AWILD LANDS WAS ASSOCIATION JOURNAL



Kinnaird Lake, Boreal Forest Natural Region Photo: C. WEARMOUTH

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COVER PHOTO _____

Chris Wearmouth captured this sunset during the May 2008 AWA canoe trip in Lakeland Provincial Park in Alberta's Boreal Region. Our rush to consume the boreal's many natural treasures through logging, oil sands mining, and motorized recreation is putting ecosystems such as this one under tremendous pressure. If there is to be any boreal wilderness left for our grandchildren, we must push back and work for its protection today.

FEATURED ARTIST.

Alison Philpotts grew up in Calgary, where she lives and paints. She draws much of her inspiration from the landscapes of southern Alberta, working with a rich palette to interpret the prairies, foothills, and mountains in vivid, saturated colour. You can view Alison's catalogue at www.philpottspaintings. com and email inquiries to alisonphilpotts@shaw.ca.

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Editor:

Joyce Hildebrand

Editorial Advisory Board:

Pam Asheton, Julie Black, Sarah Crook, Andy Marshall, Sharon McIntyre

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Please direct questions and comments to:

Joyce Hildebrand (403) 283-2025 • awa.jh@shaw.ca

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ALBERTA WILDERNESS ASSOCIATION

Box 6398, Station D, Calgary, Alberta T2P 2E1 (403) 283-2025 Toll-free 1-866-313-0713 www.AlbertaWilderness.ca awa@shaw.ca



PHOTO: J. HILDEBRAND

THE WONDER OF WILD PLACES

On April 28, AWA staff and a few other concerned Calgarians had the privilege of spending the morning with three Achuar natives of the Peruvian Amazon. Carlos Mukuin, Manuel Tampet, and Henderson Rengifo, accompanied by a human rights lawyer and two U.S.-based representatives of Amazon Watch, were in Calgary to meet with Talisman Energy Inc., which in 2006 acquired petroleum interests on traditional Achuar land.

We listened to their heartbreaking story of how over 30 years, oil and gas operators discharged about nine billion barrels of toxic oil extraction by-products directly into the rivers and streams that the Achuar used for drinking, bathing, washing and fishing. The results were devastating: a decline in fish and game populations and agricultural productivity, dangerously high concentrations of lead and cadmium in both children and adults, and sickness and disease in both humans and wildlife.

While Alberta's environmental issues initially paled in comparison, it quickly dawned on us that we face some similar challenges. As in Peru, oil and gas leases are sold with no public consultation; government often turns a blind eye to industry's regulatory violations; wilderness, water, and wildlife on which First Nations and others rely are being despoiled with little regard for human or wildlife health; toxic lakes are proliferating north of Fort McMurray; and for the most part, we don't know how to reclaim – never mind restore – the flayed landscapes after extracting their treasures.

In my two years as an AWA staff member, however, I have become convinced that many Albertans are deeply concerned about what is happening to our wild places. Sometimes outraged and occasionally overwhelmed and despairing, they articulately defend wilderness and the creatures that depend on it. This issue of the *Wild Lands Advocate* features some of those inspiring advocates – people like Lorne Fitch, Dave Sheppard, Cliff Wallis, Ward Neale, Martha Kostuch, and more. People who have built on the foundations of earlier defenders of wilderness.

May 27 marked the 101st anniversary of the birth of Rachel Carson, the quiet, reserved scientist who focused world attention on the devastating effects of pesticides on humans and wildlife, and moved environmental issues to centre stage. Her classic, *Silent Spring*, sits on my shelf beside her earlier trilogy about the sea and its wonders. In fact, *wonder* was what motivated Carson to speak out. "It is a wholesome and necessary thing," she wrote, "for us to turn again to the earth and in the contemplation of her beauties to know the sense of wonder and humility."

Facing immense opposition from powerful institutions, Carson believed that experiencing the beauty of wilderness is critical to our survival. "The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for the destruction of our race."

In wilderness the white noise that pervades our "normal" existence disappears, allowing us to listen to the deep wisdom of rocks, trees, lakes, and wildlife. "We need to embrace silence so when we do speak, the clarity of our voice will be unmistakable," wrote Ontario Algonquin Robert Lovelace on April 7, 2008 from prison, where he was incarcerated for refusing to leave his community's peaceful protest blocking industrial access to their traditional homelands for uranium exploration activities.

In our efforts to keep and expand the wild places we have left in Alberta, let's not forget to go to them, to draw our strength from wilderness and its creatures.

- Joyce Hildebrand, Editor

MITIGATION – COSMETICS OR COMPENSATION?

By Lorne Fitch, P. Biol.

f the world isn't going to be perfect, don't you just yearn for one that is at least a bit more honest? Even though it wouldn't diminish the issue. imagine if business, industry, and the Alberta government were a little less disingenuous about the impacts of their activities. "Look, this drilling project will trash the native prairie grassland. Caribou are toast, as are grizzlies, sage grouse, and bull trout. This new dam will dry the river up but we'll produce more potatoes and power for more toasters. We cannot, in this lifetime and perhaps in several lifetimes, reclaim this massive hole in the boreal forest."

These are unlikely statements in today's world. What we are more likely to hear is "No wildlife will be harmed and every blade of grass will be replaced." A 1960s Simon and Garfunkel refrain comes to mind: "I have squandered my resistance for a pocket full of mumbles. Such are promises, all lies and jests." Mumbles it is, masquerading under the term *mitigation*, full of promise but low on substance.

As a young and substantially naïve university student, I attended a public forum on the Bighorn Dam, eventually built on the North Saskatchewan River west of Nordegg. A water resources engineer from the Alberta government provided most of the commentary and rationale for the project; it never struck me as odd that a senior Alberta civil servant was shilling the project for the corporate world. (I was to learn later that there is sometimes very little difference between the two.)

The government employee downplayed the obvious environmental costs of impounding a free-flowing river. Instead he painted a sylvan scene of cottages at the water's edge (in your mind's eye you could see them, with names like Waven U Inn), little boats suspended on calm waters, and families fishing and picnicking.

Some years later, aboard an old Bell



"Mountain Flowers" ©ALISON PHILPOTTS

helicopter (reminiscent of M*A*S*H*) unable to make headway west near the aptly named Windy Point and seeing the spring drawdown of tens of metres, I remembered him. Mumbles it was, to distract us from the real issues and the loss of a river – an ingenious bait-and-switch technique. He never used the term *mitigation*, but the vision of lake-based recreation lowered resistance to the project despite the absurdity of prospective cottage development on a wind-whipped body of water, derived from glaciers, that is functionally a bathtub.

Winston Churchill might have accused the dam builders of "terminological inexactitudes"; John Crosby, the flamboyant Newfoundlander, would have been somewhat more direct and said they were being "careless with the truth." The Stoney Indians, displaced from part of their ancestral home for this dam, got – in a twisted way – a form of mitigation. The reservoir was named for one of their tribal elders. Abraham Lake is a masterful bit of merchandizing, combining legacy with the image of a natural body of water.

This taste of how the word *mitigate* and the concept of mitigation have been used provides a cautionary preface to this tale. "When I use a word it means just what I choose it to mean – neither more nor less," declared Humpty Dumpty. "The question is," replied Alice, "whether you can make words mean different things."

Mitigation attempts to lessen or minimize an impact or effect. "I'm going

to mitigate the impact of backing your car into a tree." The declaration does not include how, or even if, I'm going to fix the dented bumper, crumpled fender, and scratched paint. It doesn't specify where I would get it fixed, or if I would use new parts or just pound out the old sheetmetal. Nowhere did I indicate if it would be to your standards or satisfaction. I didn't say I would provide you with alternate transportation. Options like a cash settlement or other compensation aren't clarified. Maybe I think your car was a clunker to begin with and the value hasn't been affected by a little dent. I haven't even stated what I'm going to do about the tree I hit.

When I say "mitigate," you hear "fully compensate, replace, restore, reclaim, restitution, fair, equitable." What I meant was "tradeoff, substitute, appropriate balance, offset, alleviate, mollify, lighten." You leave thinking you understand, with an impression of the outcome; you invariably end up unhappy and dissatisfied. *Mitigation* is a long, smooth-sounding word that conceals its dangers as long, smooth words do. The danger is there nevertheless, as is the potential for misunderstanding and manipulation.

Mitigation has become one of those aggrandizing bureaucratic terms that assigns a human intent to compensate for a loss, without a clear statement about how the bargain will be struck. Mitigation is politically sound but ecologically risky. It may be the most potent public relations rhetoric yet to rationalize the loss of a river, a forest, or a piece of prairie.

Riparian Recovery, Naturally

Almost 40 years ago, Mel Kraft (Alberta Fish and Wildlife) and Elmer Kure (Alberta Fish and Game Association) started to discuss with central Alberta farmers along the North Raven River the possibility of restoring the sport fishery of this spring-fed stream. Their intent was to mitigate the effects of decades of unmanaged livestock use and cultivation on a stream that had developed a stellar reputation as a trout fishery. The trend seemed clear, and it was downhill for the trout. Painfully, the inventory information was collected to confirm the trajectory, determine the solutions, and pinpoint where restoration was required. A program of land acquisition, trades, and agreements secured some



During the 40 years of mitigation efforts, central Alberta's North Raven River has experienced remarkable recovery, but the job isn't over yet. PHOTO: L. FITCH

tenure. Streambank fencing, limited stream crossings, and off-stream water developments were negotiated and constructed to give some of the vital and remaining bits of the riparian area some relief from agricultural pressures.

Riparian area recovery has been astonishing: the willow growth is now thick enough that some anglers complain about this impenetrable jungle. The stream narrowed and deepened, and with less sediment, cooler temperatures, and abundant overhanging cover, the trout population responded. Over a 20-year period, trout numbers increased more than 500 percent; in areas still unmanaged, populations dropped by 80 percent over the same time period. Riparian and trout recovery on the North Raven River represents one of only a handful of initiatives I can point to as models of mitigation effectiveness in Alberta, but the job there isn't done yet. There are still portions of the watershed that require changes, and even the functioning bits need tune-ups.

Lizards and Oil Don't Mix

In the 1980s, an oil and gas field started to develop southeast of Manyberries in an area with sensitive grassland species. The Habitat Branch of the Fish and Wildlife Division applied, over the span of years, the most stringent protection (mitigation) techniques available administratively. These included setbacks from known features like sage grouse leks (mating grounds), avoidance of badland and erodible slopes thought to be habitat for short-horned lizards, and timing constraints to provide protection during critical periods for wildlife. Energy companies were persuaded to use minimum disturbance techniques, share access roads, and reduce the amount of roading. Immediate site revegetation was encouraged, as was the reclamation of footprints in juniper dune habitats, also important for lizards. Inventories of short-horned lizard populations and habitats were undertaken, as was habitatsuitability modeling to use as a predictive tool for avoiding key areas.

If zeal were enough, it should have



Despite efforts during the Manyberries oil and gas field development to mitigate effects on sensitive grassland species such as the endangered short-horned lizard, the cumulative impact of industry activities has had severe effects on wildlife habitat in the area. PHOTO: L. FITCH

worked. Unfortunately, the application of mitigation techniques at the scale of an individual wellsite, pipeline route, or access road was overwhelmed with the sheer additive effect of multiples of these features. In just over two decades, the landscape was transformed from lonely prairie grassland with few human-made features into an industrial area with dozens of wellsites, batteries, pipelines, and roads. Sage grouse populations plummeted and leks were abandoned. The effect on short-horned lizards is less clear. Small, slow, cryptically coloured beasts, they are hard to see, let alone inventory and avoid. More than a quarter of their habitat has a substantial energy footprint on it now, and development isn't yet finished. I can't imagine the population is thriving with such a heavyfooted neighbour.

Manyberries is a microcosm of the rest of the industrial landscape that is most of Alberta. Mitigation zeal can't match development zeal.

Oldman Dam – Beautiful Strategies, Ugly Facts

The Oldman Dam, in southwestern Alberta, has had arguably the highest profile for mitigation in the province and the most scrutiny of mitigation effectiveness of any provincial initiative. Stung with quips like "Only the Alberta government would destroy three rivers with one dam" (an act of uncharacteristic economy), there was a considerable appetite for mitigation to counter substantial opposition to the prospect of inundating three "Blue Ribbon" trout rivers.

The project itself was mitigation on two separate fronts. Announced in the epicentre of a drought, it proposed additional water storage to compensate for the historically overallocated, overused St. Mary, Belly, and Waterton rivers and to alleviate the difficulty Alberta had in meeting its interprovincial water-sharing agreements at the Saskatchewan border. Some have

speculated that one additional purpose was to shore up the sagging political fortunes of the local Conservative MLA, in danger of losing his seat to a popular NDP candidate.

Faced with inundation of 43.2 km of the Castle, Crowsnest, and Oldman rivers and their riparian forests, the task of putting a brave face on the project was daunting. Beyond the posturing, politicking, and wordsmithing, the basics of the mitigation program revolved around replacing about 225,000 m² of high-quality trout habitat and compensating for the loss of riparian forests with the protection, enhancement, or creation of 689 wildlife habitat units. Beautiful strategies they were, full of hope and promise; they were followed by the ugly facts.

The first bit of ugliness, on the fisheries front, was where to find a place to plunk 225,000 m² of new fish habitat on top of existing conditions. Of the three rivers affected, the Crowsnest River had the greatest history of channelization, urban development, transportation corridors, and industrial development, especially related to coal mining and processing. It was a river with lots of old wounds that habitat mitigation would partially correct. It was also an inherently productive river for trout. Very few opportunities for habitat mitigation presented themselves on the Castle and upper Oldman rivers. A little more than 100,000 m² of high-quality habitat was shoehorned into the Crowsnest River. from just upstream of Coleman to the full supply line of the reservoir.

What was designed, and attempts made to construct, was deep-water habitat, the lack of which is deemed to be a key limiting factor for trout. Trout require deep water as resting areas, to periodically escape higher-velocity portions of rivers. During winter conditions, as flows are reduced and ice cover thickens, the deep pools provide overwinter survival habitat.

This river re-creation requires substantial river "training" with large boulder structures, which narrow the channel and increase water velocity to scour deeper holes and maintain them. An ugly fact is that rivers don't respond well to training, especially over time. Imagine a solid, static object in a dynamic, moveable channel, and the challenge of integrating them. Bedload movement (the downstream shifting of

gravels, sand, and silt) coupled with the inexorable energy of moving water meant some structures worked and others failed. Given the ceaseless pounding of water plus two major flood events, within six years the amount of constructed habitat was reduced by two-thirds. What did survive may not meet the test of the best quality, deep-water habitat.

While inventorying high-quality habitat and auditing its decrease are not easy tasks, they pale in comparison with the complexity of evaluating if any of the work did a fish any good. A tremendous amount of work, spread out over 15 years, attempted to document trout responses. If lack of deep-water habitat was a key limiting factor to trout, creating more should have resulted in more fish. That wasn't the case, at least not in direct proportion to habitat creation. Habitat improvements allowed trout populations to spread out over longer reaches of river and to some extent, allowed some trout to grow larger. But the expected result - many more trout - didn't happen. It would seem the natural carrying capacity of a river reach can only be improved to a degree with habitat enhancement, and then other limiting factors come into play.

As a substantial part of the wildlife mitigation program for the Oldman Dam, shelterbelt plantings were used in an attempt to compensate for significant riparian losses from reservoir construction. Despite heroic and expensive efforts to select appropriate species, reduce competition with weeds, and water trees for up to three years, the results proved dismal and the riparian forests inundated by the Oldman Dam have not been functionally replaced. An unintended, unplanned benefit of perimeter fencing and of livestock exclusion has been the natural regeneration and spread of native shrubs. This represents an incremental gain for wildlife habitat but comes nowhere near balancing the loss.

So let's review where we stand on this mitigation initiative. We got a reservoir that has very little utility for trout because it's deep, unproductive, and resembles a bathtub being filled and emptied. We got a dab of upstream habitat creation, much of which repaired old ravages and to which trout didn't respond in kind. It is unclear whether there will be an ongoing commitment to fund the maintenance

of this constructed habitat as the river continues to wear away at it.

Charitably then, after accounting for all the losses of constructed habitat, there was still a deficit of about 200,000 m² of high-quality trout habitat required to meet the commitment of the Oldman Dam mitigation strategy. Most of the focus for compensation of lost habitat was shifted downstream of the reservoir, where no baseline exists to calculate if much of the trout habitat mitigation deficit is or can be met. On the wildlife front, no replacement of the cottonwood gallery forests occurred. Of the trees and shrubs planted, most died or are still too early in development to provide replacement habitat units for wildlife. Prairie falcons got some new nesting ledges on cliffs, and some marginal wetland habitat was replaced.

And this is one of the best examples of mitigation commitment, planning, effort, funding, and evaluation in Alberta. Despite the enthusiasm and commitment, in the final analysis there simply wasn't enough room or ability to mitigate the negative effects of reservoir construction on fish and wildlife habitat.

Observations from over the Fence

In my neighbour's backyard sits the dying trunk of a once majestic cottonwood tree. In urban environments, trees have real value. They provide wind and sun protection, crucial in the environment of Lethbridge. Birds are attracted to them for nesting, foraging, and cover. People are drawn to trees — because of higher humidity under the canopy, it feels cooler. Property values increase.

I can only guess that one of the branches of that cottonwood tapped on my neighbour's window during windy periods. My neighbour isn't a destructive or uncaring soul, but when wielding a power tool, his eyes must glaze over and thoughts of consequences become temporarily suspended. In that regard his response is little different than the institutional blindness brought on by development characterized as "ready, fire, aim."

He fired up his chainsaw to cut off the one offending limb but became so taken with the effort, he didn't quit until the tree was a bare three-metre-high stump.

This too has remarkable resonance with the larger world. We emerge from the trance-like state of largely unplanned development and then begin to ask how we might compensate for the effect of the activity. In my neighbour's case, what appeared on top of the stump was a brightly painted birdhouse. I suppose it was a possible act of contrition or mitigation for his act of arboricide. The cottonwood is, for all intents and purposes, dead. It will not offer shade or shelter ever again. Neither will it capture and store energy, filter the air, or provide a pleasing aspect to the landscape. The gaily painted birdhouse mitigates the loss of none of these values and was the final act of putting lipstick on a corpse. Mitigation might be considered in a similar vein: cosmetics or compensation?

"Humpty Dumpty sat on a wall. Humpty Dumpty had a great fall. And all of the King's horses and all the King's men couldn't put Humpty together again." Maybe our most profound lessons on mitigation are from Mother Goose.



PHOTO: L. FITCH



To mitigate the effects of the Oldman Dam, an attempt was made to create deep-water trout habitat in the Crowsnest River. Six years later, only a third of the new habitat remained, and this remnant may not meet the criteria for good-quality deep-water habitat. PHOTO: L. FITCH

Mitigation Weaknesses and Perversities

What can we glean from these and other mitigation experiences?

The current atmosphere in Alberta with a development-focused ideology and no land-use strategy, framework, or plan means that "no" is rarely an acceptable answer in the face of potential development. Mitigation has become, in many cases, an accounting practice of tolling up the losses (mostly unclear) and the gains (mostly illusionary) as a way to rationalize the development.

Mitigation might be thought about in the same way that technological solutions are employed in smoking, ostensibly to reduce the health risk but really to maintain consumption rates. The use of filtered cigarettes precisely fits this thinking. The tobacco company tries to solve a problem in a way that lets consumption of the drug continue without interruption. Mitigation addiction is the affliction created in the vain hope we can continue to do everything, everywhere, anytime and all the time, with our development footprint effectively erased behind us.

Rarely is there a biological baseline that forms a benchmark in space or in time to know where we are at, predevelopment. Alberta doesn't have a long history of biological inventory, especially of the long-term monitoring variety. What that means is in the face of development,

there is an imperfect knowledge of species present; population levels; natural variation in population size; spatial and seasonal distribution; and how a particular site contributes to life-cycle requirements. Yet at best, a year – or perhaps two – of inventory information is collected prior to development. At worst, the assessments take place months, even weeks, before disturbance and in seasons guaranteed to miss some species. We know very little about a lot, less often a lot about a little, but mostly not enough in order to reach a mitigation goal.

Mitigation and restoration efforts can produce habitats that superficially resemble the ones lost but have been unsuccessful at replicating the diverse function of the system. That conclusion comes, in part, from soil scientists monitoring the restoration of prairie grasslands and from wetland ecologists evaluating the success of wetland creation. It suggests that our understanding of ecosystem functions and processes, and of the interconnectedness of systems and occupants, is imperfect. Six decades after the abandonment of cultivation on prairie soils, vegetation above the ground is largely indistinguishable from unaltered sites, but the soil below still differs substantially. I believe we need to start with the acknowledgement that we have become very adept at dismantling landscapes, but we are in our infancy in understanding

how they work and in knowing how to glue them back together.

In the haste to provide at least some semblance of results, we have a tendency to rely on technological or engineering fixes. Most ecosystems – if not severely impacted – have some level of inherent resilience and can bounce back, if we have the understanding and patience to keep out of the way of natural restoration. Reliance on technology or engineering may cause further damage and promotes the sense that we understand the system well enough to rewire, weld, or replace pieces instead of mending biological ties. As shown by the North Raven River example, management of riparian areas to allow natural regeneration is a much more effective restoration tool than a structural approach using instream rocks and sticks and elaborate bank stabilization devices. There should be a mitigation Hippocratic Oath that states "Do no more harm."

We should reject outright the tendency to believe that mitigation provides fair and equitable compensation for losses and that mitigation is always successful. Some mitigation techniques work some of the time, in some locations, and with some species. With the exception of just saying "no" to development, there is no mitigation silver bullet that has a universal application.

Overlooked in the accounting is the lost "production" of fish, wildlife, and other landscape values from time of disturbance to some measure of habitat replacement. If someone burns down the corner store, the poor owners lose, in addition to a building and stock, their income until they can relocate or rebuild. If a reach of river that can produce a hundred trout per year is destroyed and it subsequently takes 15 to 20 years to restore habitat for reproduction and survival, we Albertans are out of pocket 1,500 to 2,000 trout. That lost production should have a value and it needs to become part of mitigation "accounting." Otherwise we are unable to do full-cost accounting for the project to determine the real costs and real losses in other resource values.

If we do a poor job on impact assessment, on determining mitigation goals, and on implementing mitigation, it shouldn't be surprising that evaluation and monitoring are equally flawed.

The success of mitigation is difficult

to determine since rarely are criteria presented to gauge "success," and the list of accomplishments relate to what was done, not whether any of it worked to restore ecological function or replace lost fish and wildlife populations.

This isn't exclusively an Alberta phenomenon. The federal Department of Fisheries and Oceans has a national mitigation policy to ensure there is "no net loss" of fish habitat. It requires proponents of development to compensate for losses to ensure that fish habitat doesn't diminish as a result of the activity. Departmental biologists have determined that only 10 percent of development projects reviewed met the goal of "no net loss"; in 86 percent the results are unknown. To the south, reviews in the U.S. indicate that only 18 percent of those undertaking developments indicated that monitoring was required. Only half reported collecting baseline information, without which any evaluation is suspect.

The mitigation castle is built on the shifting sands of inadequate baselines, failure to measure, lack of standardized measurements, little transparency in reporting, inappropriate timelines, and inadequate resources. Enthusiasm, resources, and monitoring never last long enough to see the task to completion – we stop long before the end with the rationalization that something is better than nothing.

Mitigation as a strategy to deal with relentless development pressures isn't going to disappear, nor should it. At best, mitigation sensitizes us to the very real losses and trade-offs that are an inherent part of development on any landscape. Effective mitigation employs adaptive management: learning and applying new knowledge along the way. Unfortunately, the only way to learn is to constantly evaluate the actions taken. Stronger measures are needed to ensure that monitoring (and reporting) occurs and that resources are budgeted for the lifespan of the initiative. Mitigation without evaluation is like a contract without a signature, essentially a worthless gesture. What we don't talk about is the strategy for failure - what to do if the mitigation doesn't work. If there is no cost to failure, one might expect it to occur frequently.

Better site planning, to reduce the potential footprint, is a start to more

effective mitigation. That implies less cursory and more appropriately timed impact assessments to chart an effective course toward mitigation. The goal might be simply stated as "Protect the best – restore the rest." Site planning has to occur in the context of a landscape scale, the size of which has to make sense ecologically and is well beyond the single wellsite, access road, and potato field mode of evaluation. Without a sense of the existing and growing footprint, mitigation strategies will be overwhelmed and rendered ineffective. The science of cumulative effects analysis has progressed to provide us with reasonable interpretations of overlaps; future trajectories, given today's growth rates; critical thresholds; and the signals to determine when to stop. Coupled with information that helps us see the results of stressors, the line-in-the-sand concept becomes less theoretical and more tangible. These tools will only help us if we use them; it is counterproductive to ignore the past footprint of land use and carry on as if it doesn't exit.

George Bernard Shaw put his finger on the essential issue some time ago. He said, "The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself." Mitigation provides the illusion that we are able to accomplish the unreasonable.

When Aldo Leopold's bird dog, Gus, couldn't find pheasants, he worked up an enthusiasm for meadowlarks. To quote Leopold, "This whipped up zeal for unsatisfactory substitutes masked his failure to find the real thing. It assuaged his inner frustration." To assuage our inner frustration over the lack of a stewardship ethic, we have found us a meadowlark called "mitigation." Like the meadowlark, it has its good points. It smells like success but is often used to divert our attention from something more fundamental. Our real task is to learn to live within the limits of the land, and as Leopold exhorted, "to live on a piece of land without spoiling it."

Lorne Fitch is a professional biologist, photographer, and communicator. He spent 35 years working as a Fish and Wildlife biologist for the Alberta government. He now works with a number of NGOs and is an adjunct professor with the University of Calgary.



"Out of the Woods" ©ALISON PHILPOTTS

RECLAMATION ILLUSIONS IN OIL SANDS COUNTRY

By Joyce Hildebrand, AWA Conservation Specialist

fter more than 40 years of scraping away swathes of trees, muskeg, and soil in northeastern Alberta to get at the tarry black gold underneath, Alberta's first oil sands reclamation certificate was finally issued in March to great applause. Roughly one km² of land (104 ha), Syncrude's Gateway Hill, was declared "reclaimed" by the Government of Alberta.

But there are many reasons to mute the trumpets. First, this certificate represents a miniscule 0.2 percent of the land disturbed for oil sands mining – almost 480 km² as of 2006. Second, the reclaimed area was a dumping ground for "overburden," earth removed to get at the ore beneath; reclaiming tailings ponds will present a much greater – and perhaps insurmountable – challenge (see sidebar).

And third, reclamation does not mean restoration. Syncrude's reclaimed site bears little resemblance to the original boreal forest ecosystem. A complex of forests and low-lying wetlands has been transformed into a dry, hilly upland with new trails for human use. Syncrude spokesperson Alain Moore's statement about the site, given after the certificate was granted, speaks volumes: "If people aren't looking closely, it blends into the natural landscape" (Canadian Press, March 19, 2008). Is that enough? Or do we expect those who have exploited the land to restore it to its pre-disturbance state?

What Does Reclamation Mean?

In the interest of "looking closely," let's start with the legal meaning of reclamation – what exactly do oil sands companies have to do to qualify for a reclamation certificate?

According to Alberta's Environmental Protection and Enhancement Act (EPEA) regulations, the objective of land reclamation is to return the land to "an equivalent land capability," which means that "the ability of the land to support various land uses after conservation



There is evidence that tailings ponds such as this one next to the Athabasca River are leaching toxins into the area's groundwater. PHOTO: J. HILDEBRAND

and reclamation *is similar to* the ability that existed prior to an activity being conducted on the land, but that the individual land uses will not necessarily be identical" (emphasis added). The vagueness of the language here is troubling, as is the absence of binding reclamation timelines in *EPEA* approvals.

"It won't be identical to what was there before," says Kem Singh, Alberta Environment's regional approvals manager for the Northern Region. In fact, knowledge of "what was there before" is in many cases fragmentary and is largely industry-based. "We rely on companies themselves for the benchmark data."

According to Singh, Alberta Environment's reclamation goal is "a kind of capability that allows for various land uses, determined on a regional basis." One of the documents guiding the reclamation process, Guidelines for Reclamation to Forest Vegetation in the Athabasca Oil Sands Region, identifies the two primary land use objectives for reclamation as "the establishment of stands of commercial forest and the establishment of wildlife habitat."

Another primary guiding document, Land Capability Classification for Forest Ecosystems in the Oil Sands (LCCS), clarifies which of these objectives takes priority. According to the May 2008 Pembina Institute report Fact or Fiction: Oil Sands Reclamation, "The LCCS indirectly implies that economic or productivity factors dictate the reclaimed target landscape – a forested ecosystem. Using the LCCS land and soil categories diminishes the value of wetlands and leads to a perverse situation where oil sands proponents claim there will be an improvement in land capability after reclamation."

In the case of wetlands such as the McClelland Lake patterned fen, approved in 2002 for oil sands mining by Petro-Canada's Fort Hills Oil Sands Project, the phrase "equivalent land capability" may have to be stretched to the point of near meaninglessness. Virtually everyone agrees that no one knows how to reclaim this ecosystem to anything resembling what it is now – a rare peatland 8,000

years in the making and hydrologically connected to a number of other wetland types through both surface and groundwater.

Faith-Based Approvals

In a 2004 report, the National Energy Board stated, "Re-establishment of self-sustaining ecosystems is a major challenge in the reclamation of land disturbed by oil sands mining operations." For us to assume that those in charge know how to reclaim natural landscapes even to an "equivalent capability" is naïve in the extreme, especially with respect to peat-based wetlands. In Alberta, we seem to be turning the precautionary principle on its head. The government-industry postcautionary principle appears to be "Lack of full scientific certainty shall not get in the way of profit" or "Dig now, worry about environmental consequences later."

In its application for the Horizon project, Canadian Natural Resources made this statement: "Mitigation paired with reclamation assumes a postproject success rate of 100%.... Uncertainty with reclamation methods is assumed to be resolved with ongoing reclamation monitoring and research." This faith-based "winging it" approach to reclamation appears to satisfy the government departments responsible for project approvals.

"Amazingly, the EUB and the departments of Environment and Sustainable Resource Development accept this approach to addressing uncertainty," said Dan Woynillowicz, a senior policy analyst with the Pembina Institute, in his September 2006 presentation to the Oil Sands Multi-stakeholder Committee in Fort McMurray. "This uncertainty also has potential economic ramifications for Albertans."

Who Foots the Bill?

It took Syncrude 10 years to reclaim the 104-ha overburden plot that was certified in March. Considering the much greater challenges of tailings pond and minepit reclamation, certification of current projects is many decades down the road. Given the increasing public concern about environmental issues related to fossil fuel production and consumption, it's difficult to predict just what will be happening in oil sands country 40 or

The Toxic Legacy of Tailings Ponds*

The acute toxicity of Alberta's tailings ponds is now a well-known fact. The migration of tailings toxins such as naphthenic acids through the groundwater system presents serious risks to the boreal landscape and beyond.

The two primary reclamation possibilities that regulatory authorities accept for the acutely toxic tailings waste are the creation of end pit lakes (EPLs) and integrating consolidated (that is, dewatered) tailings into the reclaimed landscape. While both are fraught with uncertainties, EPLs is the least expensive option and the one that most reclamation fantasies are based on.

The EPL narrative, set in some distant future, goes like this. When a mining project comes to a close, the last mine pit will become the permanent storage pit for mining wastes, including the contents of the notorious temporary storage lakes known as tailings ponds. This toxic deposit will be topped up to a depth of 65 to 100 m with fresh water, largely drawn from the Athabasca River. Water will drain from the reclaimed surrounding landscape into the EPL and will discharge back into the Athabasca River. Since the lake's upper layers will presumably not mix with the lower toxic layers, the hope is that the EPL will eventually become a viable self-sustaining healthy aquatic ecosystem. EPLs will remain a permanent feature of the boreal: within the next 60 years, at least 25 EPLs are planned for the Athabasca region.

The main problem with EPLs is that they are "an unproven concept," in the words of Pembina Institute's May 2008 report on oil sands reclamation. "In spite of both the uncertainties and the risks, large oil sands mines that rely on end pit lakes as reclamation tools are being approved by regulators" (p. 41).

Tailings Facts

- Water surface of Syncrude's largest tailings pond, the Mildred Lake Settling Basin: 13 km²
- Contents of the Mildred Lake Settling Basin: 400 million m³ of fine tailings, or 160,000 Olympic-sized swimming pools
- Volume of impounded tailings now on Alberta's landscape: 5.5 billion m³, or 2,200,000 Olympic swimming pools
- Current rate of production of oil sands tailings waste per day: 1.8 billion litres a day
- Amount of total tailings produced per barrel (0.159 m³) of bitumen: 12.5 to 15.5 barrels (2 to 2.5 m³)
- Total area of potential tailings ponds, including new approvals and planned projects: more than 220 km², or five times the size of Sylvan Lake
- Volume of fine tailings produced by Suncor and Syncrude alone by 2020: 1 billion m³
- Approximate volume of toxic tailings produced daily by 2015 if current extraction and tailings management remain unchanged: 7.5 million m³
- Total expected volume of tailings ponds for existing and planned mines in the Athabasca region (excluding Syncrude's Mildred Lake Mine and North and South Aurora Mines): 11.6 billion m³

*The information in this box was gleaned from Fact or Fiction, Pembina Institute's May 2008 report on oil sands reclamation. The full report is available at www.pembina.org.

50 years from now. Scientists predict that settling out the toxins from tailings ponds could take at least 150 years. Who will be left with the bill? And who will be politically accountable? Certainly not those who are now signing lease agreements and approving projects.

The possibility of abandoned oil

sands mines a generation or two from now would not be without precedent. According to MiningWatch Canada's May 2008 report, 2,100 abandoned coal mines have been identified in Alberta and are on file with the provincial government. "Very few of the mines have been evaluated for physical or chemical



Oil sands mining north of Fort McMurray. PHOTO: J. HILDEBRAND

stability, and fewer than 1% of all mines have undergone remedial work," says the report. "A conservative estimate in the mid 1990s placed the price to clean up all abandoned mines in Canada at \$6 billion or higher."

To try to ensure that Albertans won't be left with the clean-up bill, the Government of Alberta has established an Environmental Protection Security Fund to which oil sands companies are required to contribute. The security, which can take the form of cash, bonds or letters of credit, is returned to the operator when the land is certified reclaimed.

Although "the amount of security must cover the cost of reclamation in case the operator is unable to complete reclamation on the site" (Alberta Environment website), a number of problems with the Security Fund have emerged. First, oil sands reclamation research is still in its infancy – with so many unknowns about how to reclaim certain ecosystems, even to "equivalent capability," how can the cost of reclamation be predicted with any accuracy?

Furthermore, based on our limited current knowledge, the fund appears to be woefully inadequate. Syncrude has not provided a breakdown for the cost of Gateway Hill, but in 2006 the company spent \$30.5 million on reclaiming 267 hectares, or about \$114,000 per hectare. According to the government's latest *Environmental Protection Security Fund*

Annual Report, as of March 31, a total of approximately \$469 million (including cash deposits plus interest, bonds and guarantees) had been set aside for oil sands mining reclamation. With close to 48,000 ha disturbed and not certified reclaimed as of 2006, that's less than \$10,000 per hectare, not even one-tenth of Syncrude's approximate costs to reclaim perhaps the easiest of disturbed oil sands landscapes.

Tailings ponds now cover more than 50 km² of Alberta's boreal forest. According to Randy Mikula, head of tailings research at Natural Resources Canada, "There is enough suspended clay floating in the ponds to fill a ditch 20 metres wide and 10 metres deep from Fort McMurray to Edmonton to Ottawa" (*Globe and Mail*, February 1, 2008). Even if it's possible to reclaim oil sands tailings ponds – and at this point, it has never been tried – what will the price tag be?

A lot, if the Sydney Tar Sands Ponds are anything to go by. In 2004, the Governments of Canada and Nova Scotia announced a 10-year, \$400 million plan to clean up the ponds and coke ovens, which cover a combined area of 68 ha. That's almost \$6 million per hectare for clean-up – or 600 times as much as is currently in Alberta's reclamation piggy bank.

Long-term accountability for the mess left behind, in terms of both political leadership and industry, is simply nonexistent. Once a reclamation certificate has been granted, the government cannot issue an Environmental Protection Order (EPO) regarding conservation and reclamation for that mining site. (An EPO is an order that the administering authority may impose to prevent or minimize environmental harm; it usually requires a person or company to undertake certain actions within a specified timeframe.)

Liability for contamination is currently forever, but generations from now, as tailings ponds toxins continue to settle out, who will be monitoring and enforcing regulations regarding oil sands contamination? Who will ensure that the propane cannons used to keep wildlife away from these toxic lakes (which research has shown to be an ineffective long-term solution) are still functioning? Will the current practice of industry self-monitoring continue?

At present, a paltry 11 Alberta Environment inspectors working out of field offices across the province (not just in the oil sands sector) are responsible to ensure that operators comply with their approvals, Codes of Practice, or accepted conservation and reclamation practices. The work of these few inspectors includes responding to public complaints; inspecting sites during construction, operation and reclamation phases; and reviewing *EPEA* approval applications (Alberta Environment website).

The recent deaths of hundreds of migrating ducks seeking rest in a Syncrude tailings pond provided a stark picture of the devastating effects of tar sands mining on wildlife. Even before this sad event, 91 percent of Albertans agreed in a 2007 poll conducted by Probe Research that new oil sands approvals should be suspended until infrastructure and environmental management concerns have been addressed. Eighty-eight percent felt that only if companies can demonstrate that they can return mined areas to the way they were before mining began should new oil sands mining projects be approved. It seems that Albertans are ready to step out from behind the word reclamation and demand legislation and policy that will deal more effectively with the realities of cleaning up the mess left behind by tar sands development. What we now need is political leaders with the courage and foresight to get in front of the parade.



Compensation for Disturbed Wetlands – A Leap of Faith?

By Carolyn Campbell, AWA Conservation Specialist

or many of our wildlife species, spring regeneration and rebirth depends on habitat near or in wetland areas. Until recently, wetlands were little appreciated, and in Alberta, many millions of hectares have been altered or drained. Because of the difficult challenges of restoring ecological functions to disturbed wetlands and reconstructing those that have been destroyed, protecting the significant wetlands that remain should be a top priority.

A wetland is land that has water at, near, or above the land surface or that is saturated with water long enough to have wetland or aquatic characteristics. These characteristics include water-influenced soils and vegetation, and biological species, including invertebrates, adapted to a wet environment. Sometimes surface water is evident much of the time, sometimes rarely so.

Wetlands are critical to healthy aquatic ecosystems and to the quantity and quality of our surface and ground waters. The ecological services that wetlands offer include recharging groundwater; reducing flooding, erosion, and sedimentation; filtering metals and nutrients; absorbing and slowly releasing water for drought protection; and providing important habitat for biodiversity.

Historically these benefits were largely ignored, and wetlands were regarded as unproductive land. Government policies encouraged the draining of wetlands. In Alberta's White Area – the agricultural and settled region - an estimated two-thirds of wetland area has been drained or altered over the past 100 years. In the Green Area – the 47 percent of Alberta that is largely nonsettled and comprises primarily Boreal Forest and Foothills Natural Regions - the amount of wetland that has been lost is unknown. Only partial inventories exist today, and current plans to complete Green Area wetland mapping will take at



Compensation for wetland impacts in the boreal forest remains unproven and untested. Photo: C. Olson

least seven years to complete.

There has been a 'no net loss' federal wetlands policy since 1992 but this only applies to federal lands in Alberta and any projects with federal funding. Provincially, the Water Act requires Alberta Environment's approval before altering the flow of water or impacting the aquatic environment within a water body, including a wetland. However, a Green Area policy has never been put in place to regulate the protection and conservation of wetlands. Instead, for Green Area industrial projects such as petroleum production, mining, pipelines, and large industrial plants, the Environmental Protection and Enhancement Act requires that land disturbed must be restored to an "equivalent land capability." In practice, this has meant a preference for turning wetlands into what is seen as "more productive" forested lands.

Since 1993 Alberta has had a White Area wetland policy, but for years, regulators lacked both an accompanying implementation plan and the resources to enforce the policy. Not surprisingly, wetland loss in the White Area continued at a rate estimated at between 0.3 and 0.5 percent per year. The *Provincial Wetland Restoration/Compensation Guide*, published in February 2007, represented a big step forward in effective implementation of a "no net loss" White Area wetland policy.

Both provincial and federal regulators assess proposals that impact wetlands through a process known as a "mitigation framework." (For an eloquent analysis of the implications of the word *mitigation*, please see Lorne Fitch's article beginning on page 4.) There is a hierarchy of preferred actions outlined for project proponents: first, to avoid disturbing the wetland entirely; second, to minimize damage to the wetland; and third, to take actions to *compensate* for any damage that the regulator permits. In practice, all too often there is pressure to move directly into a discussion of compensation. Environmental advocates have a role to play in ensuring that regulators require project proponents to demonstrate that the avoid and minimize alternatives have truly been exhausted.

Wetland Restoration

The preferred federal and provincial method for compensation is "restoration," the re-establishment of natural wetlands that have been drained or altered. Restoration of natural wetland habitat in grassland settings has been highly successful, according to Jonathan Thompson, senior research biologist with Ducks Unlimited Canada. "It's affordable - often simply a matter of plugging ditches - and effective. There's quite a body of science now showing successful restoration of marshes and shallow open water wetlands common to Alberta's prairies and parklands." Working from a drained wetland inventory has allowed Ducks Unlimited to seek opportunities with willing landowners in landscapes with the highest value for waterfowl populations. "Restored wetlands have also benefited a broader array of wildlife in these regions," adds Thompson.

While these restoration successes are certainly encouraging, restoration must not become an excuse for destroying natural wetlands elsewhere. Restoration is much more problematic in the Green Area boreal forest, where the prevalent wetlands are peat-based bogs and fens. About 43 percent of the oil sands region landscape consists of peat wetlands. With a relatively dry climate – precipitation is less than or equal to evapo-transpiration – the extensive boreal wetlands depend on complex interactions between groundwater and primarily organic surface soils. Prolonged water table declines, or chemical and erosion impacts from nearby industrial activity, produce severe effects on vegetation that are harder to redress than in typical White Area situations.

The 2007 Guideline for Wetland Establishment on Reclaimed Oil sands Leases states that while restoration techniques for bogs have had some success in the relatively wet climate of eastern Canada, they "remain largely untested in this part of the northern boreal ecosystem. There will be a period of trial and error in this region, and further research is certainly required."

Wetland Construction

"Construction" as a compensation method occurs where the previous wetland was completely removed (as in mining) or where no wetland existed previously. Federal policy allows



Protecting wetlands such as these in the stressed Athabasca River watershed is critical for preserving water quality and quantity, and for maintaining wildlife habitat.

PHOTO: I. HILDEBRAND

wetland construction "as a last resort" compensation option. Provincial White Area policy allowed construction before 2007, but since the 2007 guide, restoration has been the primary compensation option. In the Green Area, however, construction of wetlands is allowed as part of restoring the land to an equivalent capability.

In the White Area, constructing wetlands is still a riskier process than restoring wetlands, according to Jonathan Thompson. "Appropriate soils and vegetation must be selected, or these wetlands will not function properly," he says. "In addition, these are typically heavily engineered projects with much higher construction, operating and maintenance costs." These risks justify retaining a preference for restoration over construction as a compensation method in the White Area.

Construction of wetlands in the Green Area is highly problematic. The ability to construct successfully functioning peatlands has never been demonstrated in the boreal. On oil sands mining leases. where tens of thousands of hectares of soils are removed, construction of wetlands requires re-engineering of whole watersheds. There have never been attempts to construct peatlands on this scale, and the ecological effects of replacing peatlands with other types of wetlands are unknown. Due to the complexity of this region's wetlands, avoid and minimize are of crucial importance.

Wetland Protection

To be even remotely responsible stewards of this landscape, we need to retain the most ecologically significant functioning natural watersheds in the Green Area. The McClelland Lake and Wetlands watershed, situated 90 kilometres north of Fort McMurray, is a prime candidate for protection. Within this watershed, which ultimately drains into the Athabasca River, large fens channel slow-moving water into the largest lake between Fort McMurray and Lake Athabasca. An abundance of wildlife passes through or resides in this wetlands complex. Yet half of this wetland complex is slated for destruction by Petro-Canada's Fort Hills Oil Sands Project. The wetlands and lake in the other half are bound to be severely affected by this activity. A responsible wetlands management policy would insist that industrial proposals avoid the significant McClelland watershed and other ecologically important wetlands.

Throughout Alberta, avoidance and minimization of wetland disturbance must be strongly championed. While restoration of prairie and parkland wetlands has been beneficial, it is not a panacea for all development pressures in the White Area. Considering the difficulty of achieving genuine compensation for wetland disturbance and loss in the Green Area, it is critical that significant boreal wetland areas be protected from industrial activity.

Provincial Park Boundaries May Change after Hunter Outcry

The provincial government is considering changing the boundaries of the recently created Rock Lake Provincial Park northwest of Hinton. In 2006, Alberta Tourism, Parks. and Recreation (TPR) expanded the Rock Lake Provincial Recreation Area and redesignated it as a provincial park after problems with poaching inside the recreation area and the discharging of firearms within campgrounds.

The government did not consult the public prior to the redesignation, as the Parks Division felt they were merely changing the administration of a portion of land within the encompassing Rock Lake–Solomon Creek Wildland. Since 2006, many locals have voiced their opinions about the expanded park, focusing primarily on the elimination of hunting from areas where it was previously allowed under Wildland classification.

In April, TPR held two open houses, one in Hinton and one in Edmonton, to answer questions and hear comments from the public. Comments filed with TPR before May 30 will provide direction for the possible boundary change. AWA has made a submission outlining our priorities for the area and expressing our concern with the lack of public consultation in the initial decision. The Government of Alberta expects to make a final decision regarding the boundary later this year.

- Chris Wearmouth

Killing Wolves to Save Caribou

Ted Morton, Minister for Sustainable Resource Development (SRD), has temporarily suspended the use of strychnine to kill wolves in northern Alberta until SRD staff have produced a report detailing where and how strychnine is being used throughout the province (including for ground squirrel control).

This follows a public outcry after details were leaked about the government's poisoning of wolves as part of its ongoing wolf-control program in the territory of the Little Smoky woodland caribou herd.

In the winters of 2005-06 and 2006-07, 155 wolves were killed in the Little Smoky region northwest of Hinton, principally by being shot from helicopters. This past winter, according to the *Hinton Parklander* (April 7), another 62 wolves were killed, though it is not clear how many of these were poisoned.

AWA opposes the use of strychnine for wolf control. Poisoned bait is buried in the snow in the winter, but there is little to prevent other carnivore species from taking the bait, and animals that may feed on the poisoned carcasses are also at risk.

Through its involvement on the Alberta Caribou Committee, AWA has argued for many years that if the government is serious about trying to recover endangered woodland caribou, it must address the issue of habitat destruction, which is what has pushed this species to the brink. The Alberta government's own Alberta Woodland Caribou Recovery Plan (2005) made it clear that killing wolves will not recover caribou: "Ultimately, habitat conservation and management is the fundamental tool to reduce undue predation on caribou.... Predator control will not succeed as a sole, or predominant, tool for caribou recovery."

The Little Smoky herd was defined in the 2005 Recovery Plan as at "immediate risk of extirpation." Unfortunately, killing wolves is much easier than reducing industrial impacts in woodland caribou habitat, and so the prospects for future caribou recovery look grim.

- Nigel Douglas

Suffield Coalition Challenges EnCana at Toronto AGM

On April 22 (Earth Day!), a representative of the six-group Suffield Coalition, of which AWA is a member, attended EnCana's Annual General Meeting in Toronto and challenged the company during the question period about its proposal to expand operations in the Suffield National Wildlife Area (NWA). Carla Sbert of Nature Canada

made a brief statement and asked three questions of EnCana.

EnCana's response focused on the heft of their Environmental Impact Statement. Despite its length, the Suffield Coalition's experts found the EIS to be seriously deficient. EnCana's answer also emphasized the company's record of environmental responsibility. In 2007, however, internal government documents revealed that EnCana's "minimal disturbance" drilling program in an environmentally sensitive area of CFB Suffield left serious environmental impacts.

In his response, EnCana CEO Randy Eresman categorized the company with other "industrial" users at Suffield, specifying military activities and cattle grazing. In fact, the military has made the NWA off-limits to ground exercises for the benefit of the wildlife, and carefully managed grazing is a natural prairie disturbance. That leaves the oil and gas industry as the only industrial user in the wildlife refuge.

Since assuring shareholders of the company's environmentally responsible development in Suffield, EnCana has appeared two more times in Medicine Hat Provincial Court (April 24 and May 29) on charges of violating Canada's *Wildlife Act* within the NWA. The company has now made five court appearances on this charge, each time being granted an adjournment. Their next court date is June 26, 2008.

The Suffield Coalition believes there is a win-win alternative. EnCana could support the maintenance of refuges for species at risk by withdrawing their Suffield application. Such an action could have reputational and fiscal advantages for the company and would allow the grassland to begin healing from past human disturbances.

- Joyce Hildebrand

Grizzly Bears

Reaction to the long-awaited release of the provincial *Grizzly Bear Recovery Plan* in April has been distinctly underwhelming. The multi-stakeholder Grizzly Bear Recovery Team met

between 2002 and 2004, and presented the first draft of the recovery plan to government in 2004. Since then it has been through a tortuous review process by government staff, as well as international grizzly bear experts.

The recovery plan lays the framework for a successful recovery process, but unless there is the financial support and the political will to implement it, grizzly bears are unlikely to benefit. Central to grizzly bear recovery in Alberta is habitat protection, a fact acknowledged in the recovery plan: "The greatest risk of habitat loss is the cumulative effects of human activity; hence the need to monitor the footprint and initiate habitat conservation and enhancement as required." But what is conspicuously lacking is any mechanism for actually dealing with habitat protection.

The recovery plan recommends the establishment of Grizzly Priority Areas (GPAs) "to maintain habitat quality and ensure low risk of mortality." (An earlier draft referred to Grizzly Conservation Areas [GCAs], but the word "conservation" was apparently deemed unacceptable.) But at the same time it was recognized that better management in these GPAs is not enough: all grizzly habitat needs better management. A 2006 draft of the plan stated, "Additional activities, including agriculture, facility development and operation (industrial and recreational), recreational activities, and OHV use also need to be addressed through appropriate management within and outside of GCAs" (emphasis added). The disappearance of this statement from the final plan is a serious concern.

Although there have been some small steps, including the suspension of the spring grizzly bear hunt from 2006 to 2008 (recently extended for one more year) and considerable advancements in surveying of bears, it is important to place the entire recovery process in the context of the question, "How is this going to help grizzly bears?" Plans and reports alone won't help the bears. Since grizzlies were first recommended for designation as "threatened" in 2002, not a single hectare of grizzly habitat has been protected. Nowhere have road densities been reduced, as recommended in the recovery plan.

We could say that the time for talk is finished; now it is time for action. In fact, the time for action was six years ago.

That makes the need to do something – anything! – to protect grizzly bear habitat more urgent than ever.

- Nigel Douglas

High Island Incident Revisited In spring 2007, Parks and Protected Areas installed two communications towers in High Island Natural Area, an ecologically sensitive island in Lac La Biche, with no public consultation.

In the hope that this unfortunate event could trigger the establishment of an effective public consultation process, AWA initiated plans for a meeting with the Parks division and concerned Albertans. More than a year later, that meeting finally took place on May 21, 2008 in Edmonton.

Participants comprised representatives from the Parks division, the Lac La Biche Birding Society, Beaver Lake Cree Nation, CPAWS, AWA, and Lac La Biche County, as well as long-time Lac La Biche-based environmentalist Tom Maccagno, who first raised the alarm about the events at High Island.

Co-chair Dave Nielsen, Acting Assistant Deputy Minister for Parks, began the meeting by stating that a mistake had been made in not consulting the public about the installation proposal, a refreshing and welcome admission. After meeting participants expressed their deep concern about the events of 2007, we moved to the bigger issue of public consultation on proposals and developments in Alberta's protected areas, both internal (such as Parks infrastructure development) and external (such as oil and gas development).

At the meeting, AWA requested the following from the Parks division: 1. A copy of the environmental screening done for the installation proposal and Parks' post-construction report on the impacts of the development. 2. An on-line publicly accessible database documenting proposals and developments in protected areas whenever the footprint of existing facilities would be extended. 3. A Memorandum of Understanding with conservation groups formalizing a public consultation process for such proposals. 4. Support for effective public consultation on new developments initiated by other government ministries, one example being new oil and gas proposals in Rumsey Natural Area.

- Joyce Hildebrand

Disturbing Disturbances in Rumsey Recent developments in the Rumsey Natural Area indicate the urgent need for a new management plan. On a brief visit in mid-May, I observed the results

of recent practices that are compromising the biological integrity of the area.

Paramount Resources is proposing a new pipeline between two wells, both within the Natural Area. The proposed route goes through strongly rolling hummocky moraine with woodlands and wetlands. One of the wellsites is occupied with crested wheat grass, smooth brome. and sweet clover. There is a risk that these non-native species will spread onto new disturbances.

Vegetation on a Husky pipeline from a wellsite appears to have been sprayed with herbicides. The spraying has killed vegetation (much of it native) but has not killed all of the crested wheat grass, which has spread eastward from the wellsite. If the spread is not prevented in the next few months, the problem will increase exponentially.

In two other areas of the park, willows have been bulldozed and a large area of aspen woodland and willow shrubland has been cleared by a bulldozer whose tracks have disturbed the grassland on a nearby hillside. Neither of these disturbances was discussed with ANPC (Alberta Native Plant Council), AWA, or Red Deer River Naturalists, all of whom have a longstanding interest in the area.

Extensive erosion is occurring along the main access road built by Poco Petroleum in the 1980s. Reclamation attempts along the roadside have failed. A steep south-facing hillside north of the road is almost bare of vegetation due to heavy grazing and trampling by livestock, some of this occurring this spring.

In mid-May, livestock had already entered lands in the northern part of the Natural Area, adversely impacting the rough fescue grasslands. Studies have shown that rough fescue grasslands are best grazed in the fall or winter and definitely should not be grazed in early spring. This degradation of rangelands - which for decades were so carefully managed by Tom Usher, the former leaseholder who supported protecting the Rumsey block – is most disturbing.

- Cheryl Bradley ANPC Representative Rumsey Technical Advisory Committee



Local Community Succeeds in Building New Model for Parks

By Chris Wearmouth, AWA Conservation Specialist

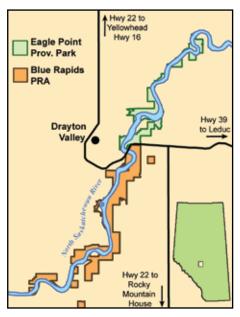
ilderness across Alberta is in trouble - there is no denying it. This is especially true in the interior of the province, where development is running rampant and the natural landscape can only be found in tucked-away pockets. Yet occasionally we are reminded that with a dedicated effort and an ability to see beyond our own interests to a larger common goal, we can be victorious in protecting the lands, water, and life that still roam wild in the nooks and crannies of central Alberta. Such was the case with last year's creation of two protected areas along a major provincial waterway, a success story that opens the door for innovation in addressing the environmental and recreational interests of Albertans through our province's parks system.

On September 29, 2007, a small brigade of outdoor enthusiasts paddled downstream as horse-mounted conservation officers watched from the shore of the North Saskatchewan River outside the town of Drayton Valley. Government officials, local recreation clubs and members of the community joined to celebrate the official designation of Eagle Point Provincial Park and the Blue Rapids Provincial Recreation Area. These designations salute the achievement of Drayton Valley's local government and community organizations, the driving force behind the unique process that led to the parks' creation.

"This is a shining example of how the local community and park users from different perspectives can come together and contribute to the goal of healthy, sustainable parks in Alberta," said Hector Goudreau, then-Minister of Tourism, Parks, Recreation, and Culture (now Tourism, Parks, and Recreation, or TPR), in a government news release.

The two protected areas span 53 meandering kilometres of the North Saskatchewan River, meeting at the

North Saskatchewan Bridge on Highway 22. In total, Eagle Point and Blue Rapids cover almost 5,600 ha (56 km²) of land in the Boreal Dry Mixedwood and Central Mixedwood Natural Subregions. The river valley is an important wildlife corridor for large animals such as moose and black bears from the Lower Foothills Subregion to the Boreal and Parkland Natural Regions downstream from Drayton Valley. The protected areas are also home to bird species such as the pygmy owl, the bald eagle, and the black-throated green warbler.



The two protected areas outside of Drayton Valley. The parks span 53 km of the North Saskatchewan River and cover almost 5,600 hectares of surrounding lands. MAP: AWA FILES

Besides increasing protection for this stretch of the North Saskatchewan, the regulations governing the two parks clearly outline the recreational activities that will be permitted within their boundaries. Eagle Point Provincial Park is open to non-motorized recreation such as hiking, cross-country skiing, and cycling. Blue Rapids Provincial Recreation Area will allow for managed motorized activity such as all-terrain

vehicle (ATV) use and motocross on a proposed designated trail system to be built in the near future. Both protected areas may also provide opportunities for horseback riding on designated trails and boating on the river.

In fact, it was a dispute between these different user groups that prompted the development of the two protected areas. In the summer of 2004, the Pine Valley Motor Cross Association sought a permit to build a motocross park and trail facility on public lands already occupied by local cross-country ski trails. The Pembina Nordic Ski Club challenged the permit application at a County of Brazeau council meeting, forcing the two clubs to question how they could address the different recreational user groups' needs.

"I stood up [at the meeting] and I said, 'You guys keep telling us to go away. Go away to where? There is nowhere to go," says Brent Hodgson, founder of the Blue Rapids Motorized Trails Association.

Out of this conflict the North Saskatchewan Protected Areas Steering Committee was born. Over the next three years, representatives from 11 different user groups and three levels of government came together to prepare and support a proposal for the two protected areas in a process unique in the development of Alberta's parks. "This is the first time a park has ever been created by a community coming in and asking for it," says Hodgson.

According to Rob Macintosh, who is with the Eagle Point Park Trails
Association, "The key focus of this protection initiative was to take a substantial area of ecologically important public land that was essentially trapped in the middle of a highly developed White Zone area and protect it before it was lost to encroaching development."

Still, Hodgson says, "This is not a pristine natural area in any sense." Prior to the parks' designation, random motorized use was the rule and there were – and still are – numerous industrial



Looking south along the North Saskatchewan River. The bridge on Highway 22 separates Eagle Point Provincial Park in the foreground and Blue Rapids Provincial Recreation Area in the background. PHOTO: D. WOOD

interests present in the area, including oil and gas and gravel extraction. Getting the different users – from the ATV group to the local archery club, from adjacent landowners to industry – to support the project was one of the bigger tasks of the three years.

Macintosh says it would have been politically impossible and strategically foolish to promote anything but cooperation with the numerous industrial interests. "In order to achieve this protection, it was critical to recognize that environmental protection and recreation have to co-exist with a significant degree of existing industrial activity," he says. Luckily, the committee had strong support from the local municipality and county, who were active in bringing the different users together at the table.

Throughout the process, TPR and Alberta Sustainable Resource Development, which governs public lands, were kept informed. The proposal originally received a cool reception from the Parks planning department, but in time it gained the support of several key figures, including Minister Goudreau and Policy and Land Use Manager Doug Bowes.

The other large task at hand was the hammering out of guidelines for the future management of the parks, especially as the local community wanted to remain active in the future planning, funding, and operating of the park. "We were not prepared to turn over [recreation] leases and the high degree of local control we had over those [leases] without the assurance of an effective partnership and a full say in how things would happen," says Macintosh. The committee worked on developing a brand new model of operating a park in Alberta that would include equal participation from the local community, instead of simply having the designation handed down and transferring control to the under-resourced Parks department.

The steering committee made their final pitch in April 2007 to the Cabinet Policy Committee on Community Services. In a separate proposal to Cabinet, the Parks division backed up their plan. The proposal received final approval last summer, and on August 29 the two parks came into existence, absorbing the previously existing Natural Areas of North Saskatchewan, Drayton Valley, Pembina Field, and Washout Saskatchewan.

At the time of the parks' creation, the MLA for the area, Tony Abbott, applauded the willingness of the different recreational groups to work together for "the best solution for the land and all park users involved." "What we hope it will do is foster user respect for each other," said Hodgson. "We have to learn to share these 15,000 acres."

Although most of the area's user

groups have given their approval, one group has yet to be completely satisfied with the creation of the parks. Local hunters are questioning where they will fit into the new parks. Macintosh says that hunting will not be allowed in the provincial park due to government regulations and safety concerns arising from the large number of non-motorized and therefore quiet users who will be traveling extensively throughout the park. No final decision has yet been made regarding the Provincial Recreation Area, and hunters could be allowed as long as they maintain a safe distance from the soon-to-be-developed motorized trail system. "It's the position of all of the local community partners that hunting should be retained to the greatest extent possible in the Provincial Recreation Area," says Macintosh, adding that over time as the level of recreation increases, it may be necessary to adjust regulations to reflect a shorter season or specialized

Like the process that led to the successful designations, the parks' future management will be unique, with the local community playing a significant role in direction and support. Macintosh and Hodgson recently co-founded the Eagle Point-Blue Rapids Parks Council, which will work co-operatively with TPR to undertake the future planning, operations, and management of the parks. The Council has hired Rebecca Reeves. who previously worked for the Canadian Parks and Wilderness Society, as the new organization's executive director. Reeves says that what she really loves about the project "is the fact this isn't a pristine area. It's presenting us with all the challenges we face on public land."

Sitting on the Council are eight representatives from the different recreational groups, one from the Town of Drayton Valley, one from the County of Brazeau, and two TPR staff. As well, there are plans for four sectoral representatives, which will include industry and environmental groups. "There is a total balance between government and industry and environment against the operating groups that will be delivering recreation services," says Hodgson.

The Council has begun the process of public consultation in developing a management plan for the parks. Reeves says it is important that the council hear the opinions of all the stakeholders while developing the initial direction of the plan. Through a series of information sessions and feedback options, the Council is currently focusing on the local community, with plans to bring the draft management plan to a larger provincial audience next year.

Part of the future plan will be focused on the development of services and facilities within the parks. Several facilities already exist from the previous recreation leases, some of which will be expanded, as at the time of designation, commitments were made to allow expansion to compensate leaseholders for handing over their leases to the provincial government. As well, a new designated off-highway vehicle trail system will be developed in the Provincial Recreation Area. While the exact numbers will be worked out throughout the development of the management plan, according to Hodgson, less than 1,200 ha of land are being proposed for recreation facilities and services, leaving more than 80 percent to exist naturally and begin regenerating.

Another interesting aspect of the parks' operation is their funding. "Most of the resources to develop a comprehensive management plan for the provincial park and provincial recreation area, as well as virtually all of the resources to enhance and develop the recreational facilities within the parks, are coming from the local community and the local volunteer organizations," says Macintosh. It is proposed that fees collected from recreation services such as campgrounds and facility use will be funneled back into the parks' operating costs. As well, local clubs should be able to access provincial funds outside the Parks budget, such as the lottery fund, to contribute to their portion of the operating costs. "From the Parks perspective, much of the financial burden has been lifted off the province and has been accepted by the community," says Macintosh, adding that the Council will still rely on TPR for the planning and implementing of enforcement personnel such as conservation officers.

However, Macintosh cautions that due to the off-burdening of costs to the local community, their model may not be appropriate for more pristine areas where there is a small volunteer base, a small municipal community base, and a



Arising out of a conflict between motorized and self-propelled recreation, the two newly protected areas will address the need for designated trail use. PHOTO: D. POISSANT

large area to be protected. The issue of off-burdening costs and responsibility is something that will need close scrutiny if this model is adopted in other places of the province in the future. Concerns about the government abdicating its responsibility by supporting this model must be addressed. The Parks department budget and staff is a shadow of what it was just over a decade ago. In 1995 there was a budget of \$12,850 per km² and one staff member for each 4 km²; by 2006 this had dwindled to a mere \$1,380 per km² and one staff member per 60 km². This leaves many to wonder if anything will be done at all if it's not done by the local community. As well, with the local recreation community so heavily involved, will the government become primarily accountable to local recreational interests above all other concerns, possibly blocking the future input of non-local Albertans to whom the parks also belong?

While these questions will need answering should the Drayton Valley

model be replicated for other natural areas within Alberta, local proponents see their example as opening the possibilities for future protected areas. "This is what we need in many more areas of the province – to get the people to respect each other and share the land base," says Hodgson. "We only have so much land, and now we're starting to get crowded and ... we're going to have to learn to share."

In the government news release at the time of designation, Minister Goudreau is quoted as saying, "I applaud the hard work of the local stakeholder committee and hope to see more locally-driven initiatives like this take shape across the province." If we can satisfactorily answer the questions that arise, this model of effective community involvement could very well serve as the prototype for future protection of Alberta's wild places.

For more information about the Eagle Point–Blue Rapids Parks Council, please visit www.epbrparkscouncil.org.



To Speak or Not to Speak – Scientists as Advocates

By Nigel Douglas, AWA Conservation Specialist

magine you are a scientist. Your study of rattlesnakes in southern Alberta is raising serious concern about the effect of industrial roads on snake populations. You publish your studies, report your results at conferences, but rattlesnakes are still being killed on the roads.

What do you do? As a scientist, your job is to study rattlesnakes. If nobody acts on your results, is it your fault? Do scientists have an obligation to advocate for good management decisions based on their findings? This dilemma faces scientists everywhere, but it seems particularly significant in Alberta, where scientists' results are often ignored by decision makers.

Look up the word *scientist* and you will find definitions such as "a person with an expert knowledge of a physical or natural science" (Oxford Canadian Dictionary). Traditional definitions are about acquiring knowledge, not about doing something with that knowledge or communicating it to others.

Canada – and Alberta – have some exceptional scientists but a very poor record of using their excellent work. According to the international science journal *Nature*, "Comparisons of nations' scientific outputs over the years have shown that Canada's researchers have plenty to be proud of, consistently maintaining their country's position among the world's top ten. Alas, their government's track record is dismal by comparison" (February 2008).

Dr. David Schindler, Killam Memorial Professor of Ecology at the University of Alberta and one of Canada's top water experts, agrees. "Thirty years ago, we were the envy of every country in world," he says ruefully. "Now we have some of worst monitoring of anywhere in the world." Schindler is a prime example of a scientist who is not afraid to speak out, and who believes that scientists should speak out more.

Jonathan Wright, a self-professed "old

school biologist" who has studied reptiles and forest carnivores in Alberta, puts it even more strongly: "To me, the scientist who refuses to advocate for his species is the same thing as the businessman who puts on a suit in the morning and leaves his ethics behind."

What Keeps Scientists Silent?

For scientists to maintain credibility, it is crucial that they stand on solid scientific ground. As Schindler puts it, "Scientists don't have the luxury, like advocacy groups, of opposing things without scientific backing."

"One of the most important working principles of sound research is that you don't draw broader conclusions than your data can support," says Anna Hargreaves, research scientist at the Calgary Zoo's Centre for Conservation Research.

"Many non-scientists think of science as being characterized by certainty. Science, especially ecology, is actually more about uncertainty, testing ideas, sorting out the 'always true' from the 'usually true' from the 'almost never true."

The flipside of scientific certainty is the precautionary principle: "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically" (Science and Environmental Health Network, 1998). "I wish the precautionary principle got more respect and had more clout," says Hargreaves. "When we have decent evidence that something is harmful, we should deal with it while gathering additional data.... Science excels at sounding alarm bells, long before all the complicated interactions are teased apart." Similarly, Schindler believes that "scientists should be prepared to go beyond data and use what experience has led them to believe."

Grizzly bear research in Alberta is a perfect example. In 2002 government scientists on the Scientific Subcommittee of the Alberta Endangered Species Conservation Committee (ESCC) recommended that grizzlies be designated as "threatened" because their numbers in the province were thought to be only around a thousand. The designation didn't happen, but the following year, a detailed five-year population survey began. Each year, grizzly numbers were surveyed in a specific area and were found to be lower than had previously been thought. And each year, nothing was done to address the problem, the excuse always being that we need to wait until the five-year study is complete before we do something.

This is clearly unacceptable, and in this case, the scientific community voiced its concerns. In March 2005, a group of 19 prominent scientists wrote a joint letter to Premier Ralph Klein calling for him to act on the ESCC recommendation to designate the grizzly as "threatened." Their letter noted that the policy statement of the ESCC states that "the biological status of species should be determined by independent scientists using the best available science" and that "where the balance of scientific information indicates a species is at risk, conservation and protective measure will be taken." Despite their best attempts, however, the grizzly bear remains more vulnerable than ever, as it still has not been designated as "threatened."

Another measure of scientists' credibility is their ability to remain objective. "If you know a scientist is employed by an oil sands company, you start to take any research results they present about the benignness of oil sands extraction with a grain of salt," says Hargreaves. "You have a certain level of skepticism because you suspect an agenda." But she believes that some people think this cuts both ways: "If a researcher is heavily involved in advocating against something – hunting a certain species, developing a certain area – do they risk compromising their perceived scientific credibility?"

Jonathan Wright has little sympathy

with this argument. "The idea in science that it somehow affects your objectivity to be biased towards your subject is rubbish," he says. "If you allow it to affect your objectivity, then it will. If you don't, it won't. If you're properly trained to think objectively, being an advocate is no problem."

In 2003 a very public debate erupted when Dr. Gordon Stenhouse was apparently removed as chair of the provincial Grizzly Bear Recovery Team after suggesting to CBC television that high road densities in Alberta were having a severe impact on grizzly bears. The message was chillingly clear to Stenhouse, and to all government scientists: "Do the science but keep your mouth shut."

Jonathan Wright is another scientist penalized for speaking out. Having worked for six years for Canadian Wildlife Service studying reptile populations in Suffield National Wildlife Area, he felt that it was his moral responsibility to voice his concern that nothing was being done to safeguard wildlife habitat in the area. His job was quickly terminated. Wright feels that established biologists felt threatened by a colleague who was willing to advocate for wildlife.

Even university scientists speak out at their peril. "At end-of-year, they evaluate the number of papers you produced, the number of abstracts presented to meetings, or the number of funding dollars you brought in," says Schindler. "People who pay attention to public problems jeopardize their careers." Schindler is one of a relatively small proportion of university scientists who have the job security that comes with a tenured position. "The untenured person is very vulnerable," he points out.

In a recent book review, Louise Fabiani wrote, "Science is all about challenging comfortable assumptions." Jonathan Wright believes that this is not necessarily the reality. "Most scientists today refuse to advocate because they are no different from most of the rest of us – they're too comfortable. Advocacy is not easy, often not fun, and can produce hardship. I expect that former generations who lived in seminal democracies would have taken to advocacy today much more easily. They didn't expect life to be easy."



"Ranch Gate" ©ALISON PHILPOTTS

Science and Politics

Wright believes that many of the problems facing wildlife today are more political than scientific issues. "Our government is concerned with our government," he points out. "Grizzly bears have little or nothing to do with the survival of our government. Oil does." Even more than this though, society makes its choices. "Saving grizzlies and caribou means nothing less than curbing our current economy," says Wright. "Grizzly bears and a growth economy, grizzly bears and consumerism, are mutually exclusive values. We won't have both."

The political influence on the application of science is exemplified by the Government of Alberta's treatment of species at risk recovery plans, documents that explain, with scientific justification, what needs to be done to recover a species. The Alberta Sustainable Resource Development website lists recovery plans for 17 plant and animal species. After a plan is approved by government, the politicians and land managers decide whether to implement the plan in order to recover the species or whether their other priorities are more important.

"When politicians make decisions

flying in face of science, they should explain why they've done so," says Schindler. "Scientists should be compelled to speak out if political decisions aren't supported by science." If politicians decide that the price of recovery is too high, they should say so: "Politicians should say, 'We are losing caribou, but we think gas and oil is more important,' if that is the case."

Schindler sees the separation of science and politics as crucial. "We need to get scientists at arm's length from the politicians," he says. "Give them a budget, let them form their own structure. Their bosses should be in dialogue with the politicians to discuss the issues. But free them from having to support the politician in power."

It is partly up to scientists themselves to ensure that science gets the respect it deserves, in Alberta and elsewhere. "Scientists have to take back the high ground," says Schindler. "They have a duty to speak out. The public pays my salary and deserves to hear my findings."

For Wright, this is a moral imperative that comes with the job: "If you are making a living off that creature's plight, I believe you have a moral obligation to give back to that creature. So do it – advocate!"



Three Nations Celebrate Twinning of Hay-Zama Lakes Wildland Park with Chinese Nature Reserve

By Christyann Olson, AWA Executive Director

n Tuesday evening I pulled out the topographical map for Zama Lake and looked closely at the place where my adventure on Wednesday, May 28, 2008 would take me. One quick glance at the size of the blue patch in the middle of all the green tells you there is something special here. The mapped wetlands and marshes tell the story.

I've known about this area for a number of years, and AWA has been involved in the work being done to care for this international Ramsar site since 1994. But I had never been so far north. As we flew north along the Rockies. the mountains were snow-capped and the rivers full. The mighty Peace River was an easy landmark, as was the meandering, magnificent Chinchaga River. We were on our way to celebrate the dedication of Hay-Zama Wildland Provincial Park and the twinning of Hay-Zama with the Dalai Lake National Nature Reserve in Inner Mongolia, China.

Once on the ground at Rainbow Lake, we traveled to Chateh, where the school, decorated for the occasion, welcomed visitors to the celebration. People were excited, children were intrigued, and guests from many walks of life came to recognize the treasure of Hay-Zama Lakes Wildland Park. A delegation of eight government and academic officials had come from the Republic of China to participate in the ceremonies and join the celebration.

James Ahnassay, Chief of the Dene Thá First Nation, welcomed everyone. From the time the Hay-Zama Committee was formed in 1994, the Dene Thá Council wanted to protect the lakes in perpetuity. "By twinning these lakes to a very similar complex in China," said the Chief, "we are making a statement to the world about maintaining wetlands throughout the world. This is our celebration; these lakes are an ecosystem of international significance." A Dene Thá elder spoke passionately in Dene and



As the celebration began, drumming prayers and powerful words spoken by a Dene Thá elder grounded those gathered for the event: dignitaries from First Nations, the People's Republic of China, and the Province of Alberta; school children and honoured guests; and the communities surrounding Hay-Zama Lakes Wildland Park. PHOTO: C. OLSON

gave the opening prayer. The drumming created a sense of connectedness and peaceful awareness.

Throughout the ceremony, the recognition of strong collaborative efforts and the unique partnership of industry, government, First Nations, and the environmental community was emphasized. Their ability to focus on common goals and work through differences to find cooperative, sustainable ways of developing the oil and gas reserves while protecting the lakes that support more than 200,000 birds annually was an important message.

Mr. Hu Qun of the People's Republic of China and Deputy Minister of Tourism, Parks, and Recreation Bill Werry signed the Twinning Agreement. Mr. Hu Qun spoke about the hope that this experience will become the model for collaboration around the world; that we will improve friendship among countries and further enhance our ability to work together to protect our lands. "There is significant meaning to signing the Twinning Agreement. We own this earth together and we share in the responsibility to protect this earth and protect this environment. Signing the MOU between Hay-Zama and Dalai Lake establishes the platform for future work towards protection and collaboration for the betterment of humankind."

Frank Oberle, MLA Peace River. represented Minister Cindy Ady and brought greetings from the Province to those celebrating the official designation of the park. He took time to recognize Cliff Wallis and Alberta Wilderness Association for their role in the work of the Hay-Zama Committee, and especially Cliff for his spearheading of the twinning project. MLA Oberle gave an important message to the children and the Dene community. "What your community has achieved is important not just in your region or province or country, but around the world. You should be very proud today and take this as proof you can change the world if you want to."

The ceremony closed with the drumming of the Dene Thá leading the community in a traditional Tea Dance with everyone joining in the circle of friendship, a feast of traditional Dene foods, and tours of the wetlands. Back home on the banks of the Bow with the evening sun setting on the Rockies, I reflected on the work we do at AWA and how little we realize the vast importance of our role.

THE SLOW MARCH OF THE LAND-USE FRAMEWORK

By Nigel Douglas, AWA Conservation Specialist

he Alberta government's muchanticipated Land-Use Framework (LUF) is continuing its stately progress through a complicated series of public, stakeholder, and internal government reviews. The first draft of the LUF document was released on May 23. Groups involved in extensive stakeholder meetings throughout the summer of 2007 have been invited back for another round of discussions in May and June of this year. The final version of the document is slated for release in the fall of 2008.

In his March 27 mandate letter to Ted Morton, Minister of Sustainable Resource Development (SRD), Premier Stelmach reiterated that one of his government's priorities was to "address competing use of land through planning and decision-making directed by the completion and implementation of the Land-Use Framework."

AWA is one of a number of organizations that invested a considerable amount of time over the past three years in providing input into the LUF process. Talk was encouraging throughout the process, particularly the almost universal acknowledgement that land-use planning (or lack thereof) in the province is not working and that changes are desperately needed. As Minister Morton said in June last year, "The status quo is not an option." Now the proof of the pudding is in the eating.

Ahead of the eventual release of the LUF, AWA has endorsed an important document, Alberta by Design Checklist: Blueprint for an Effective Land-Use Framework, by Steven Kennett (Pembina Institute) and Rick Schneider (CPAWS Northern Chapter). This report aims to establish a measuring stick against which a future framework can be compared (see text box).

How far the final LUF will go to meet the principles outlined in the report remains to be seen. By no means does Minister Morton have the support of all of his Cabinet colleagues, and it is almost certain that individual interest groups will find things to oppose. "Change always finds its share of opposition," Morton said in April, at the opening of the spring legislature.

The draft plan recommends dividing the province into six regions, loosely defined by watersheds, each of which would have a regional planning body to ensure that development is tied to water and other environmental limits. While full of encouraging sentiments and principles, the one thing that is clearly missing is the provision of any legislative teeth to ensure that the document becomes more than just another admirable report gathering dust on a shelf in the government archives.

Public response to the draft plan is being sought through a public survey, available on-line at www.landuse. alberta.ca, or as a paper version by calling the government toll-free number 310-0000. Last date for comments is June 20. As is often the case, the survey makes it difficult to get across the points one might actually want to make. Participants are asked if they agree or disagree with statements such as "Overall, the six strategies in the *Draft* Land-use Framework outline a plan that will address the land-use issues and challenges facing Alberta" (emphasis added). AWA's response is that, if there is the political and financial support to implement the framework, then it could address land-use challenges; if there isn't, then it won't!

AWA is working hard to ensure that the LUF really does become something that will improve the current development free-for-all that characterizes so much of Alberta's landscape. We are also calling for a time-out on new development in sensitive areas such as the Eastern Slopes and the Little Smoky, to avoid a potential stampede to develop in the coming months before any effective plans can be implemented. If the current system is broken – as has been universally acknowledged - then it makes sense to suspend any more unplanned development until effective plans can be put in place. If you are at the bottom of a deep hole, the first thing to do is stop digging!

Land-Use Framework Blueprint
The Pembina Institute/CPAWS report
entitled Alberta by Design Checklist:
Blueprint for an Effective LandUse Framework suggests a number
of principles to guide an effective
framework, including the following:

- 1. Ensure Genuine Progress
 Improving overall quality of life and ensuring long-term environmental, social and economic sustainability ... should replace the current focus on maximizing economic growth as defined by narrow indicators, such as gross domestic product.
- 2. Define Genuine Progress Indicators through Public Engagement

Quality of life should be defined in terms of clear and measurable desired outcomes that reflect the full range of values and interests of Albertans. The processes used to determine these desired outcomes should be open and transparent, with procedural guarantees for effective public participation and mechanisms for accountability.

- 3. Our Land Base Is Finite
 The policy and planning framework should include mechanisms for setting priorities, defining limits of acceptable impacts and making decisions about trade-offs.
- 4. Achieve Landscape-Scale
 Management across Sectors
 The policy and planning framework
 should enable Albertans to ... manage
 cumulative impacts when multiple
 activities occur on the same land base.
- 5. Correct Market Failures
 Reliance on market forces should
 be tempered by the recognition of
 market failures and the need for
 public policy to correct these failures
 notably the failure to account for
 the externalized environmental and
 social costs of development ... and the
 benefits to all Albertans of maintaining
 environmental goods and services on
 both private and public land.

See pembina.org for the full report.

Eagle Eyes and Wolves

Dear Editor:

My compliments on the April issue of the *Wild Lands Advocate*, not just because of its well-presented contents, but also the fine photos and quality of printing. I read the whole magazine, cover to cover, and have some special comments on two issues.

First of all, thank you very much for AWA's involvement and outspokenness in the recent wolf control controversy. In my recent wolf article (WLA, October 2007), I expressed my surprise about the apparent lack of protest from the general public concerning the aerial shooting of wolves by government agents. All of that changed very dramatically after you drew media attention to the University of Alberta plans to sterilize alpha wolves and kill all other pack members, including the pups. As you probably know, the Edmonton Journal quoted AWA's Nigel Douglas and ran several pages of letters from outraged readers.

The second issue to which I would like to draw your attention concerns the recent article about golden eagle migration ("Sky Corridors – Bird Migrations along the Spine of the Continent," WLA, April 2008). You report that Sherrington was the first to discover the eagle migrations. The fact of the matter is that I observed it more than 40 years ago and reported the phenomenon to the Calgary Bird Club.

In 1970 I published an article in Blue Jay (28:20-24), entitled "Migrations of diurnal birds of prey in the Rocky Mountain foothills west of Cochrane." In 1985 I published a paper in the Canadian Field-Naturalist (99:383-385) about the spring migrations and foraging habits of Golden Eagles in western Alberta. My 1985 book Wild Hunters includes a chapter called "Eagle Hills" describing the eagle migrations and hunting habits. Furthermore, the July/August 2002 issue of Canadian Geographic featured a major story by Sid Marty about the eagle migrations. He interviewed me and duly reported that not Sherrington, but Dekker was first to report the March flight.

- Dick Dekker, Edmonton

In Search of Visionary Leadership

Dear Editor:

I read the April 2008 issue of the *Wild Lands Advocate* from cover to cover. A magnificent and disturbing issue.

I am 68 years old and have had a keen interest in land management in Alberta since I arrived here in 1969. Land management by humans for us and other species necessitates long-term considerations. The wildlife corridor articles created within me more frustration than joy. How can we humans, with the knowledge we have acquired in life processes, still be so short-sighted, inconsiderate of other species, inflexible, and self-destructive? We know better but fail to learn from the past experiences.

Driving through Canmore I often wondered where these wildlife corridors might actually be hidden amongst the "developments." Now I know how narrow and obscure they are and how much negotiation it took for government policymakers to give wildlife only the minimum.

Wildlife needs to move to exist. It needs to move to find food and mates. Wildlife used to have movement opportunities all over the continent with only natural restrictions. Life in the wild is tough and our restrictions imposed on wildlife make it even more difficult for it. Now our wildlife has to learn about 600-m-wide corridors, 35-m buffer zones, underpasses, and overpasses. Even these tiny passes we create for them we insist they share with us. Golf courses take precedence over giving wildlife adequate room to move. This story is repeating itself in the Crowsnest Pass. Shame on

This state of affairs is created by past and present lack of leadership by government policymakers. Provincial and academic biologists and conservation groups understand the fundamental problems and advocate solutions that should resolve the issues. Conservation groups should find willing collaborators in

Alberta Environment and government land-management decision makers. Instead it is a continuous atmosphere of resistance.

It's not a lack of money – it is a lack of vision and political will. To let grassroots organizations do the advocating and then act according to less-informed public opinion is safe for the political party but not in the best interest of Alberta. We need elected officials to lead us, to inform us of the issues, to set appropriate policy and to enforce it. Who else is going to do it?

We are fortunate to have knowledgeable provincial biologists, academics, public advisory groups, committees and conservation groups to inform us of the emerging issues. We have voluntary conservationists and conservation workers earning minimum wages assessing and alerting the public and government officials about the threats to our water, soil, and air. We need a pro-active department of Alberta Environment that promotes policies which protect those vital elements.

The current policymakers in Alberta Environment do not have the long-term environmental health of Alberta as their objective. Unfortunately, these policymakers are supported by the short-term thinking of most of the voters who bother to vote in Alberta. Voters can be excused for not appreciating the complexity and consequences of land-management practices. It is the duty of municipal and government policymakers, however, to seek the best information and act in the long-term good for all species in Alberta.

- Klaus Jericho, Lethbridge



"The Hiker" ©ALISON PHILPOTTS

Dave Sheppard – Community Solidarity His Living Legacy

By Sharon McIntyre

Dave Sheppard has achieved what many of us long for: a successful career, peer recognition, a loving family, friends who care deeply about him, a log home in the magnificent foothills of the Canadian Rockies, a profound connection with his wilderness surroundings, and deep roots in his supportive community.

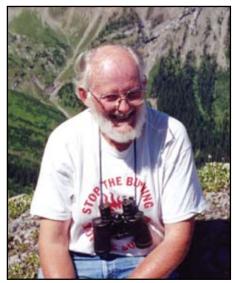
The only thing he would probably still like to add to this inspiring list of accomplishments is the designation of the Castle Wilderness region as a Wildland Provincial Park.

"Back in the 1970s, when the AWA first proposed the South Castle as a Wildland Recreation Area, no one thought it would be so difficult," admits Dave. "But we're getting closer now to achieving some significant protection there, thanks to the hard work of so many groups and individuals who have refused to give up on the Castle."

Dave Sheppard is the recipient of the 2008 Alberta Wilderness Defenders Award, to be presented in November at the AWA Martha Kostuch Annual Wilderness and Wildlife Lecture. The award recognizes his many years of leadership in the conservation community, the significant contribution he made to AWA's formative years, and his unrelenting efforts to have the 1,000-km² Castle region (south of the Crowsnest Pass and north of Waterton-Glacier International Peace Park) protected.

Dave's dedication to this remarkable wilderness area was first recognized with the 1996 Parks Canada Award. "His sense of hard work, innovative approaches and mediation qualities have held the Coalition together since its inception," states the Government of Canada news release. "He has unified a diverse mix of interest groups ... all with their own interests in the Castle Wilderness."

Educated as a conservation biologist, Dave taught biology at the University of Saskatchewan. By the late 1970s, Dave and his wife, Jean, found their dream



Dave Sheppard enjoying his beloved Castle Wilderness. PHOTO: K. JERICHO

location in the foothills near Pincher Creek, Alberta. He soon recognized the ecological importance of the Castle region's diverse ecosystem and unique landscape, including its role as habitat and north-south corridor for wildlife.

Dave's goal became to protect this area from harmful human intervention, and he encouraged supporters to work with him. Their efforts culminated in the formation of the Castle-Crown Wilderness Coalition (CCWC) in 1990.

Dave and the CCWC Board initially set about building the informational groundwork needed to support a Castle Wilderness protection proposal. Dozens of reports, inventories, brochures, letters, and discussion papers were researched and produced, most of them written or co-authored by Dave. He also understood the importance of informing and involving local area residents, and spent countless hours meeting with people and motivating them to also become environmental protectors.

The CCWC saw their intense labours bear fruit in 1993, when an application to expand Castle Mountain Resort in the West Castle Valley was approved by the Alberta government's Natural Resources Conservation Board (NRCB), but with the caveat that the rest of the area must receive Wildland designation. The

CCWC was an intervener at the Pincher Creek-based hearings, and the summary report read like an endorsement of Dave's teachings. However, the government rescinded its decision less than two years later, and today the struggle continues to protect the Castle Wilderness from encroaching use and development.

"We didn't fully understand how the political game was played back in 1994," Dave explains. "The forces of opposition simply out-gunned us. In hindsight, had we been better organized and more willing to compromise on some of the smaller points, we might have been successful. The government's reversal was a big blow. It's taken this long to finally get the Castle back to where the government is willing to at least discuss it again."

Included in the range of titles
Dave has held in his environmental
protection efforts are AWA Lundbreck
Chapter President, CCWC President,
and Volunteer Hike Leader for the many
ecological field trips he loves to lead,
inspiring a new generation of wilderness
defenders.

Now retired and thinking about writing a book, Dave has perhaps made the most lasting impact in his role as community leader. His innate ability to rally a disparate group of people behind a common cause, humbly take on the grueling time and travel requirements, maintain an even keel when things get rough, and create lasting social bonds among those he meets has not gone unnoticed. "Dave is a humble, gentle and hard-working volunteer par excellence," says friend and fellow-conservationist Klaus Jericho. "As a result of his extensive research, he knows the Castle Wilderness inside and out. I'm very happy to see that his dedication to this important cause is being recognized by his conservation peers."

Thanks to Dave's commitment to wilderness and its protection, Albertans have a living legacy of environmental stewardship that will echo through the Castle Valley and beyond for decades to come.

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In Memoriam

For nearly 50 years, Ed Johnston explored the Eastern Slopes of the Rockies, from Waterton to Jasper, on foot and by horse. The route that led him there was as winding as the trails he loved. A Regina boy, Ed came to foothills via the Qu'Appelle Valley and Montreal, thanks to the YMCA. The Y introduced him to camping in Saskatchewan's outdoors, partly funded his education at Sir George Williams (later Concordia University), and gave him a job at Camp Chief Hector, where he worked with members of the Stoney First Nation and introduced hundreds of children - including his own - to Yamnuska and the surrounding mountains.



Though life's path took him far from the Bow Valley and the Y, Ed's love of high places and respect for indigenous cultures only deepened and broadened over time. This "mountain itinerant" journeyed to the Arctic and Antarctic, and many places in between.

Wherever he was, Ed lived gently, mindfully, and with joy, delighting not just in remote passes and peaks, but also in small things: a feather, some bone, a pebble from the Pipestone River, making snow angels at Assiniboine, glissading down Rae Glacier, or skiing into Elizabeth Parker Hut under the midnight moon. What a gift to know a man whose wisdom was untouched by cynicism, who remained "married to amazement" all his days. We miss him.

AWA learned with deep sorrow of the recent passing of Ed Johnston, long-term friend and supporter. We sincerely appreciate that Ed's family has chosen to have friends send gifts in his memory. Memorial donations in Ed's name can be given online at shop. albertawilderness.ca.



Ward Neale – A Life Well-Lived

A few years ago, I was struck by the powerful passion in the voice on the other end of a telephone call to the AWA office – I remember it as clearly as if it were yesterday. The voice was that of Ward Neale, calling to find out what help we could be and what he could do about the growing concern about our government's plans to charge seniors for skiing in Kananaskis Country.

The years flew by. A few weeks ago, Ward's engaging face appeared at my office door as he finished up his receipts and thank-you letters for supporters of his fundraising efforts at the 2008 Climb and Run for Wilderness.

Ward has been our top fundraiser for a number of years. He always gave the credit to his friends who offered their generous support to help him help us. In 2006, at 82 years young, Ward became the oldest runner to finish the Run for Wilderness. For years, he has climbed the Tower, met old friends, made new ones, and participated as he has in everything he ever took on – to the fullest possible enjoyment. This year, car trouble and bad weather were not enough to stop his participation.

Throughout the years, our paths have crossed. Ward was ever present in opportunities to inspire our youth and our seniors. Regulars at the Calgary Youth Science Fair, he and

Roxie were always there to present awards, encourage young bright youth, and help all of us know the importance of education, support, and opportunity.

Years young, that was Ward. He was an inspiring gentleman, and his wonderful mate, Roxie, was never far behind. He truly believed in the importance of our natural world for our good health in body and mind. He has touched all of us at AWA. We have lost a fine friend, and we share in the sorrow of his family. Not many have earned their "Rest in Peace" as graciously as this fine man.

- Christyann Olson See photo of Ward on p. 30.

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PHOTO: AWA FILES

A Eulogy for Martha

Martha Kostuch, 58, passed away on April 22, 2008 after a lifetime of environmental activism.

It's the day after Earth Day and I've just heard of Martha's passing. Celebrate the Earth one day; celebrate the life of a person who did much in Earth's service the next. Martha asked us not to grieve but to act in her memory. Indeed we should and will, partly for Martha and mostly because we know it's the right thing. Just as she engaged in initiatives she knew she would not see to fruition, we should follow that lead. Someone wise said the ultimate test of a person's conscience may be their willingness to sacrifice something today for future generations

whose words of thanks will not be heard. Today we need to thank Martha, for stiffening our collective spines, for advocacy, for promoting fairness and equity and for speaking (and acting) forcefully, intelligently and ethically for the environment. I think of these words of Gandhi when I think of Martha: "First they ignore you, then they laugh at you, then they fight you, then you win". In so many ways, Martha won. For her persistence in the face of ridicule and adversity and the path she created we give thanks. If it is some comfort, no one remembered ever dies.

- Lorne Fitch, P. Biol.

"Save the Grizzly" Awards

AWA's "Save the Grizzly" campaign, launched last fall with the help of the Edmonton firm Calder Bateman, has won the following 2007 Advertising Club of Edmonton awards:

- Award of Excellence for an Advertising Campaign (this included the posters, ads and website)
- Award of Excellence for Magazine Single
- Award of Excellence for Non-traditional (this included our news events in Calgary and Edmonton)
- Award of Excellence for Web Design (for the savethegrizzly.ca website)

Now we just have to let Alberta's grizzly bears know how much we appreciate them. Please consider supporting the campaign by sending your donation today.

Wanted: More Meticulous Readers

Thank you to David McIntyre of Crowsnest Pass for bringing to light an error in the April 2008 *Wild Lands Advocate*. McIntyre carefully examined the photo of the bear print on page 31. After extrapolating the actual size of the print from the lengths of the surrounding pine needles and distinguishing a single claw mark above one of the toes, McIntyre identified the print as that of a grizzly and not a black bear, as was originally reported. We are grateful to those who delve into our news journal in such detail, and we welcome comments on and corrections to the *Advocate*. Please email your musings to the editor at awa.jh@shaw.ca.



In Memoriam

An avid hiker, hunter, fisherman, and camper, Steve Ondrus valued the backcountry of the Crowsnest Pass and shared his passion for all things wild. Steve passed away on March 6, 2008 at the age of 93. His memory will live on in the legacy of passion for wilderness and in the circle of friends who made donations in his memory to Alberta Wilderness Association. We are honoured to receive these gifts in his memory.

Pre-Registration Is Required for All Events

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

SUMMER SOLSTICE STROLL

Devonian Botanic Gardens, Edmonton

With "Nature Nut" John Acorn Friday, June 20, 2008, 6:00 p.m. Adults – \$25; Children – \$10

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. A unique and enjoyable event for the whole family.



Solstice Stroll, June 2007

WILD WEST GALA

Friday, September 26, 2008 Red & White Club, Calgary

Great food, outstanding wine, and superb entertainment all night long, featuring our own Nigel Douglas, Auctioneer Jessie Starling, and singer-songwriter Barry Hertz and friends. Be prepared for a surprise or two!

STEWARDSHIP DAY

Invasion of the Alien Plants

Thursday, July 10

Help save Wild Alberta from the incursion of noxious weeds! Join AWA for a day in the beautiful Castle wilderness, helping remove the nonnative species that threaten our wild places. It's a great way to give back to our natural world, which gives us such joy. The day will end with a barbecue, generously organized by Shell Canada.

AWA'S 2008 SUMMER HIKES

Participating in AWA's hikes program is a great way to explore Alberta's wilderness, 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 hikes, see the 2008 hikes brochure or visit AlbertaWilderness.ca.

TWO-NIGHT BACKPACK

The Great Divide

With Reg Ernst

Wednesday, July 16 – Friday, July 18
Backpack through the sub-alpine and alpine terrain of southern Alberta, camping along the Castle River. The first and third days will be relatively easy.
On day two, get ready for a long but breathtaking hike along the Continental Divide, with views of the Castle,
Waterton Lakes National Park, and the B.C. Rockies.

WEEKEND CANOE TRIP

McClelland Lake

*With Darin Zandee*Saturday, August 30 – Sunday, Sept. 1

\$100 AWA members \$125 non-members

Explore the heart of an 8,000-year-old wetland complex deep in the boreal forest. North of Fort McMurray, the rare patterned fen and other wetlands surrounding McClelland Lake rival the Rockies in scenic beauty. This is one of Canada's least-known natural treasures.

DAY HIKES

\$20 AWA members \$25 non-members

Porcupine Hills

With Vivian Pharis Saturday, July 5

Lying between the mountains and the prairies, this area is unique for its mixture of Rocky Mountain, Parkland, and Grassland Natural Regions. Grasses intersperse with wildflowers as we meander up the hills, passing through thickets of Douglas fir and aspen. Ruffed and sharptail grouse are common, and wild turkeys and deer may be spotted.

Ya Ha Tinda

With William Davies Saturday, July 12

Surrounded by peaks, the montane of Ya Ha Tinda – which means "Mountain Prairie" in Stoney – borders the Red Deer River in the southern part of the Bighorn. Learn about the traditional uses of the land; then climb up to get a bird's-eye view of this important wintering ground for elk and other ungulates.

Beehive Natural Area

With Nigel Douglas Saturday, August 9

Part of the headwaters of the Oldman River in southwestern Alberta, the Beehive Natural Area is a stunning mix of cool, dark sub-alpine forests and broad alpine meadows, set against a dramatic backdrop of rugged rocks and scree. The area provides habitat for grizzlies and summer range for elk and bighorn sheep.

Black Rock Mountain

With Heinz Unger Wednesday, August 13

Despite the foreboding name in the equally ominous Ghost wilderness, this hike will have you reaching new heights as you ascend the scree on your way up to the peak that until the 1950s sported a fire lookout. On a clear day, the view extends east to Calgary and west into Banff National Park.

Bighorn's Ram Ridge

With Heinz Unger Saturday, August 16

The Bighorn is truly the unprotected jewel of the Eastern Slopes. Ram Ridge on the area's eastern edge offers spectacular vistas of the western mountains. With a steep ascent and rocky scramble, this hike will keep your blood moving right up to the alpine crest. Along the way, you might spot a bear track or two or even catch a glimpse of the namesake bighorn sheep.

EARTH DAY REFLECTIONS FROM ALBERTA MLAS



MLA David Swann's comments (abridged) in the legislature on Earth Day, 2008.

With a mixture of foreboding and

hope, I greet my fellow MLAs on this 39th annual Earth Day. Truly these are dangerous times as we witness climate chaos, ice cap melting, worsening food and water shortages around the world.

In 1939 we confronted a different global threat and rose to the occasion with all the resources we could muster. Today we need to take the climate crisis with a similar resolve and courage, as we face a collective way of life that selfishly violates our biosphere and future generations. This is our time, and it is not our time. We recollect our absolute dependence on the earth for everything. We confront unparalleled opportunities as well as our unhealthy addiction to growth. We need reminders that we borrow this time from our children. Chief Seattle said: "This we know; the earth does not belong to us. Humanity belongs to the earth. Whatever we do to the web, we do to ourselves."

We continue to bow to the whims of the markets, markets not noted for either foresight or morality. What is government for if not to balance environmental and human values with economic development? We justify this free-market fundamentalism through our antiquated measure of progress, the GDP. Genuine progress requires genuine courageous leadership to ensure that we have good scientific grounds for decisions or else follow the precautionary principle.

As in 1939, we see new storm clouds gathering. We need to mobilize all possible resolve and resources across all parties. We must work together to address our debt to future generations with decisions based not on markets but stewardship. This is not our time; it belongs to our grandchildren and children.

— MLA David Swann, Calgary-Mountain View (Liberal) Shadow Minister for Environment, SRD, Aboriginal Relations



I often celebrate Earth Day with friends as we climb the Calgary Tower (many times!) for AWA, but this year, my wonderful wife

Jennifer and I attended to our first-born —Dawson Logan Rodney — who was born this past April 9. Over the years, I have immensely enjoyed our planet's natural wonders, so I understand the importance of protecting, preserving, and enhancing our environment — personally, professionally, and politically — and I'm proud to be part of a government that leads by example on these fronts.

The Alberta government initiated a formal program to reduce our environmental footprint from government operations in the 1990s; we have reduced electricity consumption by 10% and cut our greenhouse gas emissions by 220,000 tonnes annually. Alberta continues to be a leader in research and development of new footprint-reduction technologies, and Budget 2008 includes funds for many environmental projects including \$30 million for our Climate Change Strategy (to implement carbon capture/storage, conserve and use energy efficiently, and green energy production). Additionally, our Water for Life strategy is internationally recognized as a worldleader ... and that's just the beginning.

Government is playing a vital environmental role, and we are all obligated to do our pivotal parts — individually. If each of us treats each day as Earth Day, others — like our new son Dawson — will inherit an earth that is in even better condition than it is now. Isn't that the Alberta way?

— MLA Dave Rodney, Calgary-Lougheed (PC) Chair, All-Party Field Policy on Community Services Government Agenda & Priorities Committee Canada's Only Mt. Everest Double Summiteer



On Earth Day, we are challenged to take action — to leave our car at home, turn the heat down, recycle, and compost. Many

Albertans have embraced the opportunity for individual action. Saving the planet has become a family activity, something we talk about around the dinner table. On Edmonton Clean-Up Day, my family joins our neighbours in cleaning up our beloved Mill Creek Ravine.

While we try to do our part, we also must take on the much harder task of challenging governments to take action. When it comes to the big emitters of greenhouse gases and other pollutants, government regulation and inspection is required to make a real difference.

As far back as 1974, the NDP warned about the dangers of neglecting the waste produced by tar sands exploitation, especially the impact of tailings ponds on wildlife. Thirty-four years later, no plan is in place to clean up the mess we are creating. Currently, only four investigators are assigned to monitor a project with the largest environmental impact of any industrial site in Canada.

We need our elected representatives to take responsibility for what we are doing and to ensure we are leaving an environment that will support future generations of Albertans and Alberta's wildlife. We need a government that has the vision to lead us to a new energy future. We can use our wealth to promote green energy. We can harness the wind and the sun. We can preserve wilderness areas and wildlife. We can make sure industry cleans up its act — starting now — and uses technology to stop polluting. It is a big challenge, but for the sake of our children, it is one we must embrace.

MLA Rachel Notley,
 Edmonton-Strathcona (NDP)
 Environment Critic for Alberta's NDP

CLIMB AND RUN FOR WILDERNESS 2008

Albertans Go Wild at 17th Annual Climb & Run for Wilderness

An estimated 1,600 Albertans showed their wild side on April 19 in support of Alberta's wilderness at the Earth Day celebrations hosted by AWA and the Calgary Tower.

Although the day began with a blizzard, participants braved the snow to run around the tower and then up the 802 stairs to the top of Calgary's iconic landmark. The run was followed with the Team Challenge and the individual Climb, with participants raising almost \$127,000.

With plenty of entertainment, music, great prizes, and the Wild Alberta Expo, it was a celebration worthy of the majestic natural world we are so privileged to enjoy in this province.

See climbforwilderness.ca for more photos, details, and records.



Minister of Tourism, Parks and Recreation Cindy Ady awards the climb's top fundraiser, Ward Neale. Photo: D. Olson



"Doc" receives a kiss from another wilderness lover at the top of the tower. With clowns, face painters and games, the day was something the whole family could enjoy. PHOTO: K. CARLSON



Jonathan Heinz pushes himself up the stairs on one of his 23 ascents. Heinz was the fastest runner with a time of 9:25. He then went on to climb 22 more times to win the individual event's Most Climbs category. PHOTO: M. STROWBRIDGE



The Prairie Mountain Fiddlers once again performed at the Calgary Tower for the Earth Day weekend, bring their old-time tunes to the celebration. PHOTO: K. CARLSON

Although it was a blustery day for participants, spirits were high as climbers faced the driving snow on the outdoor portion of the course. Photo: M. Stowbridge



Calgary Tower

Steps: 802 Flights of stairs: 52 Metres: 160 Feet: 525 Number of climbs to equal Mount Columbia, Alberta's highest peak (3,747 metres): 24



The Wild Alberta Expo offered Calgarians a chance to learn more about the work of more than 30 organizations. Here, volunteers John and Karin *Groeneveld talk with a group at the AWA booth.* PHOTO: D. OLSON

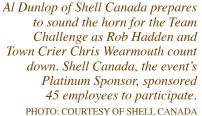


receives the first Wilderness Woman Award from AWA Executive Director Christyann Olson for her inspiration and commitment to the climb throughout the years. PHOTO: K. CARLSON



Volunteer Kimberly Weiss handed out popcorn to those needing a bit of fuel after the hike up. Approximately 160 volunteers came out to support the climb doing everything from registering people to cheering climbers when they reached the top. PHOTO: J. QUON

DEPARTMENTS





Return Undeliverable Canadian Addresses to:



Alberta Wilderness Association Box 6398, Station D Calgary, Alberta T2P 2E1 awa@shaw.ca