
Bald eagle	9,648
Sharp-shinned hawk	6,660
Red-tailed hawk	1,955
Northern goshawk	1,552
Rough-legged hawk	1,472
Cooper’s hawk	1,233
Northern harrier	586
Merlin	409
American kestrel	299
Osprey	275
Broad-winged hawk	183
Peregrine falcon	169
Prairie falcon	127
Gyr Falcon	96
Swainson’s hawk	30
Ferruginous hawk	21
Turkey vulture	14
TOTAL	133,711

birdwatchers such as Wayne Smith were already suspecting that the eagle migration was more significant than had been previously thought, it was generally believed that there was only a limited movement of young eagles, which tend to pass through in April and May. The migration of adult eagles is much more purposeful, but it takes place in March and April, and was largely missed. If nothing else, it makes one wonder what else is going on out there that we haven’t yet noticed!

Another important lesson is just how much can be achieved by amateur naturalists. “It shows that you can do good studies just by observing,” says Sherrington. “There is still an important place for good empirical observation, and you can’t overemphasize the importance of time in such studies.” And it can essentially be done with little more than a notebook and a pair of binoculars.

For more information about the eagle migration, check out the Rocky Mountain Eagle Research Foundation website at www.eaglewatch.ca.



WHY DID THE SALAMANDER CROSS THE ROAD?

By Cyndi Smith

Sex, that's why ... and trying to get home again. And then the kids have to come home when they get big enough.

On the Entrance Road in Waterton Lakes National Park, there's a section of highway adjacent to Linnet Lake that is a killer of long-toed salamanders. Studies have shown that the salamanders cross the road during three different time periods annually: when adults migrate from non-breeding habitat to Linnet Lake to breed, when adults leave Linnet Lake to return to their non-breeding habitat, and when juveniles leave the lake for the non-breeding habitat. Migration is intermittent, taking place primarily at night during rainfall.

The issue was first raised by one of the park's interpretive staff as he noted an unusually high mortality of salamanders along the primary visitor access road into Waterton Park. It became apparent that the mortality was, in part, the result of a new sidewalk that had been built two years earlier. The right-angle curb prevented the night-time migration of the salamanders — stranded on the road, they were killed by cars and predators.

The community soon pulled together, with adults and children coming out during the April migration (on cold wet nights) to physically move the salamanders over the curb. This hands-on, personal commitment of the community was a significant educational opportunity that solidified local support for the salamanders and led to additional investments in replacing the curb with a sloped curb to allow the salamanders to climb to safety.

But salamander mortality on the road continued because of increasing vehicle traffic. In 1994, at least 10% of the salamanders that attempted to cross the road were killed by vehicles, and up to 44% during more recent counts. The number of carcasses found along the road represents an unknown fraction of the total killed, because scavengers



Long-toed salamanders face many challenges in Alberta, including the introduction of game fish in ponds and lakes, wetland drainage for industrial and recreational development, road-building that separates different seasonal habitats, and drought.

PHOTO: PARKS CANADA

often remove the remains. One researcher noted that highway traffic in the months of April, May, September, and October, when salamanders are migrating across the roadway, increased by 52%, 17%, 18% and 20% in those months, respectively, between 1989 and 2000.

We're hoping an effective solution is to install specialized culverts, or "amphibian tunnels," to allow the salamanders to cross *under* the road. These would be the first such tunnels for amphibians in Canada's national parks and only the second location in Canada. Each tunnel will be 600 mm wide by 520 mm high and will have slots that allow air, moisture, and light into the tunnel. A series of small fences will direct amphibians to the tunnels.

A university student will also study the dispersal of salamanders to their over-wintering habitat, which is not well documented in the scientific literature. Better knowledge of non-breeding habitat would help ensure that this habitat is adequately protected and managed. For example, the hillside above the road, which the animals traverse, is a serious problem for non-native plant management and control

measures normally include herbicides in addition to pulling/digging, but there is concern about possible impact on the salamanders.

The tunnels are to be installed in May 2008. The use and success of the tunnels will be monitored intensely in the first two years, and modifications will be made if required. We anticipate that vehicle-caused mortality of long-toed salamanders and other small wildlife will decrease due to the tunnel installation, and that the Linnet Lake population of salamanders will increase ... due to sex, of course!

For further information, contact Cyndi Smith, Conservation Biologist, Waterton Lakes National Park: (403) 859-5137, Cyndi.Smith@pc.gc.ca.

Cyndi Smith has an MSc from Simon Fraser University. Since 1980, she has worked for Parks Canada in a variety of roles, from law enforcement to resource management. In Waterton Lakes National Park, she is responsible for ecosystem research and monitoring activities, species at risk, and data management.

Say “No” to Wildlife Privatization

The Open Spaces program is a government initiative sponsored by Alberta Sustainable Resource Development Minister Ted Morton. Many hunters and conservationists, including AWA, fear that the program, if approved, will lead to paid hunting and the privatization of wildlife.

One of the two components of the Open Spaces program is the Recreation Access Management Program (RAMP), which is intended to compensate landowners for increasing/improving habitat and for allowing public access for hunting and angling.

Under the second component, Hunting for Habitat, landowners would receive 10 to 15 percent of the province’s elk hunting tags (and perhaps tags for other species as well) and could sell these to hunters. The primary purpose is to increase elk herds.

AWA has joined with other concerned groups to oppose the proposed Open Spaces program. We believe that, as wildlife in Alberta is a “public resource,” all Albertans must be involved in wildlife management decisions, not just hand-picked “stakeholders,” as has been the case in Open Spaces, the planning of which has been anything but open.

AWA opposes paid hunting and the privatization of wildlife. We recognize that there is an issue here that needs to be addressed. There is currently no mechanism for rewarding landowners who take seriously the responsibility of providing ecological services such as wildlife habitat or for penalizing those who don’t. However, we firmly believe that the proposed Open Spaces project is not a solution. We also know that this program does nothing to address our government’s neglect in failing to protect and care for public lands and protected areas throughout Alberta.

For more information on the proposed Open Spaces program, go to poli.ucalgary.ca/wildlifestewardship. To see the response of AWA and other conservation organizations, go to AlbertaWilderness.ca.

— Nigel Douglas

AWA Gains Voice in Rumsey’s Future

The coalbed methane well licence granted to Pioneer Natural Resources in 2007 in Rumsey Natural Area expired a year after it was granted, and was cancelled on February 28, 2008 by the Energy Resources Conservation Board (ERCB; formerly the EUB). This is good news for this internationally significant protected area and for all who have worked strenuously to keep Rumsey free of industrial activity.

Although the EUB’s Information Letter 90-21 (1990) says AWA will be advised of well licence applications in Rumsey, we received no notification until after the Pioneer licence had been granted in February 2007. In March 2007 AWA and the Alberta Native Plant Council (ANPC) jointly requested that the EUB review its decision. Accompanying the request was a submission documenting the historical interest of both organizations in Rumsey and providing reasons for objecting to the licence. The EUB responded in August with a denial of our request, stating that neither organization had advanced a legal right or interest in relation to the proposed well.

Despite the denial, however, the intervention resulted in several important changes that may mark the beginning of true protection for Rumsey. First, Pioneer Natural Resources allowed the well licence to expire, choosing not to proceed with drilling in the protected area. Second, on February 20, an ERCB representative informed AWA that Rumsey Natural Area and Ecological Reserve is now flagged so that any application within Rumsey will immediately trigger contact with AWA. Third, the ERCB has committed to inviting AWA to participate in consultations with Sustainable Resource Development should any applications be submitted.

AWA believes that licences with surface access should not be considered for the Rumsey Natural Area, nor should any new oil and gas dispositions be posted. Until Alberta Energy makes that commitment, it is essential that system failures such as occurred with Pioneer’s

well licence be averted through effective process. This includes early consultation with all interests regarding any applications for surface access approval.

AWA is also seeking leadership from Alberta Parks in developing a new management plan for the Rumsey Ecological Reserve and Natural Area that recognizes the area’s ecological significance, the need to restore past disturbances to native condition, and the need to prevent cumulative adverse effects in future.

— Joyce Hildebrand

Sage Grouse — No Place to Dance

On Valentine’s Day, Alberta Wilderness Association and five other conservation groups announced the launch of a major lawsuit against federal Minister of Environment John Baird for refusing to identify critical greater sage-grouse habitat. Environment Canada’s refusal could mean that the sage-grouse will soon have no place to perform its spectacular ritual mating dance — and therefore little chance of survival.

The Federal Court lawsuit, brought by Ecojustice Canada on behalf of the six groups, argues that failure to identify critical habitat in the recovery strategy for the grouse amounts to a refusal to enforce *Canada’s Species at Risk Act (SARA)*.

The once widespread grouse has been listed as “endangered” since 1998 and now survives in a remote area in southeastern Alberta and southwestern Saskatchewan. In addition to the federal government’s refusal to identify critical habitat despite having ample scientific information to do so, Premier Ed Stelmach’s Alberta government has refused to limit oil and gas installations in grouse habitat despite having approved the 2005 provincial sage-grouse recovery plan. Scientists have clearly shown that oil and gas activity undermines breeding and survival of greater sage-grouse.

To support our efforts to save this endangered species from extinction, please consider donating to cover the high legal costs of this campaign. Write to Environment Minister John Baird and Prime Minister Harper asking that they

comply with the *Species at Risk Act* and immediately amend the federal greater sage-grouse recovery strategy to identify the species' critical habitat.

— Joyce Hildebrand

National Parks Draft Fire Management Plan

Parks Canada has recently been asking for input into its draft Fire Management Plan for four Rocky Mountain National Parks: Banff, Jasper, Yoho, and Kootenay. The draft plan will govern fire management practices for the period 2008—2017. The stated objectives of the proposed plan are (1) to provide for the safety and protection of life, property, and adjacent lands from wildfire, and (2) to achieve ecological goals through the use of prescribed fire and appropriately managed wildfire.

The positive long-term benefits of restoring fire as an active component of a healthy ecosystem are generally seen to outweigh any short-term negative effects on terrestrial ecosystem health or on wildlife.

Responding to the plan, AWA stated that it is “broadly supportive of the use of fire — both wildfire and prescribed burning — as a management tool in the National Parks, and sees it as a positive development.” At the same time, we stressed that “when there are endangered species involved, particularly woodland caribou, then they should take priority over prescribed burning programs.”

AWA also noted that it takes substantial resources to implement wildfire management practices such as prescribed burning. These resources must come from new funding and not be diverted from other essential Parks Canada programs.

For more information, see parcsCanada.pch.gc.ca/pn-np/ab/banff. AWA's response can be seen at www.albertawilderness.ca

— Nigel Douglas

Alberta Government Washes Its Hands of Suffield Hearing

Despite strong opposition, the Joint Review Panel overseeing the hearing into EnCana's proposed drilling project in Suffield National Wildlife Area (NWA) chose to approve EnCana's request for a delay of the hearing until October, 2008. The Suffield Environmental Coalition, of which AWA is a member, believes

that the delay is an abuse of the hearing process and gives an unfair advantage to EnCana.

Meanwhile, some provincial government ministries appear to be abandoning the Suffield region altogether. Alberta Environment declined the Joint Review Panel's request to participate in the Suffield hearings to share the department's expertise on water use, licensing, and management, stating that the NWA is a federal responsibility.

However, the department is clearly abdicating its responsibility for the province's water. EnCana's Environmental Impact Statement includes copies of water-well drilling reports to Alberta Environment, as well as groundwater diversion licenses issued by Alberta Environment to EnCana for their operations on CFB Suffield, showing that the department has responsibility for groundwater on the Base.

Alberta Environment also instructed the department's representative on the Suffield Environmental Advisory Committee (SEAC) not to participate in preparing SEAC's submission to the Joint Review Panel, leaving only two SEAC members to write the submission — the Environment Canada and Alberta Energy and Utilities Board representatives.

Alberta Sustainable Resource Development (SRD) was also invited by the Panel to participate in the hearing to provide input on species at risk, ungulate use of the NWA, and key effects of the project on the NWA, as well as other issues. Despite SRD having written to the Panel that the NWA is “of major significance to many Alberta wildlife species,” the department declined the invitation to participate. AWA believes that this is unacceptable: SRD is responsible for wildlife management and public lands, and much of the wildlife that uses the NWA ranges widely onto the adjacent provincial public land.

AWA will continue its efforts to protect the integrity of the NWA by opposing EnCana's project application. If you would like to support the Suffield campaign financially, please go to www.albertawilderness.ca/AWA/Donate.htm and designate your gift for Suffield. We would sincerely appreciate your donation toward the considerable costs of this campaign.

— Joyce Hildebrand

Migratory Bird Regulations

AWA has expressed a number of concerns about Environment Canada's proposed changes to the 1994 Migratory Bird Convention Act, aimed specifically at dealing with the issue of “incidental take” of migratory birds.

In theory, the regulations surrounding migratory birds are probably as strong as any wildlife protection measures in the country. The Act prohibits the destruction or disturbance of the nests, eggs, young, or adults of any migratory birds, including common birds such as robins or crows.

But in practice, as Environment Canada background documents suggest, “many are inadvertently destroyed in the course of ongoing industrial activities and development.” This inadvertent destruction is termed “incidental take.” Environment Canada does not currently have the ability to issue exemptions to the regulations, so the current situation is a strong law which is, if not unenforceable, certainly unenforced.

AWA is very concerned that any changes to the *Migratory Birds Convention Act* are likely to result in a dilution of the act's effectiveness, without delivering any remedies to deal with the problems migratory birds are facing. Like the original regulations, the proposed changes talk about protecting migratory birds and their nests, but do nothing to protect the birds' habitat. As with so many pieces of provincial and federal legislation, the regulations attempt to do the impossible: to protect individual animals without doing anything to protect the places where they live.

As an example, AWA's response to Environment Canada mentions that “Even the Suffield National Wildlife Area, a supposedly protected area which falls under Environment Canada's regulatory jurisdiction and is critical migratory bird habitat, is under threat from a major new natural gas infill development. National Wildlife Area management plans must prohibit new industrial activity and phase out existing activities.”

AWA's full response to the proposed changes can be seen online at issues.albertawilderness.ca/WL/archive.htm.

— Nigel Douglas



KILLING WILDLIFE TO SAVE WILDLIFE

By Nigel Douglas, AWA Conservation Specialist

A proposed University of Alberta research project that is investigating killing and sterilizing wolves near Rocky Mountain House has received unprecedented public opposition. Once again, people are asking exactly who we are managing wildlife for in Alberta.

According to the research proposal, “Concern over ungulate herds that are *below objective* in portions of this area has led to discussions of reducing wolf predation” [emphasis added]. To accomplish this reduction, the proposal suggests sterilizing the alpha male and female wolves, and killing the rest of the pack in order to maintain wolves on the landscape at a low density.

AWA is asking just who has determined that ungulate numbers are “below objective.” Wildlife in Alberta is a “public resource,” so presumably the public has a major role to play in determining how they want this “resource” to be managed. Do Albertans believe that sterilizing and killing carnivores to increase ungulate numbers is acceptable?

The proposed research program is not intended to assist endangered species recovery, as with the culling of wolves in disturbed caribou habitat (which AWA also opposes, but some see as justifiable). Rather, its objective is increasing numbers of common ungulates, including elk and mule deer. The Minister of Sustainable Resource Development (SRD), Ted Morton, has strongly supported the proposals, citing “very disproportionate, almost historic lows of elk, mule deer and mountain sheep.”

But are they really at a “historic low,” or are they simply not distributed according to human convenience? Parks Canada recently investigated the possibility of sterilizing elk near the Banff townsite because of their high numbers. And SRD has recently been lobbying local authorities to support the introduction of Sunday hunting, part of



Alberta Sustainable Resource Department spokesperson Darcy Whiteside responded to public concern about the wolf sterilization proposal with a surprising and revealing comment: “No one has a problem swatting a mosquito.” PHOTO: R. BERDAN

the justification being that the apparent need to improve highway safety by controlling the excessive number of deer adjacent to highways.

Opposition to the proposals has been extensive, coming from a range of sources. “This is 1950s wolf management that has been updated to include sterilization,” said wildlife biologist Paul Paquet. He described the proposals as “destructive and morally reprehensible.”

The research proposals also received considerable opposition in the media. The *Calgary Herald* and *Edmonton Journal* both carried numerous letters objecting to the wolf cull, and both published editorials against it. “Left alone, the elk and wolf populations regulate themselves quite nicely,” pointed out the *Herald*, and according to the *Journal*, “Manipulating one species for benefit of human sport directly contradicts the conservation principles of sustaining natural biodiversity and the naturally determined balance of species’ populations.”

The *Journal* also put its finger on the real issue, which is still not being addressed: “Preservation of habitat, a much more difficult but important task, is the key to maintaining healthy populations.”

Last fall, Minister Morton instituted Provincial Hunting Day to “promote hunting and hunter awareness and educate Albertans about the important role hunting plays in wildlife management and conservation.” But the proposed wolf cull has received heated public opposition from hunters and non-hunters alike. It seems that killing carnivores to artificially inflate the numbers of huntable ungulates is not an effective way to promote hunting amongst 94 percent of Albertans who do not hunt (2004 Alberta Recreation Survey).

AWA concurs with the Waterton Lakes National Park website: “We can eradicate wolves. The real challenge will be to see if we are wise enough to listen to the howl of the wolf objectively and find creative ways of sharing the landscapes we both depend upon.”

Send your comments to Honourable Ted Morton Minister, Sustainable Resource Development 420 Legislature Building 10800 – 97 Avenue Edmonton, AB T5K 2B6 (780) 415-4815 foothills.rockyview@assembly.ab.ca



CELEBRATING STEWARDS — ALBERTA WATERSHED STEWARDSHIP INITIATIVES

By Carolyn Campbell, AWA Conservation Specialist

Citizen-initiated watershed stewardship groups have a key role to play in protecting and restoring Alberta's surface and ground water, and aquatic ecosystem health. Described in the Alberta government's *Water for Life* strategy as "neighbours sharing information and taking action to protect and enhance their local watershed," watershed stewardship groups engage in an amazingly diverse variety of activities. The trio of initiatives profiled here offers a sample of inspiring, creative ways in which citizens are working to address watershed management challenges.

Every spring, volunteers in the Cochrane community gather for a morning of tree planting and creek clean-up along local waterways. Branches and Banks, a spinoff group of the Cochrane Environmental Action Society, is the water stewardship group that has organized this event since 1996. Volunteers of all ages have planted approximately 31,000 native trees so far. Branches and Banks also partners with others in awareness-raising activities, such as wetlands appreciation and the citizen water-testing initiatives promoted by Alberta Water Quality Awareness Day.

In another hands-on project, Branches and Banks worked with a bio-engineering expert in May 2007 to stabilize an eroding bank on Big Hill Creek. Bio-engineering is a simple, effective riverbank-stabilization technique using cuttings of live local native trees such as willows. The cuttings are pounded and pushed into the bank in simple woven or stake structures. The structures provide stability and encourage the tree cuttings to reroot as a natural stabilizer and silt catchment. Fairly labour intensive, with a one- or two-day timespan and inexpensive materials, it's an ideal project choice for volunteer groups. Branches and Banks is very representative of the



Branches and Banks volunteers planting native trees near Cochrane, June 2007.

PHOTO: BANKS AND BRANCHES

many stewardships groups across the province working on stream clean-ups and bioengineering projects for their local river channels.

One of Alberta's newest watershed stewardship groups is the Keepers of the Athabasca Watershed Council. Responding to urgent pressures on the Athabasca watershed, a coalition of groups and individuals formed the Keepers in mid-2007. Its goal 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.

A particular strength of the Keepers is the strong connections it is forging between First Nations and environmental organizations. Fifteen First Nations reserve-based communities, as well as numerous other indigenous communities, depend on the Athabasca River and Lake watershed. An important demonstration of support for Keepers activities came with a recent resolution by Treaties 6, 7 and 8 Chiefs of Alberta calling for a halt to new tar sands approvals (see sidebar). Keepers supported a rally on March 1, 2008 on the steps of the Alberta

Legislature to raise awareness about the pressing health and environmental concerns of the aboriginal community of Fort Chipewyan on Lake Athabasca.

Also on the political-legal front, Keepers member Peter Cyrien of Athabasca Chipewyan First Nations filed a petition with the federal Auditor General in early January (see *WLA*, Feb. 2008, p. 18). Citing recent public health and ecological research, the petition calls on Fisheries and Oceans Canada to investigate *Fisheries Act* violations from contamination of the Athabasca River below Fort McMurray and throughout Lake Athabasca. The petition also demands that Health Canada research human exposure to contaminants from drinking surface water or consuming fish and wildlife in the Lake Athabasca and lower Athabasca River region. The Auditor General's Office has indicated that the petition meets the criteria for an environmental petition, and the two federal departments have 120 days to give substantive responses to the petition.

The Keepers are in the process of compiling a Citizens' State of the Watershed report for the Athabasca. According to Crooked Creek



Stream bank stabilization using bioengineering – the Elbow River Watershed Partnership’s McLean Creek project west of Calgary, May 2007. Author is in second row, second from left. PHOTO: ELBOW RIVER WATERSHED PARTNERSHIP

Conservancy Society Director and Keepers Co-chair Harvey Scott, it is simply unacceptable to wait for provincial authorities to set up an official Athabasca Watershed Planning and Advisory Council (or WPAC). Alberta’s *Water for Life* strategy describes WPACs as the “multi-stakeholder councils that work with government in an adaptive management cycle of basin planning and evaluation.” It could take years for a WPAC to produce a baseline report, Scott points out, while river water quantity and quality decline and health risks multiply.

On behalf of the Keepers, a professional scientist is compiling previous northern river basin studies dating back to the 1990s, along with recent Alberta Environment water data. They would appreciate more volunteer expertise. “Having a few more water scientists with volunteer time to pull together the statistics and analysis would greatly assist us,” Scott says. The report will help to highlight the cumulative effects of mining, forestry, and other industrial projects in the Athabasca River watershed.

The Keepers are also organizing a summer 2008 river tour, starting from the source Athabasca Glacier and ending at Fond du Lac at the east end of Athabasca Lake. A watershed community tour crew of three or four members will be assisted by various groups and individuals in watershed communities along the

way. They will hold Keepers Days in several watershed communities, likely including Hinton, Whitecourt, Athabasca, Fort Assiniboine, Lac La Biche, Fort McMurray, Fort McKay, and Poplar Point on the Saskatchewan portion of Lake Athabasca. The tour expects to conclude with a large Keepers gathering in Fort Chipewyan in August. Keepers Day will include water-monitoring workshops and video documentation of Citizens and Elders Forums where participants will share stories, concerns, and traditional

ecological knowledge about the river, the tributaries, and the watershed lands.

While Keepers of the Athabasca members range over a massive watershed system, the Onoway River Valley Conservation Association (ORVCA) operates in the much smaller Sturgeon River watershed. Its members focus on the risk to water quality and quantity from cumulative effects of surface and subsurface disturbances. Over the years, this group has become an important local resource for others concerned about ground and surface water protection in the North Saskatchewan watershed.

ORVCA was started in 2001 by residents of three counties west of Edmonton in the Sturgeon River watershed (a sub-basin of the North Saskatchewan watershed). The group’s name comes from an underground pre-glacial river valley known as the Onoway River channel, and the group is dedicated to the aquifer’s sustainability. They have been vigilant in drawing attention to unsustainable cumulative diversions, unlawful diversions, and mining practices that risk groundwater contamination.

The group has developed a particular expertise in gravel mining issues. As local landowners dependent on groundwater wells for their own domestic use, group members have observed neighbouring gravel mines and questioned them on practices such as containment reservoir locations, fuel/chemical spill control, and pumping volume license authorizations.



The people of Fort Chipewyan rally on the steps of the Legislature to bring attention to the health and environmental concerns of their community (March 1, 2008).

PHOTO: C. BRESNAHAN



An unlawful operation identified by ORVCA in May 2001, which has since been rectified. As part of a gravel mining operation, a generator engine for pumping water stands at the edge of an exposed aquifer reservoir. The blue canvas catches raw petroleum products leaking from the engine. Neither the engine nor the nearby 4,000-litre diesel fuel tank had any containment structures in case of a fuel spill.

PHOTO: I. SKINNER

When Alberta Environment's responses to their concerns have been insufficient, they have launched Environmental Appeal Board actions. In the process, they delved into the intricacies of the province's *Public Lands Act* and *Municipal Government Act*.

Through their experience in tackling local concerns, ORVCA members Mike Northcott and Ian Skinner became convinced that existing Alberta laws provide municipalities and provincial authorities with the regulatory tools needed to protect land, water, and air. The problem they see is that these laws are not responsibly administered or enforced. To raise awareness of this situation, in late 2007 they drafted a two-page primer, "Environmental Regulations and Management of Water Bodies," which they have circulated to other water stewardship groups.

In 2008 ORVCA has been responding to requests for help from other groups who want to take action on watershed protection issues. For example, residents of Sandy Lake, which is also in the Sturgeon River watershed, are concerned about a proposed gravel mine within two km of the lakeshore. According to Mike Northcott, they cannot get a definite answer from project proponents that the mining will not interfere with the groundwater they depend on for their domestic wells. The residents are urging that the precautionary principle be followed to prevent quantity impacts

or contamination. In early March the project was put on hold because of gravel haul road issues; ORVCA will continue to support Sandy Lake residents in highlighting groundwater concerns if the project resumes.

Farther afield, ORVCA members are in touch with citizens' groups concerned about the huge Dodds-Roundhill surface coal mine project proposed southeast of Edmonton. Another issue they are investigating is cross-contamination between aquifers and natural gas in

drilling operations. ORVCA's history illustrates how citizens who persist in environmental advocacy can become a valuable knowledge resource for others.

The energy and commitment of the volunteer watershed stewardship groups is undisputed. For many groups, an ongoing concern is to secure resources for their activities. The Alberta Stewardship Network, established in 2004, has helped meet this need by facilitating information exchange and capacity-building for these groups, and by administering a Watershed Stewardship Grant program funded by the Alberta government. Capacity issues of watershed stewardship groups remain a concern and are one element of the Alberta Water Council's project on Shared Governance and Watershed Management Planning Framework.

Whether it's joining a water monitoring workshop along the Athabasca or initiating a local water stewardship group, more and more Albertans are reaching out and forming alliances to address their local water and watershed protection concerns. The Alberta Stewardship Network website (www.ab.stewardshipcanada.ca) has a directory of more than 100 Alberta watershed stewardship groups. With summer just around the corner, why not check out the opportunities to get involved in your community?

Treaty Chiefs Call for No New Tar Sands Project Approvals

On February 22, 2008, Treaty Chiefs representing the Treaties 6, 7 and 8 nations of Alberta passed a unanimous resolution calling for no new oil sands project approvals until Treaty First Nations have approved a comprehensive watershed management plan and resource development plan for the region. Chief Allan Adam of the Athabasca Chipewyan Dene First Nation and member of the Keepers of the Athabasca brought the resolution forward at the Chiefs' meeting. After the resolution passed, Chief Adam commented that "thresholds have to be put in place that will protect ecosystem and human health along with the well-being of our land." Lawyer Vivienne Beisel, another

Keepers of the Athabasca member, noted, "The cumulative impacts of oil sands development have all but destroyed the traditional livelihood of First Nations in the northern Athabasca watershed.

The province has continued to issue approvals for new developments without obtaining their consent or consulting with First Nations in a meaningful and substantial way. This is in direct breach of Treaty 8 First Nations' treaty-protected Aboriginal rights to livelihood, and thus a violation of s.35(1) of the Constitution and Articles 26 and 27 of the United Nations Declaration on the Rights of Indigenous Peoples, an international agreement which Canada, along with three other nations, has refused to sign."

RECREATION CORRIDORS PROJECT MAPS THE STATUS QUO

By Carolyn Campbell, AWA Conservation Specialist

A new Northeast Alberta Trails map was released in January 2008 by the government-initiated Alberta Recreation Corridors Program. The map is the first in what will be a province-wide series of seven or eight recreational trail maps. There are certainly positive aspects of such maps and the underlying Recreation Corridors Program. However, a review of the program to date reveals that environmental stewardship concerns are taking a back seat to economic development and recreation priorities. By reinforcing the status quo of Alberta's recreation trail network, the program misses an important opportunity for stronger wildlife habitat and watershed protection.

The Northeast Alberta Trails map covers the region from Edmonton to the Saskatchewan border, and northeast to Lac La Biche and the Cold Lake Air Weapons Range. This map identifies designated snowmobile trails, non-motorized trails, and "multi-use trails including motorized" both in and outside of parks and recreation areas. Half the map's total layout is devoted to text and photos promoting the trails' tourist potential. The map's back fold section encourages environmentally responsible trail use and briefly describes wildlife habitat qualities of the boreal forest and parkland regions.

A "designated recreation corridor" is simply a continuous length of trail for recreation use that is designated under the Alberta Recreation Corridors Program and formally approved by Alberta Sustainable Resource Development (SRD) or municipalities. According to Alberta TrailNet Executive Director Linda Strong-Watson, pre-existing trails that are "designated" under this program do not go through a new environmental assessment. She emphasized that environmental criteria would have been considered at the time they were originally approved as trail routes. Moreover, she added, Alberta's Tourism, Parks, and Recreation department monitors and relocates trails as needed in consideration of environmental impacts. AWA's perspective is that a more

pro-active approach should have been pursued within the designation program itself.

A multi-stakeholder Alberta Recreation Corridors Coordinating Committee was created in January 2006 to implement standards and policies for the program. Political scientist Dr. Ian Urquhart represented AWA at two early committee meetings in 2006. He recalls that the group consisted mainly of representatives from motorized vehicle groups, and the meetings focused on club liability issues and trail construction techniques. After several meetings, AWA concluded that wildlife habitat issues were so marginal to the committee's considerations that attending was not worthwhile.

"Yes, we have to make a place for responsible motorized recreation use," Urquhart comments. "But the fundamental, mortal flaw of the committee was that it missed the most important issue when it comes to any trails program: what lands are going to be allocated or set aside for various uses — motorized, equestrian, bike, foot — and for various trail types. For example, we should be re-examining the motorized trails in Lakeland Provincial Park."

Data collected as part of the trail mapping may contribute to integrated land-use planning in the future, according to Strong-Watson. Information on trail conditions, services, and topography is collected, as well as route data. This is the first comprehensive information available on recreation trails outside of parks. It will be added to SRD data on other public land uses.

In another example of a missed opportunity, however, the data will not be used in the near future to monitor and regulate unsustainable trail use. Strong-Watson explained that unless the land falls within a Forest Land Use Zone, SRD has no tools to regulate trail usage. So for now, the main application of the trail inventory will be to prevent inadvertent trail damage by oil and gas or forestry activities. Where competing land uses are at issue, the database could also be used to notify and consult stakeholders.

This would "protect the longevity of the investment" for operators of designated trails such as municipalities, historical societies, or recreation clubs, says Strong-Watson. AWA recommends that a higher priority be placed on using this information for cumulative effects management to protect wildlife habitat already fragmented by industrial and recreation activities.

The Recreation Corridors Coordinating Committee forwarded its draft recommendations in late 2007 to the Minister of Tourism, Parks, and Recreation. They have not yet been publicly released, so their environmental stewardship ethos remains to be seen. However, a 2003 legislative committee report that was supposed to guide the Committee had relatively weak environmental recommendations: "Designated recreation corridor owners and operators are *encouraged* [emphasis added] to work with landowners or lessees to preserve and protect the environment, to maintain wildlife habitat, and to follow good environmental stewardship practices when locating, designing, constructing and maintaining recreation corridors." The report's accompanying "suggested direction" was that trail operators "must be aware of and agree to comply with all existing legislation requirements for environmental protection and requirements for compliance and mitigation" but there will be "no obligation by the trail owner/operator or the landowner ... to enter into an agreement related to environmental stewardship."

This "light touch" approach to environmental stewardship may make sense on a converted rail-bed trail through highly settled land. But by sanctioning existing trails without assuring wildlife and watershed protection, the designated corridors program has abdicated an important responsibility. Our generation must be more vigorous stewards of this habitat: the status quo is not good enough.



A TENPEAT AND CHANGE — LET’S START WITH THAT OTHER TAR SANDS CONSULTATION

By Dr. Ian Urquhart, AWA Board Member

“Environment takes precedence over the economy.”

— Premier Ed Stelmach
February 25, 2008

In early March, a disappointingly small number of Albertans re-elected Premier Ed Stelmach’s Conservatives. Our first-past-the-post electoral system turned an impressive victory in the popular vote for the Conservatives (53% of those who voted) into a landslide in terms of seats. The 72 seats captured by the Conservatives on March 3 amounted to 87 percent of the seats in the legislature. For the Conservatives, this was their “tenpeat” — their tenth successive re-election since Peter Lougheed led the party out of the political wilderness in 1971.

During the campaign the Conservative mantra was all about “change” — “change that works for Albertans” was what the Premier promised. As his new Cabinet thinks about what that promise means specifically for our province, I hope they will remember that the Royalty Review Panel was not the Conservative government’s only tar sands consultation. Between September 2006 and summer 2007, hundreds of Albertans spoke out about the future of the tar sands to another government-appointed review panel. The Oil Sands Consultation Multi-stakeholder Committee traveled to eight cities and towns to hear what values, principles, and actions people thought the government should embrace with respect to the greatest resource boom in Canadian history. That consultation, unlike the Royalty Review Panel, had a very broad mandate: the “consideration of economic, environmental and social issues in an integrated manner.”

Don’t feel bad if you’ve forgotten about this other tar sands consultation. Your government seems to have forgotten about it as well. It is now going on eight months since the Committee reported. So far, the Committee’s hard work has



The McClelland Lake watershed contains one of the world’s most spectacular patterned fens. Open-pit oilsands mining, which will destroy the fen and surrounding wetlands, has been approved for this area. PHOTO: I. URQUHART

not sparked a meaningful response from government — other than to thank the Committee for its valuable work.

Consultation Background

The catalyst for this consultation came from one of the most honest, yet chilling, government documents on the tar sands I have seen — the Mineable Oil Sands Strategy (MOSS), released for public comment in October 2005. There was no pretence that ecological sustainability mattered to the government.

For at least a generation, MOSS proposed to turn the Athabasca Oil Sands region north of Fort McMurray into an industrial free-fire zone. Throughout approximately 2,900 km² of northeastern Alberta, tar sands mining would get “the highest priority”; wildlife habitat protection would “not be implemented prior to or during oil sands mining.” This meant that wildlife issues (not to mention biodiversity or ecological sustainability) would not be entertained at all for at least the next 30, 40, or more years.

The strategy would abandon any interest in preserving even a fraction of

this landscape in its natural state. Instead, it offered grand promises of a better “reclaimed” future. The hubris of these promises was palpable. After mining’s “temporary impact,” future generations will benefit from “a new valuable landscape.” It would not be today’s ecosystem. Instead, reclamation would “create an ecosystem that fits within the region.” Any remaining concerns for “seamless reclamation to a self-sustaining boreal forest ecosystem” were to be soothed by the promise that Alberta’s new, improved boreal would have “a natural look.”

MOSS’s proposed public consultation process was duplicitous and cunning in the extreme. Consultation would only take place in Fort McMurray in balmy January weather. Its public open house would open its doors for only 150 minutes; in addition, four identical workshops were promised.

Public reaction to the substance and proposed consultation process of MOSS was as frigid as Fort McMurray’s weather on the day scheduled for the open house. Surprisingly, the government respected



Oilsands mining north of Fort McMurray. PHOTO: I. URQUHART

this reaction and abandoned the MOSS consultation model. The Oil Sands Multi-stakeholder Committee was instead created to undertake a more honest and accessible public consultation.

Is Consensus as Good as It Sounds?

In June 2007 the Committee submitted its final report to the Ministers of Energy, Environment, and Sustainable Resource Development. As befitted the breadth of the Committee's mandate, the report contained 120 recommendations to government. The 19-member committee produced 96 consensus recommendations; consensus could not be reached on 24 action-requests. Fifteen of the 24 non-consensus items concerned the vision to ensure a healthy environment.

When it came to this environmental vision, the Committee developed 11 strategies and proposed 50 actions to implement those strategies. Consensus was reached most often when proposed actions were general or abstract, were voluntary, and were not calling for significant changes to government legislation and/or industry behaviour. Consensus also emerged when proposed actions spoke to motherhood concepts such as "good information," "comprehensive planning," "better management systems," or "cumulative environmental impact assessment." Consensus broke down when deciding what specific wardrobe these ideas should wear.

An example of this enthusiasm for the general and abhorrence of the specific appears with respect to the strategy called "Improve cumulative environmental impact assessment process for oil sands." There was no disagreement on the desirability of gathering comprehensive environmental baseline data or on the value of doing regional cumulative environmental impact assessments. But the Committee could not define the relevant baseline or assessment "in more specific terms." It could not reach consensus on the merit of establishing a baseline generated by historical data, modeling, and traditional environmental knowledge. Government objected to this proposed "specific prescriptive definition." This meant that government, as well as industry, refused to entertain the idea that the condition of the boreal forest before this black gold rush began was a suitable yardstick for environmental assessments or reclamation.

The ultimate emptiness and poverty of the Committee's environmental health vision is best seen in the section discussing the strategy entitled "Minimize the impact of oil sands development on the biodiversity of boreal forests." Is my eyesight jaundiced when I see the following statement, ostensibly written to demonstrate the Committee's commitment to establishing protected areas, as essentially meaningless? "The committee also reached consensus on establishing new protected areas ...

but could not achieve consensus on limiting the total amount of land that could be disturbed, on establishing an interconnected network, or on setting aside four specific protected areas."

Everyone on the committee was prepared to say that new protected areas made sense. But when it came to walking that talk, government and industry refused to regard any of the ENGO-designated candidate protected areas – McClelland Lake Wetland Complex, Gypsy Gordon, Athabasca Rapids, or the Richardson Backcountry – as worthy of protection.

What Should Come Next?

None of the above is meant to say the possible environmental actions outlined by the Committee have no value. The intention instead is to suggest that ecological merit most often rested with the actions the Committee could not build a consensus for. In many cases these non-consensus recommendations were those enjoying the most support among those citizens who appeared before the Committee. To consider seriously these non-consensus recommendations would be to follow the guidance provided by Vance MacNichol, the retired senior public servant who chaired the Committee's work. He wrote: "It is my view that it would be beneficial for the Government of Alberta to look at not only the consensus actions but consider and deal with the non-consensus issues expeditiously as well... Frankly, I believe there are positive opportunities for moving forward on them with some additional time and effort"

If the Stelmach government really wants to implement "change that works for Albertans," it could do much worse than start its new mandate with action on many of the non-consensus recommendations found in the Oil Sands Multi-stakeholder Committee final report.

Ian Urquhart is the author of Making It Work: Kyoto, Trade, and Politics (2002) and co-author of The Last Great Forest: Japanese Multinationals and Alberta's Northern Forests (1994). He teaches political science at the University of Alberta.

Close the Gate on the Open Spaces Program

Carl Hunt, a hunter-conservationist from Edson, sent a longer version of this letter to Minister Morton on February 20, 2008. Carl worked as a fish biologist for more than 30 years with Sustainable Resource Development. For a brief summary of the Open Spaces program, see page 16.

Dear Minister Morton,

Your letter to “Fellow Hunters and Conservationists” didn’t answer my concerns that the Open Spaces program might evolve into paid hunting.

Like most hunters, I would welcome the opportunity to hunt on private land and like all conservationists/environmentalists, I think the protection and development of wildlife habitat should have a high priority compared to today’s emphasis on monetary values. But nowhere could I find the safeguards to prevent the proliferation of a black-market in the sale of farmer- issued tags or information about how public access would be controlled to protect the access rights of resident hunters or how the safety and vandalism concerns of landowners would be addressed.

I fail to understand who would evaluate the qualities of productive wildlife habitat that, according to the original pilot program description, would return private landowners an annual profit of up to \$2000 for 100 hunter-days per year for a section or landowner! How much would this cost taxpayers if it were widely applied to private property? Habitat characteristics vary for each species, so how would the government value different habitats? Taxpayers could end up paying for aspen scrub to produce bull elk but might sooner watch a pileated woodpecker or caribou in an old-growth forest.

What really confounds me is having taxpayers pay private landowners to protect wildlife habitat *while the government ignores the protection of critical wildlife habitat on grazing leases and crown lands*. Our mountain caribou herds haven’t been hunted since



Mule deer in the Castle area. The government continues to ignore the need for habitat protection, preferring instead wildlife management that increases ungulate populations for hunting. PHOTO: N. DOUGLAS

1980 and continue to decline while the government ignores the real problems of habitat degradation. Logging companies continue to log these areas even though the demand for wood fibre products and lumber has declined. Petroleum companies are building roads and “voluntarily” promise to share them with the logging industry. Thirty years of caribou recovery plans, and all we have seen is a caribou cowgirl trying desperately to prevent road-kills on a highway and caribou cows rounded up and penned like livestock to reduce calf mortality. Now the government has resorted to culls of wolves, which – as science has repeatedly shown – rebound to even greater numbers after the killing stops. Will the wolf kill stop when the gas field is developed? Are caribou recovery plans written by industries?

Grizzly mismanagement is following the same scenario as caribou. Stop the hunting, blame poachers, and allow industries to continue “business as usual.” When is the Alberta government going to implement some industrial road planning, stop the unlimited motorized access to every quarter section on Crown land, and recognize that road densities are destroying wildlife habitat?

The Open Spaces Project implies benefits for fishermen, such as better

access to fishing, but says nothing about habitat protection. Bull trout have been protected from harvest for over 10 years, westslope cutthroat are being considered for listing under the federal *Species at Risk Act*, and Arctic grayling have been decimated in the headwater tributaries of the Athabasca River. The accumulated impact of human activities on our watersheds hasn’t even been monitored. Private landowners can legally remove vegetation to the high-water mark. On public land, the number of stream crossings is unrestricted and riparian buffers aren’t even required on the thousands of kilometres of small feeder streams that nourish our trout waters. For example, aerial herbicide spraying for intensive forest management (approx 30,000 hectares sprayed per year) is allowed within five metres of fish-bearing waters and there is only a one metre buffer for ephemeral streams.

In summary, I would really like to understand why the Alberta government is offering to use taxpayers’ money to protect habitat and promote elk hunting on private property while they squander the renewable wildlife and fisheries habitat on public lands.

As a fellow hunter, fisherman, and unabashed environmentalist, I implore (quoting from your letter, 2008), “if I haven’t persuaded you, I hope you will keep an open mind” and support a broader view of the critical habitat protection that is greatly needed and long overdue in this province.

Sincerely,
Carl Hunt
Edson, AB

Premier Promises to Revisit Open Spaces Program

On March 1, 2008, three days before the provincial election, Premier Stelmach wrote the following letter to Mr. Wayne Lowry, Alberta Fish and Game, Lethbridge.

Dear Mr. Lowry:

I have been made aware of the serious and legitimate concerns of stakeholders in the development of the



PHOTO: J. HILDEBRAND

proposed Open Spaces pilot program. This concerns me and let me assure Albertans that a government under my leadership is committed to fair, open, prior consultation.

I can assure stakeholders that elected officials of the caucus will always be the final arbitrator of public policy and will be guided by the public interest. In our system of government, each legislature has the right to review decisions of policy and make changes as deemed necessary. To this point, should the people of Alberta entrust my Progressive Conservative party with the honour and mandate of governing Alberta, I will commit to bringing the Open Spaces pilot back to my Caucus to be revisited.

Yours truly,
Ed Stelmach
Progressive Conservative Leader

Public Land Sales – An Owner’s Perspective

February 1, 2008

Dear Premier Stelmach, SRD Minister Morton and MLA Jablonsky,

I have been writing for several years about this Tory government’s continued practice of selling (more like giving away) our public lands – including Tax Recovery Lands – without any discussion with Albertans (the real owners) about the value of leaving at least the most ecologically valuable lands as a public trust for the benefit of future generations of Albertans.

When Dr. Morton promised us a new Land-Use Framework, I was hoping that this lack of fiscal responsibility would stop, and that at least some of these Tax Recovery Lands would be protected. Once transferred to the municipalities, they are not obliged to preserve the land that is ecologically valuable, but are at liberty to get the most money they can

from the sale of this land.

When is a policy coming that will preserve Alberta’s Public Lands for Albertans? Environmentalists and others have been asking for years to get legal protection for public lands and a process that would scientifically assess the true value of ecosystems versus the short-term “buck in the hand” derived from selling this property to either the highest bidder or the municipalities bordering these lands.

I am extremely angered that the public has, for the most part, been kept in the dark about the ongoing disposal of these lands by this government, which continues to tell us how much more open and accountable it is than the previous Tory government was. And by this, I don’t mean recording it in some obscure section of the government’s website.

I understand that in the M.D. of Taber alone, there are 569 quarter sections of Tax Recovery Land, and that the process of transfer has already begun and will continue until 2016, when the last lease expires. Is the government waiting until 2016 before telling Albertans what they are doing with our land? Much of this land is native prairie and is home to numerous endangered species and species at risk. Is it fiscally responsible for the government to give away this land for \$1 a parcel when its ecological value is beyond price because of its ability to support biodiversity and also assist Albertans to survive global warming?

To date this government has allowed millions of acres of natural wetlands and natural prairie to be destroyed. This government has mismanaged water to the point that many regions have water shortages and contaminated water. Global warming predictions say that our area will suffer severe droughts and water shortages in the near future, *yet this government has done nothing to protect*

the areas of our province that store carbon and water.

The AWA demands full public disclosure and public review of the sale of all government-administrated lands, including Tax Recovery Land. I fully agree with this demand. The public must be fully involved in any sale or transfer of these lands.

Aside from the public involvement, AWA and I call for the development of a provincial prairie and parkland conservation strategy that includes the following:

1) Identification of all ecologically significant lands administered by the government in the White Area. This should go beyond the Environmentally Sensitive Areas report and involve a comprehensive review by *qualified* ecologists and take place within a regional framework that examines the need for prairie conservation and endangered species protection.

2) An open process that allows *all* Albertans, not just local interest groups, to participate.

3) Formal legislated protection of lands that the people of Alberta want preserved in perpetuity.

I understand that Dr. Neil Brown has sponsored a *Wildlife Habitat Preservation Act* and I believe that this would complement the protection that is required to preserve these lands for the future benefit of Albertans.

In addition, I hope this government will release Dr. Morton’s new Land-Use Framework so that Albertans can judge just how well this government has done at protecting the future land wealth and thus the future prosperity of Albertans.

Thank you for considering my requests.

Dorene A. Rew
Red Deer, AB

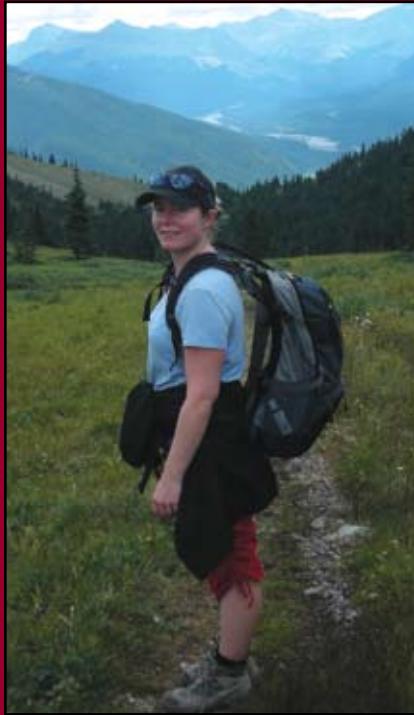


PHOTO: C. MILLER

Staff Profile: Carly Miller

It took a trip to the top of Kilimanjaro for me to realize that I had much more to give back than I was giving. It was a life-changing experience and it really reconnected me with the things that I truly care about, one of which is the environment.

I have always loved being outside in nature and consider myself very fortunate to be a native Calgarian living so close to such breathtaking beauty. Being active has always been important to me, and if I can be outside, I am. I love to hike and snowshoe and do so at every opportunity. Although I've traveled extensively, I have never seen the variety of landscapes that we have in Alberta anywhere else. I have had amazing experiences in Alberta's mountains, lush forests, grasslands, and badlands and each of these areas is equally important to me. For as long as I can remember, I have been concerned about the environment and in this particular field, I taught my parents everything they know!

A friend introduced me to the Alberta Wilderness Association, and it came at

a very good time. I am currently taking a non-profit management course through Mount Royal College, and I was looking for volunteering opportunities within an organization that I felt a connection with. I was hoping to gain experience but was also looking to make a difference in a personal area of concern.

I have recently accepted a position as Outreach Specialist, and one of my first responsibilities is to coordinate the Wild Alberta Expo. I am very excited about both the position and this fantastic Earth Day event. I am thrilled to be part of such an outstanding organization and such a wonderful team.

Staff Profile: Jennifer Cook Bobrovitz

I recently joined Alberta Wilderness Association staff as part-time librarian responsible for maintaining and developing the collection in the Wilderness Resource Centre, which supports the work of the AWA. In the spirit of "all who wander are not lost," my life has not been a straight line trajectory to this place that feels like home to me.

The seeds of my awareness, in terms of nature and the environment, were planted early and deep, without the benefit of naming, on a small lakeside farm settled by my grandparents after they returned from their turn-of-the-century homesteading adventure in Saskatchewan. My parents took over the 40-acre farm around 1950, about three years before my birth, and it was there that I learned everything I know about contentedness and peaceful cohabitation with the earth and its inhabitants. But I did not know what I knew until I was around 50.

The formal part of my education spanned two decades. After earning an undergraduate degree in history and psychology, a BEd in history and counseling, and a Masters in Library and Information Science, I moved to Calgary. Here I have worked as Chief Librarian for the *Calgary Sun*, archivist for the Glenbow Museum, archivist-curator for the historic Lougheed House, local history librarian for Calgary

Public Library, and more recently, on contract as records manager for the Stoney Tribal Nation at Morley. I have written extensively about built heritage, Canadian history, and art for a variety of publications, including the *Calgary Herald*, *Alberta History*, and *Glenbow Magazine*. In 2003 I won Heritage Canada Foundation's Award for Journalism and the City of Calgary's Heritage Award.



PHOTO: G. KYNASTON

I did not start the first recycling program in my public school while still in kindergarten. Nor did I take a biology degree and work directly for environmental organizations. I wish I had, but my path was more circuitous and grassroots. Reusing and repurposing was an economic necessity on the farm. Our clothes made the rounds of all the cousins, until they arrived thread-bare in the bottom drawer of the youngest one – Billy. My mother kept string balls, jars, blankets, and dresses past their prime. Nothing was wasted. We were organic and free-range before the word or the concept was fashionable.

I ran barefoot through clover fields, skipping over the thistles, headed for the fence stile and the nearest neighbour, where there were eight more children to run wild with. Through binocular eyes, I searched the horizon for storms and Great

Lakes ships. I checked bird sightings against the illustrated bird book kept on the dinner table. I listened carefully to my father's instructions: always pee downhill, when the tractor goes into gear – hang on for dear life, head for cover when the wind picks up and the poplar leaves turn to the silver side, and plant trees, plant trees, plant trees. Many moonlit nights I rode the tractor with my father while he ploughed and “our” fox ran in the furrow ahead of the light searching for mice.

I have always struggled with city life, feeling much more comfortable with the vast expanses of earth, sky, water, and mountains. It took many years for the seeds that were sown in my youth to germinate, sprout, and grow. And just as it takes a village to raise a child, it takes a village of family, friends, and community working together to nurture, encourage, and support a sense of responsibility to this world.

My children, Niklas and Tasha, 18 and 21, ask in despair, what can we do to make a positive difference in this world? Why bother, given the seemingly insurmountable challenges of global warming and pollution and clear-cutting and oil sands development and ... ? I smile and turn up the volume on the CD player. Jack Johnson's mellow voice fills the room, the city, the province, the world:

*I can change the world
with my own two hands
make it a better place
with my own two hands
make it a kinder place
with my own two hands.*

I remind them that when the Tibet's spiritual, the Dalai Lama, was asked how he managed to hike the long, treacherous route through the mountains during his escape from China to India, he replied, “One step at a time.”

I look forward to offering my own two hands to the work that needs to be done to ensure that Alberta's wilderness areas are preserved and protected. I am grateful that my journey has led me back home, one step at a time.



The westslope cutthroat trout prefers cold, clean moving water with various forms of cover. Body colour ranges from silver to yellowish-green, with red on the front and sides of the head. The orange-red slashes beneath the jaw distinguish the cutthroat from the rainbow trout. PHOTO: C. OLSON

Westslope Cutthroat Trout Assessed as “Threatened”

In 2006 the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed the status of the westslope cutthroat trout, found in Canada only in B.C. and Alberta, and recommended that it be listed under the *Species at Risk Act (SARA)* as “threatened.” The recommendation was made because native populations of this fish have been reduced by almost 80 percent by habitat loss, overharvesting, and introduction of non-native fish species.

COSEWIC recommends that a wildlife species be listed as “threatened” when that species is likely to become endangered if nothing is done to reverse the factors threatening it. COSEWIC's assessment is then submitted to the federal Minister of the Environment, who must decide whether to add the species to the SARA list. If it is added, a recovery strategy must be completed within two years and the provincial and federal governments then have responsibilities in the species' recovery and protection.

In Alberta, the westslope cutthroat (one of 14 subspecies of cutthroat trout) is found in the Bow and Oldman drainages, and possibly the headwaters of the Milk River. Although poaching is still a problem with respect to these fish, the major factors in the species' decline are ongoing habitat destruction from resource development and motorized recreation, and the continuing failure to address hybridization and competition with exotic species. The vast majority of Alberta populations are now extensively hybridized with rainbow trout, which have been widely introduced to places where they are non-native.

As part of the decision-making process, Fisheries and Oceans Canada is conducting consultations on whether the westslope cutthroat trout (Alberta populations) should be added to the SARA list. The consultation document states that “all available information suggests that many populations are lower relative to historic levels and numerous local extinctions have occurred.” The document further clarifies the source of the problem: “Habitat degradation and loss due to timber extraction, mining and hydroelectric developments have been directly responsible for loss of habitat and decline of several populations.” For example, the proposed Petro-Canada Sullivan field project will impact numerous south Eastern Slopes streams that are either the last known refuges of pure native populations, or the streams where major recovery efforts will have to be implemented to restore this fish to secure status in this province.

AWA is urging Fisheries and Oceans Canada to list all populations of genetically pure westslope cutthroat in their native habitats in Alberta as “endangered” under SARA. Unless protection and recovery plans are implemented in the near future, this subspecies will be extirpated from this province. If the westslope cutthroat trout is listed, there is great hope that these fish can recover. They are a resilient species, but they cannot compete with the cumulative impacts of industry, recreation, and lack of management and enforcement by Alberta Fish and Wildlife.

— David Mayhood & Christyann Olson

EVENTS

AWA'S EARLY SUMMER HIKES

Participating in AWA's hikes program is a great way to explore the wilderness of Alberta, discover our province's diverse wildlife, and learn about the work we are doing to protect these magnificent landscapes. For more information about all our summer hikes, see the 2008 hikes brochure or visit our website: www.AlbertaWilderness.ca.

Pre-Registration Is Required for All Trips

Online: shop.albertawilderness.ca or
By phone: (403) 283-2025
Toll Free: 1-866-313-0713

BUS TOUR

Medicine Wheels & Waterfowl

With Jay Bartsch
Thursday, May 22

\$45 AWA members
\$50 non-members

Spring on the prairies is not to be missed – bug-free warmth, wildflowers in bloom, and waterfowl in full breeding plumage. Human history also abounds in this area. Step into the past for a day as we visit early 1900s homesteads and a sprawling medicine wheel believed to be 4,500 years old. Lunch provided by AWA.

WEEKEND CANOE TRIP

Lakeland Provincial Park

With Ian Urquhart & Aaron Davies
Friday, May 23 – Sunday, May 25

\$50 AWA members
\$60 non-members

Discover one of Alberta's best-kept secrets – the province's only official canoe circuit. Watch the raucous mating of red-necked grebes while gliding across Alberta's boreal lakes. Enjoy the haunting calls of loons as you drift off to sleep in your tent.

Trip departs from Lac La Biche. Participants are responsible for their own canoes, safety equipment, and all camping gear, including food.



PHOTO: C. WEARMOUTH

DAY HIKES

\$20 AWA members
\$25 non-members

Summer in the Whaleback

With Bob Blaxley
Saturday, June 7

Wander along the horse and game trails of this pristine montane landscape. Experience the stunning display of wildflowers, visit ancient trees eking out an existence, and take in the dramatic views of the surrounding landscapes. Wild animals such as deer, elk, bears, coyotes, and wolves may be seen. Always a popular hike – be sure to book early.

Rumsey Natural Area

With Dorothy Dickson
Saturday, June 14

Rumsey is the only large, relatively untouched area of Aspen Parkland left in Canada. Its seemingly endless rolling hills of fescue grasses, interspersed with aspen bluffs and small sloughs, make it an area like no other in Alberta. Dorothy's wealth of knowledge about Rumsey reveals a treasure that few Albertans have experienced.

Big Sagebrush Natural Area

With Reg Ernst
Saturday, June 21

Join expert Reg Ernst on this ecological field trip exploring the world of rare plants in the Castle wilderness. This short but steep hike will delight budding botanists with one of Alberta's richest bio-diverse areas. Be sure to also keep your eye out for the many birds and animals that frequent the area.

Dry Island Buffalo Jump

With Tjarda & Rob Barratt
Wednesday, June 25

Just in time for the magical blooming of the cacti, explore the badlands of the Red Deer River. Climb to the top of the park's namesake – the "dry-island," rising 200 metres above the water; look out to the cliff-top of an ancient buffalo jump; and search for the bones of the Albertosaurus.

SUMMER SOLSTICE STROLL

Devonian Botanic Gardens,
Edmonton

With "Nature Nut" John Acorn

Friday, June 20, 2008, 6:00 p.m.
Adults – \$25; Children – \$10

Pre-registration required

Online: shop.albertawilderness.ca
Toll-free: 1-866-313-0713

Join us for a summertime barbecue, entertainment by Alberta's "Nature Nut," and a summer evening stroll through these beautiful and diverse botanic gardens. Learn about the significance and mystery surrounding the Solstice.

Come walk with us and learn about Alberta's Wild Spaces! A unique and enjoyable event for the whole family.

For directions to the Devonian Botanic Gardens, see www.devonian.ualberta.ca.

ONE WILD SUMMER



In 2007 AWA members explored Alberta's wild side through our Summer Hikes Program. Joined by the public and our many fantastic trip leaders, we explored the diverse landscapes of our province, learning about flora, fauna, geology, traditional land use, and the issues surrounding our great wilderness places. Here are some of the best photos from the season to evoke last year's memories and inspire this year's adventures.

Be sure to check out our 2008 program. Our early summer hikes are listed on page 29, and a complete summer hikes list can be found in our 2008 hikes brochure and on our website: www.AlbertaWilderness.ca.

Outstanding natural beauty across the seasons graced our rambles in Alberta's wilderness areas. Here, two hikers meander towards one of the ancient limber pines on a windswept ridge in the Whaleback during its autumn glory. PHOTO: C. WEARMOUTH



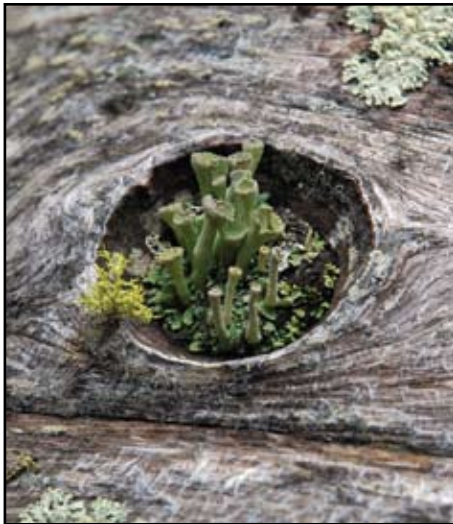
Wandering deep up Yarrow Canyon in the Castle during a three-day backpack, we came across little known treasures like this lush waterfall cascading down the red rock. PHOTO: N. DOUGLAS

Rare plant expert Reg Ernst leads a hike along Adanac Ridge in the Castle. Hike leaders freely shared their abundant knowledge of the areas and offered insight into the issues surrounding our wild places. PHOTO: C. WEARMOUTH



AWA SUMMER HIKES 2007

Hikers were rewarded with showy displays of wildflowers, rare and endangered plants, and for those paying attention to wild minutiae, this tiny garden of clubfoot lichen found in the Ya Ha Tinda area of the Bighorn. PHOTO: C. WEARMOUTH



Last year's trips through the wilderness offered adventure and renewal for many Albertans, including Liz and Tony Fricke, seen here gliding across the tranquil waters of Kinnaird Lake in Lakeland Provincial Park. PHOTO: J. HILDEBRAND



After climbing to the saddle of Ram Ridge, J. C. Dufort and Darren Jollimore celebrate the camaraderie born of exertion and wilderness adventure. PHOTO: C. WEARMOUTH

Sightings of wild animals and their sign abounded on the trips, including the discovery of this black bear track during the Ram Ridge Hike in the Bighorn. PHOTO: C. WEARMOUTH



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 OR 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



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