

December 2009 • Vol. 17, No. 6

AWA



# WILD LANDS ADVOCATE

THE ALBERTA WILDERNESS ASSOCIATION JOURNAL



*Cow Moose with Calf on a Northern Stream* PHOTO: © W. LYNCH

CAW RIDGE: TWO CHEERS FOR ALBERTA'S FISH AND WILDLIFE DIVISION / 4

A PRESCRIBED BURN IN AN ECOLOGICALLY SIGNIFICANT AREA: GOOD DECISION? / 7

PLUS ARTICLES ON: LAKELAND, FOSSILS IN THE BADLANDS, WOLVES AND A TRIP TO INNER MONGOLIA

# CONTENTS

DECEMBER 2009 • VOL. 17, NO. 6

## FEATURES

- 4 CAW RIDGE:  
TWO CHEERS FOR ALBERTA'S  
FISH AND WILDLIFE DIVISION
- 7 INITIAL EFFECTS OF A PRESCRIBED  
BURN IN AN ECOLOGICALLY  
SIGNIFICANT AREA, NORTH  
SASKATCHEWAN RIVER, ALBERTA
- 10 IN PRAISE OF  
LAKELAND'S WILDERNESS
- 12 A CASE FOR PROTECTING  
THE RED DEER RIVER  
BADLANDS, ALBERTA'S  
PALAEOLOGICAL TREASURE
- 14 WILL ALBERTA'S BLACK WOLVES  
BENEFIT FROM CLIMATE CHANGE?
- 15 WOLVES, FISH, (POPE) AND  
"TROPIC CASCADES"

## ASSOCIATION NEWS

- 16 AWARDS PRESENTATION AND  
ANNUAL LECTURE

## COVER PHOTO

In this photo Wayne Lynch captured two monarchs of the boreal picking their way along a northern stream as winter approaches.

## FEATURED ARTIST

This month we feature and say farewell to Joane Cardinal-Schubert, a longstanding friend of AWA, who passed away this past September (see the In Memoriam tribute by AWA Board member Frank Calder later in this issue of *Wild Lands Advocate*). Joane attended the Alberta College of Art and Design, the University of Alberta and graduated from the University of Calgary with a Bachelor of Fine Arts in 1977. Her work graces many public and private collections. They include the National Gallery of Canada, the Glenbow Museum, the Canadian Museum of Civilization, and the collection of Her Majesty Queen Elizabeth II. A painter, printmaker, and installationist, *Galleries West* described her work this way in 2003: "Joane's paintings and installations are visual stories of personal experiences layered on a backdrop of social and historical events. She weaves bold Aboriginal motifs into colourful statements about subjects that touch her." The images of Joane's work here are supplied by Masters Gallery in Calgary.

AWA respects the privacy of members. Lists are not sold or traded in any manner. AWA is a federally registered charity and functions through member and donor support. Tax-deductible donations may be made to AWA at Box 6398 Station D, Calgary, AB T2P 2E1. Ph: (403) 283-2025 Fax: (403) 270-2743 E-mail: awa@shaw.ca www.AlbertaWilderness.ca

- 17 PROTECTING NATURE: SOWING  
SEEDS OF COOPERATION BETWEEN  
ALBERTA AND INNER MONGOLIA
- 19 A VISION FOR FOREST  
MANAGEMENT FOR THE FUTURE
- 21 HOW DOES THE AWA  
FUND ITS WORK?
- 22 TRIBUTES
- 22 IN MEMORIAM

## WILDERNESS WATCH

- 24 UPDATES

## DEPARTMENTS

- 27 READER'S CORNER
- 29 LETTERS TO THE EDITOR
- 30 RECALL OF THE WILD

## EVENTS

- 31 EVENTS

**Editor:**  
Ian Urquhart

**Graphic Design:**  
Ball Creative

**Printing:**  
Colour printing and process is sponsored  
by Topline Printing



**Mixed Sources**

Product group from well-managed  
forests, controlled sources and  
recycled wood or fiber

www.fsc.org Cert no. SW-COC-001922  
© 1996 Forest Stewardship Council



ALBERTA WILDERNESS  
ASSOCIATION

*"Defending Wild Alberta through  
Awareness and Action"*

Alberta Wilderness Association is a  
charitable non-government organization  
dedicated to the completion of a  
protected areas network and the  
conservation of wilderness throughout  
the province. To support our work  
with a tax-deductible donation, call  
(403) 283-2025 or contribute online  
at AlbertaWilderness.ca.

*Wild Lands Advocate* is published  
bi-monthly, 6 times a year, by Alberta  
Wilderness Association. The opinions  
expressed by the authors in this  
publication are not necessarily those  
of AWA. The editor reserves the right  
to edit, reject or withdraw articles and  
letters submitted.

**Please direct questions  
and comments to:**

(403) 283-2025 • awa.wla@shaw.ca

Subscriptions to the *WLA* are \$30 per  
year. To subscribe, call (403) 283-2025  
or see AlbertaWilderness.ca.



ALBERTA WILDERNESS ASSOCIATION

Box 6398, Station D,  
Calgary, Alberta T2P 2E1  
(403) 283-2025

Toll-free 1-866-313-0713

www.AlbertaWilderness.ca

awa.wla@shaw.ca





Wolf Way 31 by 11 in., mixed media  
© J. CARDINAL-SCHUBERT

## IS THERE A SANTA CLAUS?

---

I imagine I still remember when our second daughter asked me that question just about twenty years ago now. We had just finished reading the family's well-worn copy of *Twas the Night Before Christmas*, a mandatory bedtime story in the weeks leading up to Santa Claus' annual visit. I asked her why she asked and she told me that one of her playmates at daycare had told her the jolly old elf was a fiction. I lied to her. She was only four years old and I wanted her to continue to enjoy the innocence, wonder and optimism – the outlook that anything is possible – that went with her age.

Governments, inspired by far less admirable motives, too often treat us the same way I treated Kali that evening. They hide the truth; they do not want to answer our questions honestly; they want to keep information from the people who give them the authority and legitimacy to govern – you and me.

It took nearly a year, for example, for the provincial government to tell Albertans, perhaps more importantly the outside world that, 1,606 ducks, not 500, died when they landed on a Syncrude tailings pond in April 2008. Do you remember the firestorm of criticism that rained down on Syncrude and the Alberta government when we thought “just” 500 ducks had died? Surely then a healthy portion of the government's silence about the truth may have been inspired by concerns about what further damage the truth could cause: more public anger, more questions, more calls for action, more – shudder – public participation.

This issue of *WLA* offers several articles that revolve around the “right to know” The first is an article about Caw Ridge and the efforts of Fish and Wildlife officials to be effective advocates for the region's mountain goats and caribou. I could not have written a story that is both maddening and inspiring if AWA had not submitted a freedom of information request. With that request AWA was able to pierce some of the government's veil of silence and realize just how dedicated public servants in Fish and Wildlife were and are to maintaining the ecological integrity of Caw Ridge. We continue to hope that some day the government will hold the public hearing AWA repeatedly called for on the future of coal mining in the midst of this ecological treasure.

Kevin Timoney's report on a prescribed burn of questionable ecological value carried out by government earlier this year speaks to this same issue – the report he prepared for the government in 2007, one that questioned the value of a prescribed burn, never saw the light of day. Nigel Douglas' update on the government's response to a court ruling that had tremendous potential to open up more – shudder again – public participation in ERCB deliberations speaks to a related issue.

If these offerings are a tad worrisome for you we also offer much here that should warm or cheer your soul on a crisp December evening. AWA's annual awards night, a photo essay on a September backpacking trip to Lakeland, a report on AWA's cooperative efforts in China, the palaeontological value of the Red Deer River badlands, the contribution of wolves to biodiversity and the generous gifts AWA has received from friends all further this alternative purpose.

As 2009 draws to a close I want to thank AWA for the opportunity to serve as the editor of *WLA* for the past ten months and the writers, artists, designers and printers who make this journal a true gem. May I also wish one and all the very best for the upcoming year. Let us hope that 2010 truly will be a wild year for Alberta!

- Ian Urquhart, Editor



## CAW RIDGE: TWO CHEERS FOR ALBERTA'S FISH AND WILDLIFE DIVISION

By Ian Urquhart

In the 1993 comedy *Groundhog Day* Bill Murray plays a weatherman assigned to travel to Punxsutawney Pennsylvania to report when Punxsutawney Phil, the world's most famous weather-forecasting groundhog, predicts winter will end. Murray hates his assignment; he cannot wait to escape rural Pennsylvania. He is trapped, however, in a time loop that sentences him to live his same hellish day over and over again. But over time he learns that, like Scrooge in *A Christmas Carol*, he has the opportunity to change his life for the better. Change his behaviour and new, admirable possibilities will emerge.

What, you might ask, does this plot line have to do with Caw Ridge, that Grande Cache area home to "one of the most diverse assemblies of large mammals in Alberta." What does it have to do with Alberta's Fish and Wildlife Division?

The answer emerges from poring over hundreds of pages of documents AWA received through an August 2008 freedom of information request to the provincial government. The documents tell a story where year after year, decade after decade, public servants in Alberta's Fish and Wildlife Division defended the present and future health of the woodland caribou, mountain goat, and other large mammal populations who depend on the ecological integrity of Caw Ridge. At every turn, their efforts have been blunted and frustrated by the "development imperative" – expressed by the proposals, plans and policies that spring from the coal lease rights now held by Grande Cache Coal. Fish and Wildlife's convictions that the region's mountain goats and threatened caribou would suffer if coal exploration and development proceed in the vicinity of the ridge's alpine environment have taken a back seat to the company's rights time after time after time.

With respect to Caw Ridge, Fish and Wildlife personnel seem to me to be much like Bill Murray's character



Mountain goats have been studied officially on Caw Ridge since 1989. PHOTO: S. COTE

– sentenced to relive the same hellish experience over and over. Sadly though, there is nothing funny about their circumstances or that of the wildlife populations they try to steward. And, unlike Murray's character, the capacity to change their circumstances is not within their own power. Positive change depends on changing the perspectives, behaviour and/or power of other branches of the provincial government.

What follows is a chronicle of what the records received by AWA tell us about the struggle within the provincial government between the development imperative and a wildlife protection imperative. Unfortunately, the records are incomplete in important respects. The government used several categories of exemptions under the *Freedom of Information and Protection of Privacy Act* to justify excluding portions of the record from AWA.

Two themes are highlighted below. The first is the longstanding concern of the Fish and Wildlife Division over what resource exploitation in the vicinity of Caw Ridge means for a truly special

place's wildlife populations. The second is the controversy within the provincial government over Grande Cache Coal's plans to conduct exploration drilling to delimit the coal reserves associated with a potential mine expansion (the so-called No. 16 mine).

### A Decade Ago

AWA has called Caw Ridge Alberta's "Serengeti" due to the plentiful and diverse wildlife populations the ridge supports and nurtures. Coal, a fossil fuel we once praised for its contribution to our economic progress but now condemn for its contribution to climate change, rests abundantly underground beneath the trails that wildlife have carved on the ridge over the last millennium. The Caw Ridge story is modern-day Alberta; it presents a clash between the immediate imperative of resource exploitation and the longer-term desire to insure that wildlife and the intact landscapes they depend on are preserved for generations to come.

Our interpretation of the Caw Ridge story here begins in 1999. Then Smoky



River Coal Limited, a miner with mortal financial troubles, applied to the Energy and Utilities Board (EUB) to extend its open-pit coal mining operation – the No. 12 South Mine B2 Pit. Alberta Environment received an unspecified number of letters expressing concerns about what the mine extension would mean for the sustainability of the area’s wildlife populations. This application, when combined with other approved and proposed petroleum and forestry activities, posed a risk to the region’s caribou population. That risk, according to Alberta Environment, was “approaching a significant threshold.”

Such concerns did not impress the EUB. The Board refused three requests to hold a hearing on the application; it approved the application since it thought the extension “was logical from a coal resource conservation perspective.” The EUB did not believe any significant additional environmental effects would be generated by the proposal.

Paradoxically, however, the Board acknowledged concerns about mining Caw Ridge and decided it would be wise to hold a public inquiry into those concerns. Alberta Environment was duly invited to discuss its possible role in the inquiry with EUB staff and attend a meeting in January 2000. In a briefing note prepared on the eve of that meeting Alberta Environment was a voice for wildlife. The department stated that “its current position is that mining on Caw Ridge poses significant environmental concerns and these concerns relate to impacts on woodland caribou (an endangered species under the *Wildlife Act*), mountain goats, carnivores, bull trout, water quality and alpine reclamation.” The department’s analysis, recommendations, and key messages are censored from AWA and public view. The inquiry never saw the light of day.

### **Grande Cache Coal’s Mine Exploration Program: 2007**

But neither did Smoky River Coal. The company never emerged from creditor protection. By the end of July 2000 PricewaterhouseCoopers had sold most of the miner’s assets; this year saw the birth of Grande Cache Coal Corporation (GCC). The newborn company purchased the bankrupt company’s coal leases. The Grande Cache mine started the new millennium by closing only to be

resurrected by Grande Cache Coal in 2004. GCC generated its first annual profit in the 2009 fiscal year (of \$106.2 million) on the strength of record high coal prices after racking up losses of nearly \$75 million over its first five years.

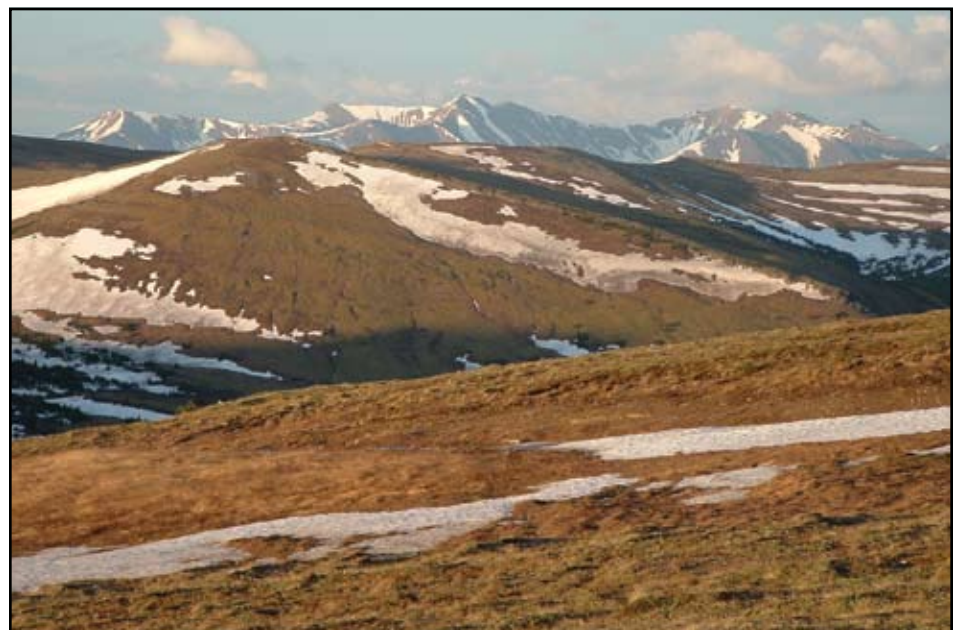
At the very end of May 2007 Grande Cache Coal gave notice; it wanted to drill a series of exploration holes immediately to the north of Caw Ridge between June and December. In September the Fish and Wildlife officials in Edson’s office of Sustainable Resource Development’s (SRD) told their colleagues in the Land Management Branch in Edmonton that they had to reject the company’s proposal. The exploration area was directly in the path of the Red Rock-Prairie Creek mountain woodland caribou herd – a herd variously described as “in decline” or “threatened.” According to Fish and Wildlife the exploration program should not proceed according to the company’s timetable. Its application would join others in being reviewed by the West Central Caribou Landscape Planning team “within the next couple of months.” A 2007 exploration program was out of the question.

Fish and Wildlife’s position, at the very least, frustrated officials in the Land Management Branch. I believe an objective reading of the record released to AWA must conclude that Land Management officials were far less

questioning of GCC’s plans than were their colleagues in Fish and Wildlife. A senior official in Land Management, for example, argued when the application to explore was before government in 2007: “I do not believe we can stop all exploration just because of the caribou migration route. There must be a caribou protection plan required and there should be some type of window of opportunity. If there is definitely a no go zone then F & W had better flag it. . . .”

For Fish and Wildlife the issue may have been less a concern to “stop all exploration” than it was to prevent all exploration that the company’s own research (mandated by its government approvals) suggested would put wildlife at unacceptable risk. Here, commenting about the proposed exploration program, a Fish and Wildlife official noted how radio-collared caribou had used Caw Ridge when mining operations had shut down. He went on to say about the company’s proposed 2007 plan: “this proposal runs right across the eastern face of the ridge and is proposed during the historical migration period of October to December. An obvious conflict that should be avoided and I’m surprised that CGCC included nothing in their application to address this.” (sic)

In 2007, the objections of Fish and Wildlife triumphed. The proposed exploration program did not proceed.



*Caw Ridge, one of three ungulate areas being studied by a multi-institutional team of researchers, is home to an impressive mountain goat population and is crucial to woodland caribou migrations. PHOTO: S. COTE*

### **GCC's Exploration Program: 2008**

This victory was just a reprieve; the next year's developments treated the region's wildlife populations very poorly. In mid-January SRD's Land Management Branch approved Grande Cache's exploration plans.

This approval was a slap in the face to Fish and Wildlife's concerns and recommendations. Three months earlier the Edson office offered a pointed critique of GCC's ambitions. "We are extremely concerned with the proposal," Fish and Wildlife said, "particularly regarding the potential for mining activity to follow the exploration program. GCCL's protection plan aptly outlines the reasons for our concerns..." The exploration program was "directly perpendicular to the migration routes" well-known to the company; these migration routes had been used by up to 70 percent of the Red Rock-Prairie Creek herd in its spring and fall migrations; caribou "all but abandoned these routes" when mining moved closer to Caw Pass; abandoning these migratory routes has coincided with the numerical decline of the herd; and, caribou used Caw Ridge extensively when miners were not blasting away in the B2 pit.

Mining, according to the data, obviously threatened caribou that were so bold, or just accustomed, to tread in areas where coal could be mined. Fish and Wildlife believed, based on the evidence they had, "that mining can have a dramatic effect on migration and, in combination with other industrial activities; it corresponds to the decline in woodland caribou (sic)." Pending recommendations from the West Central Alberta Caribou Landscape Planning Team (WCCLPT) Fish and Wildlife felt it was "premature to approve of an exploration program of this magnitude and significance prior to the review of the WCCLPT's report which will deal with future needs for woodland caribou in this part of the province."

This view grated on Land Management Branch officials. Most viscerally perhaps it appears when one official noted in an email sent mainly to Fish and Wildlife officials that, when challenging the F&W view noted above, the GCC program was for "EXPLORATION AND NOT DEVELOPMENT (emphasis in original)."

In the spring and summer of 2008 the wildlife protection imperative assumed its customary position – defensive first, defeated second. Fish and Wildlife had the nerve to wonder in a July 17th email, in the absence of any previous correspondence they could identify, what impact their October 2007 caribou concerns had on the January SRD approval.

The short answer was "nothing." In the early afternoon of July 18th a Fish and Wildlife official wrote to his colleagues: "I have grave concerns if we are still encouraging exploration and developments of major mines in light of the RedRock/Prairie Creek declines, but accept that this may be a decision beyond me."

This was an immediate response and call for advice, within an hour, to a fundamental critique of the Fish and Wildlife division. The original critique came from the most senior official in the Land Management Branch. Responding to the Fish and Wildlife question regarding what impact their concerns about caribou had on the January approval of the exploration program the Branch's Executive Director wrote: "Decisions on applications are made based in existing policies (sic) and guidelines. Current policy does allow for energy exploration and development in caribou range. The input that the program not be approved pending submission and eventual implementation of the WCCLPT recommendations in essence places a moratorium on activity. (Text omitted according to FOIPP exemptions). We need to render decisions on applications within scope of current policy and guidelines, not what might be the policy or guidelines in the future."

The province's land managers essentially viewed Fish and Wildlife as obstructionist. Wildlife officials were told to do more than present "just blatant No Go road blocks, to the Land Manager so a decision can be made on how exploration activities may go ahead in a fashion that would minimize the footprint and affect (sic) on wildlife resources." They should face up to the fact that Caw Ridge "is designated (sic) for coal exploration and development under the Coal Policy and the department has not put any restrictions...that would affect the issuance of coal rights, exploration and/or development activities."

On July 18, 2008 Fish and Wildlife officials dutifully recommended how GCC's exploration could go ahead in a way that would minimize the "affect (sic) on wildlife resources." Grande Cache had proposed three alternative exploration trails to use during their exploration program. The company preferred an 8.4 kilometre route that would take their trucks and equipment through their lease area and onto Caw Ridge itself and would go through and around the mountain goat research area. Caw Ridge has been the site of a long-term multi-university/ Alberta Fish and Wildlife research project currently led by Dr. Steeve Côté of the Université Laval (Kirby Smith of Alberta Fish and Wildlife, along with Dr. Marco Festa-Bianchet, should be credited with sowing the seed for this project in 1988). For GCC "the Caw Ridge access is clearly the best choice from the perspective of minimizing disturbance footprint."

From the Fish and Wildlife perspective, as outlined in the July 18th letter to the Land Management Branch, the Caw Ridge route was the least desirable one to follow. "Due to the sensitive ecology of high alpine areas associated with Caw Ridge," the letter read, "and the large number of Mountain Goats residing on the ridge, it is important to ensure that no highway vehicle access is supported on the ridge." Because of the effects noise would have on the goats it was "critical" to keep traffic off the ridge. The letter identified the "New Creek Crossing Option," a route Grande Cache Coal did not favour at all, as the one that would affect wildlife the least.

How was Fish and Wildlife's effort to identify recommendations that would minimize the affect on wildlife resources rewarded? The Land Management Branch approved the Caw Ridge route, the route that Fish and Wildlife unequivocally argued would have the most damaging consequences for the ridge's wildlife. Efforts from Fish and Wildlife to have this decision reconsidered went nowhere. Clearly, the Land Management Branch foretold, quite accurately, what a final decision would look like when an official earlier remarked: "A land use decision must then be made in light of all concerns not just those of F&W." In this case, however, it would have been more accurate to add that all concerns are not created equal when it comes to balancing

the development imperative with the wildlife protection imperative in Alberta. Concerns related to Grande Cache's exploration plans would trump and fail to accommodate meaningfully Fish and Wildlife's concerns.

### Conclusion

So Grande Cache Coal and the Land Management Branch got their way in the end. The company's exploration program went ahead in the summer of 2008. We also should note that it did so without having to respect the longstanding industrial activity deadline of August 22nd set by SRD for identified sheep and goat range areas. This deadline was "standard operating practice for industrial activity" designed to protect female goats and sheep. Perhaps the final indignity our voice for wildlife suffered occurred when yet another crucial Fish

and Wildlife recommendation designed to minimize the impact on wildlife was ignored. Access development needed to avoid disturbing the woodland caribou migration so "such activities must be completed prior to October 15th." Exploration activities took place well beyond that deadline.

And what about the goats? How did they react to the exploration program? Not well. The exploration program altered goat behaviour. In mid-August they had stopped foraging in areas adjacent to where there had been traffic. This additional stressor was especially concerning because the ridge's goat population already was stressed by extreme heat.

As we get ready to bid farewell to 2009 and welcome 2010 here's hoping Sustainable Resource Development Minister Morton will use the following

thoughts from a Fish and Wildlife official as the basis for a New Year's resolution he will follow:

"Fish and Wildlife Division has since the 1990's repeatedly recommended that no coal exploration or development be approved for Caw Ridge. For this latest exploration application we recommended that it not be approved. We were over ruled. We recommended that the ridge top access option proposed by GCC not be approved because the disturbance of goats and caribou and their habitat was too high. We were over ruled.

"The whole development, not just the exploration phase, must be reassessed in light of the public's appreciation and concern for this unique part of Alberta's wildlife resource."

Amen to that. 🐾



## INITIAL EFFECTS OF A PRESCRIBED BURN IN AN ECOLOGICALLY SIGNIFICANT AREA, NORTH SASKATCHEWAN RIVER, ALBERTA

By Dr. Kevin Timoney, *Treeline Ecological Research*

### Introduction

A prescribed burn by Alberta Sustainable Resources Development and Parks Canada was conducted in June 2009 within an area lying on the north flank of the upper North Saskatchewan River valley. A firebreak was burned along the crest of Whirlpool Point Ridge in summer 2007. The putative objective of the burn was to emulate "historic fire regimes and...[to reduce] potential habitat for Mountain Pine Beetle." A June 7th Alberta government press release stated:

*"Fire has been applied to the landscape in order to provide a variety of wildlife habitat, rejuvenate older forest, and reduce the risk of large-scale wildfire and potential influx of insect and disease... The total burn area completed is 4800 hectares. This includes approximately 4000 hectares of Provincial Land (SRD) and 880 hectares of Federal Land (Parks Canada). The province is satisfied [sic] with the area completed in Provincial Land and focus will now shift to securing and monitoring."*

In 2007, I wrote a study of the rare vascular plant, lichen, and bryophyte species and plant communities within this area in order to inform management of ecological and conservation issues related to the proposed burn and to establish sample plots in which to follow the effects of the burn. Based on a study of 37 plots, I documented 16 rare plant communities and 33 rare species, of which 20 were lichens, five were vascular plants, and eight were bryophytes. Some of the species were globally rare (*Glypholecia scabra*) or new to Alberta (*Gypsoplaca macrophylla*). The study identified management concerns related to the prescribed burn; they included protection of rare vegetation and species, old-growth forests, Clark's nutcracker habitat, riparian corridors, critical wildlife habitat, sensitive soils, Canadian heritage and dendroclimatically-important wood, and native cultural and religious sites. I cautioned that conducting the prescribed burn might result in the loss or degradation of special features whose



Figure 1: *The prescribed fire jumped its fireguard and burned eastward into the Kootenay Plains Ecological Reserve and the area north of the reserve.*

PHOTO: K. TIMONEY

response to fire was, for the most part, unknown. Given the declining status of, and threats to, limber pine and whitebark pine and the communities they comprise, I recommended excluding prescribed fire from these stands.

The study found exotic white pine blister rust (*Cronartium ribicola*) in only one plot and noted that infection





Figure 2: Panorama of destroyed saxicolous lichen community on east-facing cliff; upslope of a young lodgepole pine stand and about 150 m east of plot PSP11. PHOTO: K. TIMONEY

rates in the area appeared to be lower than observed elsewhere in Alberta. I speculated that the low infection rates may have been due in part to the rarity of the alternate host of the rust, *Ribes* (currants and gooseberries). *Ribes* was also found in only one plot, one that had recently burned. I cautioned that a prescribed burn could act to favour the spread of *Ribes* and therefore increase the infection rates of limber and whitebark pines.

I felt the special status of the area merited independent scientific review and public consultation regarding the management plans in advance of the prescribed burn. The study found that the available scientific data did not justify the prescribed burn on the grounds of landscape-age structure, nor was there evidence to indicate that the area's landscape stand-age distribution was unnatural or in need of "restoration".

In 2007 it was recommended to public land managers that the project be postponed until all concerned parties were satisfied that a prescribed burn would not result in unacceptable impacts. To my knowledge, neither an independent scientific review nor a public consultation took place. Instead, the report was suppressed and the prescribed burn was conducted. Given the conservation concerns raised before the burn and government plans to expand the burned area in the near future, it became incumbent to conduct independent monitoring of the effects of the prescribed burn. What follows is a summary of the initial field observations I made three months after the prescribed burn ignition. The study area is bounded in the south by Highway 11, in the north by the approximate elevational limit of trees, in the west by Saskatchewan River Crossing, and in the east by Whirlpool Point Ridge.

### Methods

Field observations were made on foot by a party of two people during 5-7 September 2009. Twenty plots were visited. Most of the plots not visited were distant ones at high elevations and/or were not burned and therefore not deemed a high priority for the initial assessment. At each plot, we observed the intensity of the fire and its spatial distribution, degree of dieback, initial plant responses, effects on soil and substrate, and signs of human activity. Additional observations were made between plots as we traversed the landscape. Our records included photographs and notes.

### Observations

The fire jumped the firebreak on Whirlpool Point Ridge and burned eastward beyond the planned fire boundary (Figure 1).

Rock lichen communities, while containing little fuel, appeared susceptible to destruction from fire. Susceptibility may have been related to advection and convection of intense heat from adjoining areas during the fire (Figure 2). The number of rare species and communities

lost is unknown as are the rate of post-fire establishment and the composition of the saxicolous lichen communities that might establish in the future.

Many healthy, rare and endangered limber pine communities were lost as a result of the burn; this is a significant negative outcome. Open limber pine communities were susceptible to stand-replacing fire (Figure 3). Many limber pine died without crowning; scorching of the first metre or so of trunk was sufficient to kill them. The abundant bearberry (*Arctostaphylos uva-ursi*) and juniper (*Juniperis communis*, *J. horizontalis*) appeared to carry fire well through open woodlands and savannahs.

Human agency may have increased the intensity of the burn in some areas. Government data on locations and density of airborne and/or ground level ignitions, fire behaviour, fire indices, and spatial extent are not available to me at this time. Hot spots continued to smolder in September.

One of the putative justifications for the burn was control of mountain pine beetle (*Dendroctonus ponderosae*), a native insect and an important disturbance agent that serves to create



Figure 3: This savannah suffered nearly-complete mortality of limber pines through scorching of stems; needles were not burned. PHOTO: K. TIMONEY





Figure 4: *Spread of Ribes cf. oxyacanthoides* was noted in the area of the 2007 firebreak on Whirlpool Point Ridge, about 65 m south of plot V03. PHOTO: K. TIMONEY



Figure 5: A riparian old-growth white spruce - lodgepole pine / hairy wild rye forest that had survived low intensity natural fires in the past succumbed to the prescribed burn. PHOTO: K. TIMONEY

a diverse landscape mosaic. This justification is dubious. As of the date of the fire, there had been no natural “hits” of mountain pine beetle in the study area. Secondly, the beetle can disperse over great distances given favourable winds. The prescribed burn will do little to inhibit dispersal of mountain pine beetle whose spread is linked to climate change. Populations of the beetle in adjacent British Columbia are expected to peak around 2010 or 2011.

More occurrences of *Ribes* were noted after the burn than before the burn (Figure 4). My impression was that the increase in their occurrences was more pronounced in the area of the 2007 firebreak (2+ years post-burn) than it was in areas three months post-burn. Since *Ribes* is the intermediate host of white pine blister rust, the increased abundance of this genus may further threaten the existence of limber pine and whitebark pine. The prescribed burn may contribute to disease-driven decline of limber and whitebark pine and the communities that they comprise. Their decline may have implications for populations of Clark’s nutcracker.

As noted above, we observed a loss of rare species from the area. The most common examples noted were those of limber pine and the fern *Pellaea glabella*. We do not know to what extent species lost in the burn will re-establish. In-depth study will be needed to document changes in species composition, especially among lichens and bryophytes.

Many old-growth and riparian forests were lost. In some areas, fires were stand-replacing (Figure 5); in other areas, canopy replacement was partial.

Soil and site degradation were common in the form of soil loss, loss



Figure 6: Erosion of the silty soils from uplands and deposition downslope was pronounced in this area that experienced high fire intensity. PHOTO: K. TIMONEY



Figure 7: Visual blight: an area marked with pest management flagging in spite of the fact that no natural “hits” of mountain pine beetle yet exist in the study area. PHOTO: K. TIMONEY

of biological legacy, combustion of soil organics down to mineral soil, and scorching of bedrock. The amount of soil erosion appeared to be related to the intensity of the burn and the slope angle (Figure 6). Slopes of about 20 degrees or greater appeared to be at increased risk of losing soil from water erosion or wind deflation.

Weeds were noted (e.g., *Nepeta*, *Vicia cracca*) where they had not been documented before the burn. Whether these and other exotic species will spread and persist will require continued monitoring.

Visual blight and related issues were noted. Three months after the burn there



Figure 8: A native religious site along the Landslide Lake trail suffered damage from fire retardant and burning. PHOTO: K. TIMONEY

was garbage and flagging that had not been removed (Figure 7). Conversely, burned labeling and flagging intended to mark the permanent sample plots had not been replaced. Fire retardant was dumped onto religiously-significant aspen trees, staining the trunks red; some of these significant trees were killed in the fire (Figure 8). The effects of fire retardant on native vegetation, especially upon saxicolous communities, are poorly understood and require study. Fire retardant should not have been applied to the study area.

Some of the oldest limber pine trees known (centuries-old) are found along and near Whirlpool Point Ridge. These internationally-significant trees, snags,



Figure 9: *Loss of a scientifically important ancient limber pine on Whirlpool Point ridge, cut down when alive in 2007 (left panel) and later burned in 2009 (right panel).* PHOTO: K. TIMONEY

and logs have been used to reconstruct the climate of western Canada over the past 1,000 years. Case and MacDonald used one such limber pine chronology to reconstruct stream flow for the period AD 883 to 1996 in a 2003 article in the *Journal of the American Water Resources Association*. Some limber pines were killed in the 2007 firebreak burn. My report alerted the government to one heritage tree in particular that was cut down with a chain saw without clear justification; its removal was not material to the function of the firebreak. The report recommended that the scientific value of that tree be salvaged by a dendrochronologist. Instead, the tree was destroyed in the 2009 burn (Figure 9).

### Discussion and Conclusions

One of the troubling aspects of the management of this prescribed burn was and remains the suppression of the Timoney (2007) report. Had government behaved openly, it could have avoided some or all of the detrimental effects

of the June 2009 burn. Instead, it forged ahead with its plans based on misinterpretation of the area's fire history and on unpublished reports that lacked scientific rigour.

Fire is a powerful management tool when used wisely and a destructive agent when used unwisely. Wherever government interferes with natural processes, the onus is on the managing agency to prove that such interference is justified. In the North Saskatchewan study area, no such justification was provided. There was nothing ecologically amiss, nothing lost needing to be restored. On the contrary, the area's ecological characteristics made it nationally significant. Now, more than half the area has been burned and towards what end? The old forests did not need "rejuvenation", they were healthy and diverse. Habitat and age-class diversity were high. Will the burn reduce the risk of "large-scale wildfire and potential influx of insect and disease"? That is unlikely. Given appropriate weather conditions, severe wildfires will occur

and migration of mountain pine beetle will occur over any dispersal breaks the government attempts to create. Furthermore, initial observations indicate that the risk of spread of white pine blister rust may have been exacerbated, not reduced, by the burn.

The following negative impacts were noted three months after the burn: loss of rare plant communities, saxicolous lichen communities, and rare species; loss of old-growth and riparian forests; soil and site degradation; weed influx; probable increase in the host of blister rust; human-caused visual blight; and loss of scientifically-important heritage wood and religiously-significant trees.

Study of the effects of the burn will continue. Those wishing to contribute observations are welcome to contact me. A copy of my 2007 report, "A Study of Rare Plants and Rare Plant Communities, with Observations and Recommendations Regarding a Prescribed Burn, in the North Saskatchewan Unit", might be obtainable via a freedom of information request to Alberta SRD. 🐾



## IN PRAISE OF LAKELAND'S WILDERNESS

*By Carolyn Campbell, AWA Conservation Specialist*

**A**WA's September 2009 backpack into the central part of the Lakeland Provincial Recreation Area offered a rare chance to explore this magnificent remote area east of Lac La Biche. Along our trail we experienced the abundance of wildlife to be found in Lakeland's beautiful old growth forests

and around its many lakes. We spotted several black bear tracks and much evidence of beaver populations at work. A bull moose watched us warily while a cow moose hurried her two calves away. A couple of barred owls marked their territory with "Who cooks for you?" calls across a lake one evening.

We will host a slide show in

Edmonton on the beauty of Lakeland in spring 2010, and in summer 2010 we will return for another AWA trip. We invite you to join us for those events to learn more about Lakeland, our boreal jewel. AWA continues to work for an expanded protected area and strong management plan to preserve the exceptional wilderness values of this region. 🐾





A boardwalk leads hikers right through the wetlands on the south edge of Black Duck Lake, one of many beautiful lakes in Lakeland Provincial Park. PHOTO: C. CAMPBELL



Lakeland Provincial Park and Provincial Recreation Area Used under the terms of the Geogratis Licence Agreement. © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.



Some of Alberta's most impressive stands of old growth white spruce are found in the forests of the central Lakeland Provincial Recreation Area. PHOTO: L. HULLEY



Paths to the edge of Dabbs Lake near an abandoned trapper's cabin are now used regularly only by moose and beaver. PHOTO: A. PAUL



Pileated woodpeckers have foraged for larvae and ants in this majestic old spruce. Roughly rectangular holes drilled near the base of a spruce such as this one are a sure sign of their foraging efforts. PHOTO: C. CAMPBELL



Lakeland's aspen forests are summer nesting grounds for many songbird species. Lakeland is recognized, through the International Bird Area program, as one such area. Lakeland is one of nearly 600 Canadian sites "that provide essential habitat for bird populations." PHOTO: C. CAMPBELL



## A CASE FOR PROTECTING THE RED DEER RIVER BADLANDS, ALBERTA'S PALAEOLOGICAL TREASURE

By Tjarda Barratt

The Red Deer River Badlands, most often associated with the Drumheller area and Dinosaur Provincial Park, are world renowned for their palaeontological significance. They offer an invaluable record of the last 15 million years of the Cretaceous Period. Dinosaurs who had roamed the earth for 170 million years became extinct at the end of the Cretaceous Period. The scientific research conducted in the Red Deer River badlands, whether it is geology, botany, ornithology, entomology or archaeology, has been the subject of many a doctoral thesis. But the research and discoveries made through palaeontology stand out above all. Besides their scientific importance, the badlands offer superb scenery and support a wide diversity of flora and fauna, especially along the Red Deer River.

The stretch of the Red Deer River corridor from south of Content Bridge (near Nevis) to Dinosaur Provincial Park is indicated on AWA's Alberta Wilderness map as "wild spaces" and an area of concern. So we need to look where further protection is needed; our efforts should address not only the badlands' fragile environment but also their important palaeontological resources.

"Palaeontology is essential for understanding so much of what happens in the modern world, including its environments, ecosystems, climates, floras and faunas, and so on," says Dr. Philip Currie. "Specific subjects, like evolution and extinction, would be hard to conceive if we did not have a palaeontological record. Basically, palaeontology is as important to scientific understanding as history is for understanding current events." Dr. Philip Currie is a world-renowned expert on dinosaurs. He is a professor of biological sciences at the University of Alberta and a research associate of the Royal Tyrrell Museum. Many of Dr. Currie's major discoveries and study of vertebrae dinosaurs have been in the Red Deer River badlands.

Evolutionary history plays a critical role in conservation and palaeontology tells us much about evolutionary history. Its value today in conservation is undeniable, whether it is saving endangered species, tackling global warming, reinstating grasslands or a host of remedial projects we are faced with. Palaeontologist Dr. Donald Prothero of California's Occidental College gave a fascinating lecture on "Evolution, what the fossils say and why it matters" at the Royal Tyrrell Museum in March 2009 as part of the Museum's Saturday Talks program. He explained how the fossil record clearly shows the evolutionary progression from early life to modern man through many transitional forms (fully explained in his book of the same title). I asked him if the study of evolution through fossil analysis might help us with our environmental issues. Dr. Prothero replied that cyclical changes in the earth's temperature are clearly recorded in the fossil record and from this the cause and effect of global warming can be better understood.

Eighty to sixty-five million years ago the Alberta badlands that we see today was a low lying flood plain across which rivers and streams flowed towards a shallow sub-tropical sea. They deposited large quantities of sediments in the region's lush swamps, deltas and estuaries. At least 50 species of dinosaurs and hundreds of species of other animals (including fish, amphibians, turtles, crocodiles, lizards, mammals and birds) flourished in the lush forests and marshes of this warm temperate climate. When these animals died their remains were covered by sediments over millions of years. Their skeletons were fossilized due to pressure, heat and chemical reaction from mineral rich groundwater.

The Red Deer River badlands began to form at the end of the last ice age 10,000 to 12,000 years ago with the melting of the ice sheets that covered most of Canada. Remnant glaciers

dammed large volumes of melt water. When warming periods caused breaches in their ice walls, enormous volumes of water were released. The rushing melt waters flowed south and eastwards carving out the Red Deer River valley of today. They cut easily through the sedimentary layers deposited 80 to 65 million years ago and exposed the dinosaur fossil-containing rocks from the last few million years of the Cretaceous period. The fascinating landforms of the badlands today are the result of extremely rapid erosion, no longer by water from melting glaciers, but instead from centuries of rain and wind action. The sedimentary layers are laid down in "formal succession" and have not been disturbed by folding and faulting. Younger rocks overlie older rocks and the deeper you go the older the fossils.

At the *Albertosaurus* bone bed in Dry Island Buffalo Jump Provincial Park the fossilized bones of 23 dinosaurs - adults, juveniles and babies - have been recovered to date. All were found at the same level and at the same stage of deterioration when they were buried. Because normally only one in twenty dinosaurs found in the region is an *Albertosaurus*, domination by this animal in a single quarry is powerful evidence that these animals lived together as a pack at the time of their deaths. Will this site and many other sites along the Red Deer River throw light on how the dinosaurs and 65 percent of all known species died in a mass extinction 65 million years ago? Dr. Currie, who has excavated and studied this site over eleven years, remarked: "Dinosaurs died out because of a catastrophic event that happened when their biodiversity was down. We have caused reduction in biodiversity in our world, so it would probably be a good idea for us to find out whether a similar catastrophic event could catch us off guard."

If palaeontology can help us to better preserve our biodiversity, then our rich fossil resources and the story





*Palaeontologists at work at Albertosaurus Quarry.* PHOTO: T. BARRATT



*Albertosaurus fossil, Red Deer River Badlands.* PHOTO: T. BARRATT



*Red Deer River and the Badlands that take its name.* PHOTO: T. BARRATT

they tell, must be protected. On the question of what he sees as today's threats, Dr. Currie states: "The threats to our palaeontological resources are much the same as other natural resources. Industrialization, road construction, pipelines, expansion of cities into badlands areas, dams, mining activities, vandals and poachers are all threats but with a few additional problems in that stabilization and reclamation of slopes, hydroseeding, landfill (garbage dumps) and other similar projects also destroy or bury fossil resources".

Thanks to the establishment of provincial parks, publicly funded research and corporate sponsorships, scientists from Alberta and around the world have made major discoveries in the Red Deer River badlands. Some of the fragile badlands along the Red Deer River are protected by three provincial parks: Dinosaur Provincial Park, near Brooks, the small Midland Provincial Park adjoining Tyrrell Museum, and Dry Island Buffalo Jump Provincial Park east of Huxley/Elnora. Each park is significant and unique scientifically due to its geology and the age of the fossil deposits.

Dinosaur Provincial Park (73 sq. km) was established for the purpose of protecting its extremely rich fossil resources and magnificent topography. The park received UNESCO World Heritage status in 1979. The smaller Dry Island Buffalo Jump Provincial Park (35 sq. km) was established to protect its scenic beauty, diverse fauna

and flora and native history (the buffalo jump from which it takes its name). The important *Albertosaurus* bone bed and other significant fossil sites at Dry Island Buffalo Jump were discovered and explored only after it became a provincial park. On the one hand this demonstrates that park status enhances the pursuit of palaeontology. However, there have been cases of vandalism at the bone bed because park officials cannot patrol it regularly. In spite of this, Dr. Currie feels that there are more advantages for the site to be in a public park than there would be if the bone bed rested on private land.

Alberta should increase the protection offered to significant palaeontological areas. The Alberta Land-Use Framework talked about developing our system of Provincial Parks. This could well be of benefit to the presently unprotected badlands region with significant palaeontological deposits in several areas of Alberta. In the meantime at least some partial protection should include stricter enforcement of the existing heavy fines for illegal fossil removal and facilitate easier access to lands of palaeontological interest. Stewardship of these fragile areas must be further encouraged. It is worth noting that, under the province's Historical Resources Act, there is provision for palaeontological resources not to be endangered by industrial and other activity.

In most cases, palaeontological deposits have been found on our wild lands. When descending into the river valley through the badlands, navigating

hoodoos and pinnacles, walking over undisturbed native grass on the terraces and taking in the fauna and flora, a sense of wilderness is profound. The AWA walkers in Dry Island Buffalo Jump Park last year can attest to this. As a local outfitter near Tolman Bridge remarked: "Every visitor thinks that he or she is the first human ever to set foot in the valley".

This is the wilderness that palaeontologists, not just from Alberta but from all over the world, come back to over and over again. They encourage Albertans to continue to strive to improve the protection of these fragile lands. To this end the last word, appropriately enough, goes to Dr. Currie: "I think it is worthwhile for us to do what we can to protect Alberta's palaeontological resources because they are some of the most important ones in the world with enormous potential to bring in visiting scientists, tourists and so many other sectors of society with an interest in natural history. The long-term spin-off benefits of world interest in what goes on in Alberta should be obvious to most people. Considering how important our palaeontological resources are internationally, it is rather sad that the protected areas are few and far between. Consider for example that our largest area for protecting dinosaur fossils is Dinosaur Provincial Park, which is 73 square kilometres in area. This is tiny compared to Dinosaur National Monument in the USA with 853 square kilometres." We can and should do better. 🐾



## WILL ALBERTA'S BLACK WOLVES BENEFIT FROM CLIMATE CHANGE?

By Dr. Dick Dekker, Ph.D.

*A team of 15 geneticists and biologists has recently written that the black fur of wolves is "a gift from the dogs" and that it gives them a camouflage advantage over their grey cousins as the tree line advances onto the tundra zone due to climate change.*

Based on the analysis of mitochondrial DNA, the black fur in western wolves is said to have been caused by a mutation that was lost to the species in ancient times but was subsequently re-acquired after wolves hybridized with domestic dogs. And this was most likely to have happened, the scientists speculated, about 15,000 years ago after some wolves crossed over from Asia into Alaska via the land bridge that developed between the two continents during the Pleistocene ice age.

Be that as it may, in my opinion, the scientists exaggerated the significance of their finding by claiming that black wolves have an evolutionary edge over their grey cousins that makes them better adapted to climate change and the expected northward expansion of the boreal forest. Black fur, the scientists thought, is an asset to a forest-dwelling predator.

This premise is fanciful because the effects of global warming may vary in different landscapes. As predicted by climatologists, rising annual temperatures could lead to the demise of Alberta's forests and create more open and snow-free ground. There, the so-called camouflage advantage for a black animal would be lost and in fact become a disadvantage. Furthermore, in my 40 years of field observations in Jasper National Park, black wolves are at all times more visible than grey ones, even among the trees.

The taxonomic origin of wolves is complicated and was vigorously debated at the Second North American Symposium on Wolves held at the University of Alberta in August of 1992. Based on the fossil record, Professor



*Black fur in wolves is unknown in Eurasia and very rare in eastern North America, but common from Alaska down to Yellowstone. At about 70 percent of the local population, the black variant is most numerous in Jasper National Park, which makes the common name Gray Wolf actually a misnomer. This impressive pair was photographed on the eastern boundary of Jasper. With advancing age, black wolves may turn silvery grey or even white. PHOTO: B. GENEUREUX*

Ronald Nowak argued that the forbearer of all wolves is the Red Wolf of the American southeast. Long ago, the ancestors of these New World wolves crossed over into Asia and Europe. There, they grew to the large size of the present-day Gray Wolf and much later returned to North America, where some acquired a black coat. In western wolves, from Alaska down to Yellowstone, the black percentage varies from 30 to 50 percent. It is highest in Jasper National Park. Of the circa 800 wolves I have seen there, just over 70% were black.

Melanism is caused by excessive production of black pigment in fur or skin, but it is not confined to the Gray Wolf. It also occurs in the Red Fox, where it can have nothing to do with hybridization with dogs because foxes and dogs have different chromosome numbers, which prevents interbreeding. Melanism is also evident in the Grey

Squirrel. After this eastern tree-hugger was introduced near Vancouver, spotting a black squirrel has become common for visitors to Stanley Park.

Black fur has even been reported in the Richardson's Ground Squirrel or gopher. Colonies of black gophers have been seen in fields near Tofield and west of Edmonton, as well as in the Yukon and Jasper National Park.

The discovery that western wolves acquired their black gene through contact with domesticated dogs is interesting, but why present it in the context of climate change? Or has climate change become the buzzword in wildlife research?

*Dick Dekker, a naturalist born in Holland, came to Canada in 1959 to find wilderness. He has written ten books as well as numerous articles and research papers. Since 1960 he has been an outspoken defender of wolves and habitat conservation. 🐾*





## WOLVES, FISH, (POPES) AND “TROPHIC CASCADES”

By Nigel Douglas, AWA Conservation Specialist

Did you know that healthy wolf numbers can help to encourage bull-trout populations? Or that they can even have a beneficial effect on soil productivity? It is well known that wolves have a significant effect on the environment around them: on populations of prey species or on other carnivores, for example. But just how profound and incredibly varied that effect can be is only just beginning to be understood.

It has been known for some time that wolves can have a beneficial effect on other wildlife populations. In Banff National Park, studies have found (Hebblewhite and Nietvel, for example) that in areas where wolves have reduced the density of elk, rejuvenating willow scrub becomes host for a range of songbirds, such as American redstart. In contrast, near the town of Banff, where elk have learned to take refuge from predators, willow is heavily grazed. Diversity of songbirds here is much lower and species such as the redstart are absent.

Biologists refer to this process as a “trophic cascade.” It occurs when predators in a food web suppress the abundance of their prey, thereby releasing the next lower level of the food chain from predation.

More recently, an October 25 article in the *Missoulian* (“Tracking science: Biologist’s findings show forest diversity, health influenced by wolves,”) detailed some surprising findings coming out of studies of wolves in Glacier National Park. Cristine Eisenberg of Oregon State University has been studying the diverse impacts of wolves for a number of years and her studies in Glacier National Park have been finding more and more direct and indirect effects of wolf populations.

Looking closely at aspen growth in some areas of the park, there are small young trees and there are tall old trees, but nothing in between. Wolves were resident in the region up until the 1920s, when they were hunted into extinction. Then in the 1980s, after a sixty-year



*Urban Dance Between Crocus and Sky, 23 by 30 in., mixed media.*

© J. CARDINAL-SCHUBERT

absence, wolves began to return, finding their way south from Canada. For the 60 or so years in between, elk were allowed to graze on the aspen growth unmolested, and so very few new trees ever made it to maturity. Eisenberg, according to the *Missoulian*, said: “Being hammered over and over by an elk really stresses a tree. Pruning is healthy, but this is like pruning your roses way back every week or two. The trees become shrubs, essentially, little bonsai aspens.”

Interestingly, there are still plenty of elk in the area – as many as 14 elk per square kilometre. The effect of wolves is less on elk numbers, more on elk behaviour. As Eisenberg puts it, “For 60 years we’ve become used to complacent elk. These elk aren’t complacent. They’re on high alert.” Whereas in the absence of wolves, elk can lead the easy life, hanging around in one place and munching at their leisure, when there are wolves on the landscape, the elk learn to

### Other recorded effects of wolf populations include:

- Beavers are reestablishing in northern parts of Yellowstone, from which they had disappeared. In the absence of wolves, elk browsing had removed the age-range of trees that beavers needed for dam building.
- Coyote numbers in Yellowstone have halved since return of wolves.
- Sightings of red foxes in Yellowstone are higher in areas with wolves. In the same way that larger wolves out-compete coyotes, the coyotes themselves out-compete the smaller red foxes

From: Sharon Levy, “A Top Dog Takes Over,” *National Wildlife*, September 2004

be much more elusive. They nibble on a tree here or there and then move on.

Just like in Banff, where heavily elk-grazed willow scrub means less songbirds, so in Glacier National Park, aspen groves where wolves are present support four or five times as many songbird species as groves in places where wolves are absent. But the effects do not stop there. As “complacent” elk and deer munch comfortably on river-side

willows, so the shady spots beloved by bull trout disappear. Insects feeding on the overhanging vegetation, which fall into the water to become fish food, begin to disappear too.

Removing wolves from the landscape also allows coyotes to flourish (wolves are much larger than coyotes and will kill them and take over their territories). One of the favourite foods of coyotes is ground squirrels, which play a major role

in aerating soils and mixing leaf litter. So as wolves return, coyotes become scarcer and ground squirrels return to their soil restoration work.

Alexander Pope, the eighteenth century satirical poet, wrote “From Nature’s chain whatever link you strike, Tenth or ten thousandth, breaks the chain alike.” Pope had presumably never heard of “trophic cascades” but he understood the concept. 🐾

## AWARDS PRESENTATION AND ANNUAL LECTURE

**A**lberta Wilderness Association was extremely pleased to present the 2009 Alberta Wilderness Defenders Awards to Judy Huntley, James Tweedie and Richard Secord on Friday November 20th. These awards recognized their outstanding conservation commitments and achievements. Their love of Alberta’s wild spaces and their enthusiastic, unwavering persistence in defending these lands have inspired many Albertans to play an active role in conserving and protecting Alberta’s wilderness.

Dozens of AWA members and friends helped them celebrate their achievements. That evening they also heard Richard Secord explore the potential for judicial review to enhance the protection of Alberta’s environment. Richard delivered the Martha Kostuch Annual Wilderness and Wildlife Lecture after the awards presentations. A précis of his lecture, “Green Law: Legal Precedents for Environmental Protection,” will appear in February’s WLA. 🐾



*Members of the Secord clan at the awards presentation.* PHOTO: K. MIHALCHEON



*Richard Pharis, Mark Lowey and Richard Secord enjoying a lighter moment during the wine and cheese reception.*

PHOTO: K. MIHALCHEON



*Richard Secord delivering the Martha Kostuch Annual Wilderness and Wildlife Lecture.* PHOTO: K. MIHALCHEON



*Judy and James were joined at the award ceremony by their daughter Ellinor Tweedie and Kent Walsh.*

PHOTO: K. MIHALCHEON





## PROTECTING NATURE: SOWING SEEDS OF COOPERATION BETWEEN ALBERTA AND INNER MONGOLIA

*By Christyann Olson, AWA Executive Director*

**M**y family's roots are more than 270 years old and we have come here from outer Mongolia, living in and respecting the grassland." I was sitting in the Dalai Lake Nature Reserve Visitor Centre in New Bareg, Right Banner of Inner Mongolia Autonomous Region (IMAR), listening to a translator interpret the words of a Mongolian herdsman. The gentle man spoke clearly and passionately about his way of life and his perspectives on conservation and protection. He went on "to discuss the changes he had seen and listed three in particular: the population has exploded since 1980, climate change has created noticeable differences in their environment and the Nature Reserve's status has grown. We were discussing the Dalai Lake Nature Reserve in the Canada-Dalai Lake Nature Reserve Workshop for Biodiversity Conservation and Community Participation that Alberta Wilderness Association (AWA) sponsored as part of a study tour to IMAR. This man talked about the common goal herders have with the Nature Reserve and that they help care for the reserve spontaneously because they respect Mother Nature and believe that with cooperation they can improve their living conditions and decrease poverty in the area. He said, "the herders' goal is ours, protect the grasslands." The herders are emphatic that they are not the destroyers, they are the protectors. Bayasgulang's message was that, for all of us, our primary goal must be to protect nature and that we should not need to spend money to help nature recover.

How was it that I could be here? Two weeks touring IMAR was a surreal, incredible experience for me. There I learned how much I shared with the people I met. I recognized and appreciated the passion of the herders and their families and realized how much their landscape reminded me of home. This full day workshop was the culmination of years of efforts and

dedicated work by passionate people for Alberta's Hay-Zama Lakes Wildland Park, a park now twinned with Dalai Lakes Nature Reserve in IMAR. The seeds of cooperation to help protect nature have been sown. A Memorandum of Understanding (MOU) was signed in Alberta in May of 2008 and both parties, the Alberta government and the IMAR government, are committed to help each other protect these two internationally significant protected areas; both of them enjoy RAMSAR site status under the Convention on Wetlands signed in Ramsar, Iran, 1971.

At the beginning of our study tour we were met with excitement and anticipation by those who had come to Alberta last year for our study tour of and dedication ceremony for Hay-Zama Lakes. Throughout our time there we heard sincere accolades for Cliff Wallis, AWA's Vice-President, for the work he had done to establish this sister relationship with Alberta's Hay-Zama

Lakes and for making this tour possible. The people of Dalai Lake and the IMAR have great expectations that this relationship will achieve something of great importance.

We learned that these people recognize and believe that NGOs have a strong role to play in conservation and conflicts with industry. They want to learn from AWA and hope they can do a better job in the future. We know we all have problems and that through talk, discussion, and study we can find ways to improve the landscapes we care about.

Chief James Ahnassay spoke at the workshop about the Hay-Zama Committee. He reminded us of a few simple principles as he helped the workshop participants gain insight into the basic ideals that help the Hay-Zama committee move forward. "Great things can happen with the simple exchange of information" he said. He emphasized another key principle with something Steven Covey tells us: "sometimes the



*Dalai Lake is the fifth largest lake in China. The day we were here the Siberian winds were blowing at gale force, bringing fresh clean, crisp, fall air. This is the viewpoint to the Genghis Khan rock in Dalai Lake, a site of mystery and legends about the fabled Mongolian ruler. PHOTO: C. OLSON*

way we see the problem, is the problem.” The Chief’s description and words of appreciation from the Hay-Zama Committee resonated well with the Mongolians and IMAR officials. They too appreciated the need to move from the “me-me to we-we” approach that Pat Cabezas, the co-chair of the Hay-Zama Committee, has become famous for.

It was a number of years ago when Cliff was working on a CIDA project in IMAR that he met Liu Songtao and together they shaped the possibility of making more happen from the work they were doing together. Both areas were developing management plans at the same time and both were, and still are, home for minority peoples. The twinning process began in 2004 and was formalized and celebrated in 2008. Twinning these areas is more than symbolic. AWA believes an international focus will keep the process more transparent and it will be less likely to fail. If there is global interest, many eyes are watching all of us and there is a good chance of exposure if things go wrong. We are learning from each other as we share information and expertise. Oil and gas development in IMAR is at an early stage and we hope the mistakes we have made in Hay-Zama can be avoided.

The workshop yielded some immediate results with the IMAR and local governments committing to establish Cooperating Herder Associations that will maintain mobility of human use on the landscape and help to protect the region’s grasslands and wetlands. Other outcomes of the visit included technical cooperation and information exchanges that will assist in management and further research and understanding of these two globally



*The mountains of the north include a national forest reserve park that is primarily Xing’an (Dahurian) larch (Larix gmelinii), Asian white birch (Betula platyphylla) and Mongolian (Pinus sylvestris var. mongolica - a variety of Scots pine). PHOTO: C. OLSON*

significant sites.

There remain many opportunities to collaborate and a great deal more we will do. The visit allowed us unique opportunities to discuss common conservation concerns with officials and local residents while walking in extensive forests of Xing’an larch, Japanese birch, and Mongolian Scots pine. We experienced the Siberian winds in the world’s largest steppe grasslands, watched waterfowl and shorebirds at lakes and wetlands and marvelled at extensive sandlands along the fringes of our travel route.

We will continue to report our progress to you through the *Wild Lands Advocate*. As we go to press with this story and issue of the *WLA* we are thrilled to let you know that the Hay-Zama Dalai Lakes case study was selected in the Pan-Canadian Biodiversity Handbook Contest! AWA’s submission will be included in a handbook that will be posted on the Canadian Environmental Network (RCEN) website and distributed to Environment Canada and the Secretariat of the UN Convention on Biological Diversity. Please join Cliff Wallis and I for a slide show and discussion of our trip to Dalai Lake in Lethbridge on January 12th (see the Events section for more details). 🐾

#### **The Hay-Zama Committee and AWA’s Mongolian Partnership**

*Re-established in 1995, the Hay-Zama Committee (HZC) continues to provide advice to Alberta on protection of the Hay-Zama Lakes, one of 1,069 sites globally designated under the Ramsar Wetlands Convention. The HZC has been instrumental in winding down pre-existing oil and gas activity in the area’s most sensitive lands, improving environmental performance and setting time limits for remaining extractive activities in a smaller, less sensitive part of the area. The HZC also obtained long-term protection for the area through its Wildland Park designation in 2002. The HZC is special for being **led by stakeholders** and enjoys the full participation of First Nations, ENGOs, industry, and municipal/provincial governments.*

*In 2008, through the AWA and HZC, the park was officially twinned with the Dalai Lake National Nature Reserve in Inner Mongolia, China, another Ramsar site. It is part of the most extensive remaining temperate grassland in the world – the Daurian Steppe. Both protected areas have indigenous populations with a conservation interest – Mongolians and the Dene Tha’. The focus of this example of international cooperation is building capacity in indigenous communities towards nature protection and community development.*





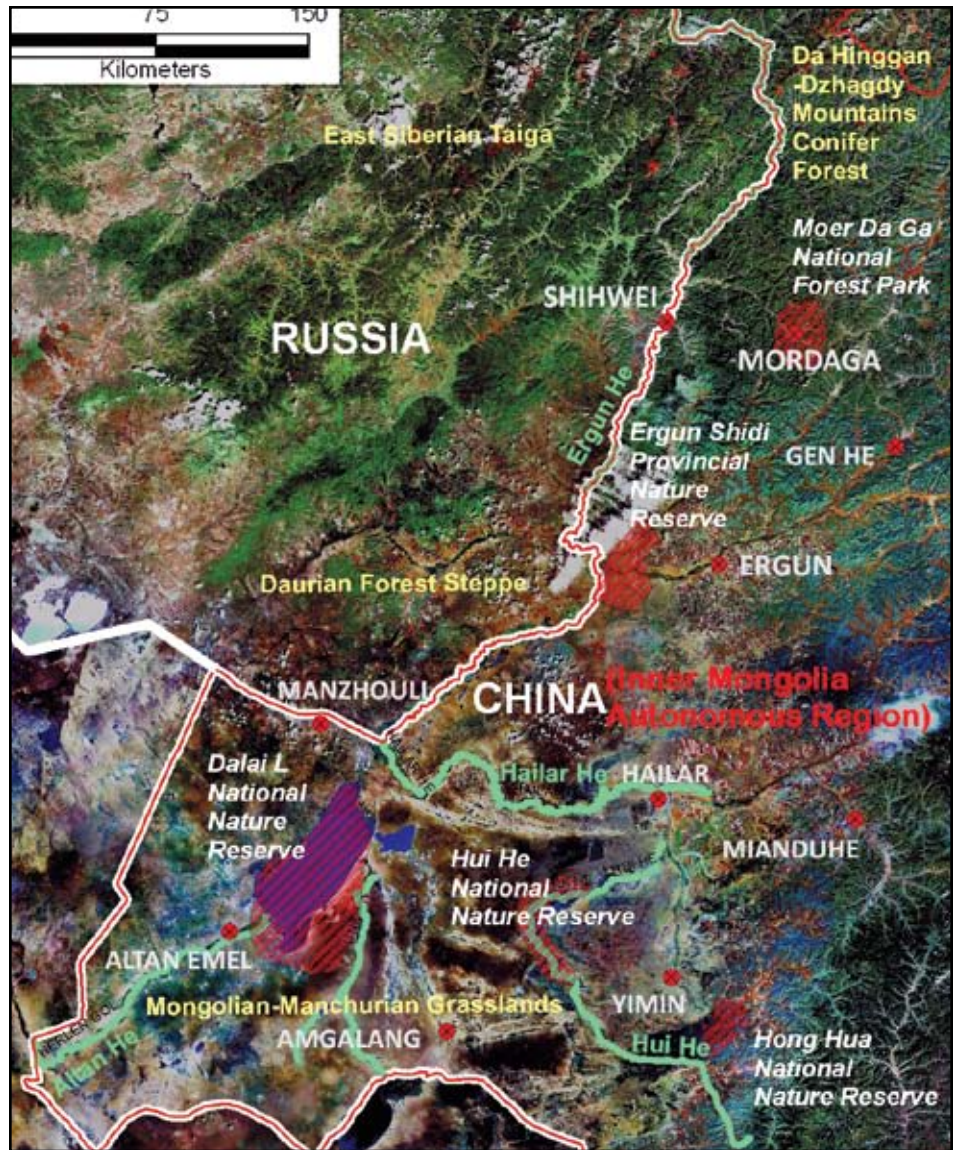
Wuliji and herder Bayasgulang participate in AWA's workshop in IMAR. Wuliji interpreted from Mongolian to English. The passion they both felt as they spoke was moving. Wuliji will be coming to Alberta on an exchange work placement so that he can learn from our Parks and Protected Areas staff and we can continue to learn from our colleagues in IMAR while sharing what we know.

PHOTO: C. OLSON



Cliff Wallis resonated with people like Liu Songtao who were passionate, innovative, and genuine. Liu Songtao is as avid a bird watcher as you will find anywhere. Liu Songtao and Cliff were thrilled to find a flock of sand-grouse and delighted in counting and documenting their discovery, far too early in the season.

PHOTO: C. OLSON



Map showing intersection of China, Russia, and Mongolia. The Dalai Lake National Nature Reserve is shown in purple.



## A VISION FOR FOREST MANAGEMENT FOR THE FUTURE

By Nigel Douglas, AWA Conservation Specialist

Local communities must play a major role in planning and making decisions regarding Alberta's forested watersheds if watershed management is ever going to become environmentally and socially sustainable. This was the core message at a two-evening workshop hosted by AWA and the Ghost Watershed Alliance Society (GWAS) in November. Participants heard

that there is no reason why forests cannot be managed to maintain ecological integrity and foster community-based economies that are culturally and ecologically sustainable.

Workshops like this one have become an increasingly important part of AWA's outreach work, and AWA has hosted a series of acclaimed events in recent years looking at water-related themes such

as groundwater and headwaters. This workshop - *Seeing the Forest Among the Trees: The Case for Ecosystem-based Conservation Planning* - took a more community-based focus. Held at the Beaupre Community Hall near Cochrane, it was an opportunity for more than 30 local people to work with Herb Hammond, the internationally-renowned forester and ecologist. The particular focus was on



the Ghost Watershed and how its forests can be managed to maintain long-term ecological and economic viability.

Herb Hammond, who describes himself as a “recovering forester,” has worked for more than 25 years in the scientific research and timber sectors and is co-founder of the Silva Forest Foundation, a charitable society dedicated to research and education in ecosystem-based forest planning. (Herb’s book: *Maintaining Whole Systems on Earth’s Crown. Ecosystem-based Planning for the Boreal Forest* is reviewed later in this issue of the WLA.)

Hammond presented a broad background to forest ecology and the tremendous complexity of forest ecosystems. He emphasized the enormous value of maintaining the integrity of the Ghost watershed for water quality and quantity, as well as for carbon storage, particularly considering the enormous changes that future climate variability is likely to bring. Intact forests will play a critical role in providing movement corridors for a variety of species, including genetic variants which could be crucial in adapting to future change. Healthy forests, particularly old growth forests, are the most efficient at producing clean water and store more atmospheric carbon than

other forest types.

Alberta has already spent tens of millions of dollars struggling with one result of climate change: the mountain pine beetle outbreak – what Hammond calls a “human-caused epidemic.” Climate change has all but eliminated the cold winters that killed beetle larvae hibernating beneath the tree bark. Fire suppression and clearcut logging have produced large areas of susceptible even-age, single species stands of pine trees – perfect habitat for the beetles. Instead of Alberta’s knee-jerk “war on pine beetles” we should instead be looking to develop landscape-level plans to maintain and encourage natural diversity, thinning susceptible stands of pine trees while favouring other species such as spruce. Clearcutting is no solution to the pine beetle problem: it does nothing more than set up the landscape for future problems. Yet, despite the marginal economic value, this is exactly what is happening in the critical watersheds of the Ghost. “Clearcutting in the Ghost is not fitting into a plan that makes much sense to me,” Hammond stressed. But Alberta is slow to get the message: “It is easier to change the image than to fix the problem,” he pointed out.

On the second evening, Hammond began to outline an alternative vision for

forest management in the Ghost; this one allows and encourages input from the local community. A fundamental principle of Ecosystem-Based Conservation Planning (EBCP) is to focus on what to protect and **then** focus on what to use (or to put it another way, to focus on what to leave and **then** focus on what to take). What needs to be protected are fully functioning ecosystems at all spatial scales, and through time. So, under EBCP principles, the priorities of forest management should be to protect and restore ecological integrity and to provide for balanced human and non-human use across the landscape.

Workshop participants were inspired by Hammond’s blueprint for truly sustainable forest management but were also daunted somewhat by the prospect of trying to drag the Alberta government towards such a radical change in thinking. But, as Hammond pointed out, the necessary shift in focus has to begin at home: “The changes we want won’t come from centralized governments or large corporations.” It is communities themselves that will have to lead the parade and they should never underestimate their potential to bring about positive change. “You have as much power as you believe you have,” was Hammond’s parting comment. 🌲



*Dawn Horse 18.75 by 22 in., mixed media.* © J. CARDINAL -SCHUBERT



*Footprint, 12 by 31.5 in., mixed media.* © J. CARDINAL -SCHUBERT





## HOW DOES THE AWA FUND ITS WORK?

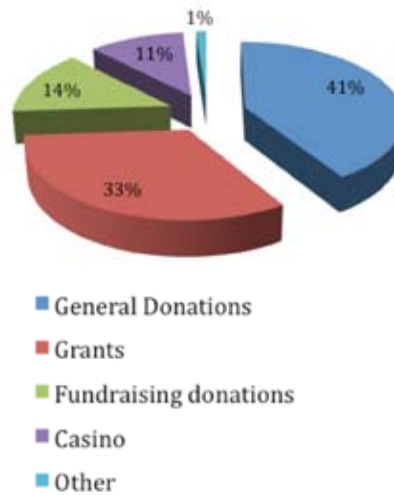
*By Christyann Olson, AWA Executive Director*

**A**WA's mission is *Defending Wild Alberta through Awareness and Action*. As a social profit group, we are also considered a non-profit, environmental non-government organization (ENGO) and a registered charitable organization under the Income Tax laws of Canada. For the past 44 years, AWA has managed, sometimes with shoestring funding, to weather the financial storms and uncertainties that seem to go with the job of being a non-profit environmental organization. Our success is largely due to a passionate and long-standing core of volunteers and supporters in Alberta, across Canada and around the world. This volunteer base then is one of AWA's vital cornerstones; so too is the small but highly respected and effective staff in AWA's Calgary office.

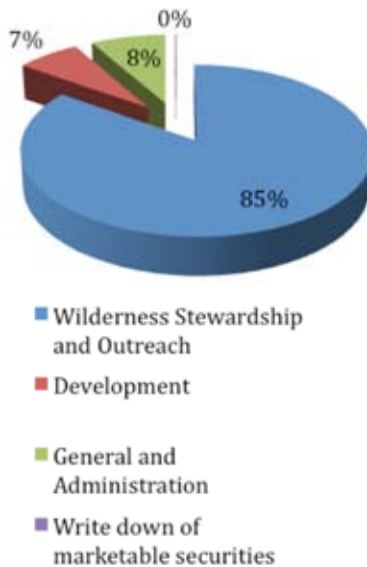
AWA has four major funding sources: donations from members and supporters, fundraising at the Climb and Run for Wilderness, a casino held nearly every two years and grants from foundations. A summary of our revenue and expenses for the fiscal year ending July 31, 2009 is provided in the accompanying pie charts.

As you can see, your donations are vital to AWA's health. While we are in a strong financial position at this time, we are looking to the future and trying to be as prepared as we can for tough times when donations (currently amounting to approximately 55 percent of AWA's revenues) dip temporarily or our work requires unexpected expenditures. We manage nimbly and plan carefully. The majority of our expenses are dedicated to our core work of conservation, stewardship and outreach. Because of our impressive network of volunteers we are able to keep our general and administrative expenses for AWA to less than eight percent.

### Revenue Sources



### Expenditures



AWA's Board of Directors has been planning for our future financial health for a number of years. Two elements of that plan consist of offering donors the opportunity to make a major gift or to leave a bequest to AWA in their will. AWA has a trust fund at the Calgary Foundation called the *Wilderness and Wildlife Trust* that was established with funds dedicated to the memory of Orval Pall. We also have "project accounting" that allows AWA to receive a directed donation of any amount. Directed donations are used for the purpose identified by the donor, regardless of whether the donation is a small gift or a major bequest. We invest our funds carefully and earn interest through those investments. Please call me if you are interested in making a bequest or a major donation. I would be very happy to discuss with you in detail how we manage our funds and how you can be part of AWA's promise for the future. If you are a current member or have been a supporter of AWA in the past, you will have received our annual Fall Appeal letter by now where we ask you to give generously to support AWA's work in 2010. Next year promises to be a very challenging one so if you have not sent in your gift yet, please do so. Help us to perform strongly our most important role - defending wild Alberta for generations to come.

On behalf of the staff and the board of directors I would like to offer our thanks to all of you who support us tirelessly. We wish you and yours the very best for the holiday season and the new year.

*Most sincerely,  
Christyann Olson*

# TRIBUTES

AWA is honoured to receive gifts from friends and family who remember their loved ones and those who have made a difference to them. Between August 2008 and November 2009 the following were honoured.



## GREAT PEOPLE CELEBRATED

Ian Ross (\* passed away 2003)  
Dr. Suzanne Walsh  
Gus Yaki



## BIRTHDAYS REMEMBERED

Steve Dixon *92 years*  
Glenda Hanna  
Samuel August Olson *93 years*  
Karl Winkler *9 years*



## BIRTHS CELEBRATED

Abigail Rose Hadden  
May 3, 2009



## WEDDINGS CELEBRATED

Sarah and Mike Fedun  
Ali and Jordan Tailfeathers



## WEDDING ANNIVERSARY CELEBRATED

Heinz & Marilyn Unger *40 years*



## IN MEMORIAM

Herbert Charles Adams *1921 – 2008*  
Malcolm Anderson *1921 – 2008*  
Ada Basso *1932 – 2009*  
Joan Diller *– 2008*  
Joanne Dunford *1921 – 2009*  
Mel Dunford *1924 – 2008*  
Will Farrington *1933 – 2009*  
Norm Ferguson *1921 – 2009*  
Bill Fuller *1924 – 2009*  
Patrick Fuller *– 2008*  
Muriel Hayes *– 2008*

Hugh Hicklin *1920 – 2009*  
Gary Hildebrand *1952 – 2008*  
Bruce Horrey *1942 – 2008*  
Jeffrey Krekoski *1983 – 2009*  
Frank Plowman *1914 – 2009*  
Gregory Reay *– 2009*  
Ann Roberts *1949 – 2009*  
Barbara Sherrington *1947 – 2008*  
Kathleen Teape *– 2008*  
William Turnbull *1931 – 2008*  
Joan Vaughn *– 2009*  
Harry Wagner *1942 – 2008*  
Arthur Ward *1915 – 2009*



## WILDLIFE MOURNED

Twelve Black Bears in Conklin



## IN MEMORIAM

### ANN ROBERTS

1949-2009



Born in Brooks Ann Roberts appreciated the natural heritage that we, in Alberta, are privileged to share and to protect. She believed strongly and passionately in the inherent value of that natural heritage and its right to exist. The strength and passion of her beliefs and perspective brought her through the doors of AWA. She played a significant role in AWA's work on grasslands in the late 1980s and early 1990s, not least through chairing AWA's Prairie and Parkland Committee. Her work was critical to

AWA's work on Suffield and helped shape the decision to designate Suffield as a National Wildlife Area. She served our organization first as a Director and then First Vice-President until the late summer of 1995.

Although Ann was confined to a wheelchair from early childhood she did not let a physical disability prevent her from experiencing and enjoying all that Alberta's outdoors have to offer. Cliff Wallis remembers taking Ann out on fieldtrips in her wheelchair. "She was always game to get out into nature and get moving!"

This same indomitable spirit, the same tenacity Ann displayed in her grasslands work, animated her desire and decision to enter law school at the University of Victoria. Studying and then practicing law became Ann's vehicle to try to improve the ways in which we understand fellow members of our society. Simon Owen, a long-time friend of Ann put it this way: "Like many, Ann was upset by the gaps in understanding between the various constituents of the justice system, namely

legal professionals, police, and Aboriginal communities. What truly distinguished her, however, was her willingness and determination to find real ways to narrow those chasms. Inspired by a similar initiative that brought together the R.C.M.P. and Peigan people in southern Alberta, in 1996 Ann spearheaded the first Aboriginal Awareness Camp, held in Coast Salish territory on the Tsartlip reserve. For two days, which in subsequent years stretched to four, law students, police officers, and even a lawyer or judge on occasion, sat, slept, feasted, and played together with elders and community members, in the process learning to see each other more clearly. For many participants, the Camps, which continue to be held each fall, are a life-altering experience."

"Despite setbacks and disappointments, through her own limitations and ill health, Ann never stopped seeking the good life, for others just as passionately as for herself. We never thought we'd lose her so soon."





## IN MEMORIAM

### JOANE CARDINAL-SCHUBERT

1942 - 2009



Joane Cardinal-Schubert attained great stature in artistic and academic circles and to our good fortune, she was a supporter of the Alberta Wilderness Association.

She was born in Red Deer and lived her early years in small communities in Alberta, including the period when her family owned the Cardinal Motel in Red Deer. The Alberta Arts Heritage site quotes her saying that as a Métis growing up in white communities “I heard the disparaging remarks but that never affected my hopes and my dreams. I had no reason not to be proud of my family.”

In earlier years, her brother, Douglas Cardinal, was the most famous member of the family. Often controversial, he is renowned for his architectural designs from St. Mary’s Church in Red Deer (his first commission) to the stunning new National Museum of the American Indian in Washington D.C.

Joane’s recognition grew more slowly. Initially, she encountered resistance from some powerful figures in the art world and one of her missions in life was to see native art recognized for its own merits (and not just as anthropological commentary) in places like the National Gallery of Canada.

Ultimately, she received many honours for her art including her induction into the Royal Canadian Academy of Arts and an Honorary Doctorate from the University of Calgary. When she died, not only were her paintings in the collection of the National Gallery but the flags there were lowered to half mast. Today, if you open a book about Canadian art, you will find Joane Cardinal-Schubert along with Emily Carr, Alex Colville and Canada’s other artistic luminaries.

Joane was never casual about her views and never shied away from controversy. Jeffrey Spalding, president of the Royal Canadian Academy, told the *Calgary Herald* that “Joane was a fiery, indomitable, free spirit. She is renowned as a groundbreaking artist who fought tenaciously for recognition of the qualities of First Nations artists.”

Her support of the AWA reflected a profound view about nature and conservation. She talked about how, as a child, she “roamed around on our land and by the lake, testing my strength, learning my place, looking and seeing.”

Her favourite childhood memory was a walk with her father when she was four years old and he said to her

“you have to be so careful, as every footstep you take will change all things.”

Joane challenged a world she believed had lost its respect for nature. One of her most famous works is in the Canadian Museum of Civilization (also a building designed by her brother). It is “my mother’s vision” of four ancestral Blood warshirts to be worn as sacred protection “in battle against today’s environmental destruction.”

Joane’s husband, Mike Schubert, shared her passion for environmentalism and he, along with their two sons, was unstintingly supportive of her career.

She was articulate in words as well as images. She was a provocative writer and a compelling speaker. Her wit could be sharp but it had a purpose and underlying it was a deep sense of humanity. Joane could laugh at herself and she could always make the rest of us laugh at our own foibles.

As an artist, Joane’s work was unmistakable, drawing upon her own vocabularies of stylized horses and buffalo and people. She had enormous influence on young artists, especially those from First Nations communities, and she was generous in her time for teaching.

If you have a chance to visit the AWA offices in Calgary, look for the three magnificent posters on the walls there that Joane designed for the AWA. We were fortunate to have her as our friend and champion of our cause.

Joane Cardinal-Schubert died in Calgary on September 16, 2009 at the age of 67.

- Frank Calder

## McClelland Wetlands Proposed as Alberta's First Conservation Directive

A newly created land conservation tool is being proposed by Alberta Wilderness Association as an appropriate measure in Lower Athabasca regional planning to recognize the ecological and esthetic value of the McClelland Lake Wetland Complex. AWA is proposing to the Government of Alberta and key corporate stakeholders that Alberta's first Conservation Directive be adopted to protect the McClelland Lake Wetland Complex.

AWA has been working toward the protection of the ecologically rich McClelland Lake Wetland Complex for many years. Located 90 kilometres north of Fort McMurray, just east of the Athabasca River, the McClelland Lake Wetland Complex includes many different types of interrelated wetlands, including an extraordinarily large and intricately patterned fen, a large peaty wetland area where hundreds, perhaps thousands, of strings – narrow ridges of shrubs, black spruce and peat – separate countless flarks – long, narrow, shallow pools of water. Fed largely by groundwater, the fen has been built up over 8,000 years since the last glacial retreat.

These wetlands feature plant species rare to Alberta, including the insectivorous pitcher plant. The entire catchment area of 330 square kilometres drains in a northeast direction, through the McClelland Lake Wetland Complex and into the Firebag river. The McClelland watershed is an important nesting area for boreal birds, as well as an important stopover point for birds, including the endangered whooping crane, migrating further north to the Peace-Athabasca Delta and Arctic for breeding.

The greatest threat to the McClelland wetlands is posed by potential tar sands development, as it lies within Alberta's mineable oil sands region. In 1996, the Government of Alberta protected the McClelland Lake Wetland Complex in a regional Integrated Resource Plan. However, in 2002 Alberta Sustainable Resource Development amended this plan with minimal public consultation or environmental impact review to allow open-pit oil sands mining in part of the

watershed. Soon after, what is now the Fort Hills oil sands consortium was given ERCB approval for its proposal to mine the southwestern or 'upper' half of the watershed without having demonstrated any plan to preserve the rest of the wetland. Instead, the ERCB directed that a company-led Sustainability Committee could eventually develop a plan to maintain ecological values such as water levels and water quality in the unmined portion of the wetland complex. To date, all evidence suggests that the whole peat wetland complex will be doomed by open pit mining in its upper portion.

In addition, Alberta-Pacific Forest Industries Inc. (Al-Pac) has recently logged extensively along the south shore of McClelland Lake (see *Wild Lands*

Initiative, to offer some substance to their commitment to realizing the Initiative's protected areas vision – to establish "a network of large interconnected protected areas covering about half of the country's Boreal Forest."

Simply put, a Conservation Directive is a mandatory direction, arising out of the conservation goals of a regional plan, to permanently protect an area of environmental, natural scenic, esthetic, or agricultural value. Holders of mineral or forestry rights on lands subject to a Conservation Directive are entitled to compensation.

To preserve the high ecological and esthetic value of McClelland Lake Wetland Complex, AWA proposes that the Lower Athabasca regional plan include



*Complex groundwater conditions create the spectacular patterned ridges of land in the McClelland fen* PHOTO: C. WEARMOUTH

*Advocate*, August 2009). Removing forest cover in this watershed is highly inappropriate given the official government commitment to ensure that ecological values are maintained in the lower portion of the wetland complex.

Suncor Energy Inc.'s August 2009 acquisition of Petro-Canada means that Suncor is now lead operator of the Fort Hills mine consortium. Recently Suncor announced that plans to proceed with investment in Fort Hills were on hold as other capital projects in its portfolio promised more attractive returns. It is therefore an opportune time to pursue the idea of a Conservation Directive with the Government of Alberta, Suncor, Al-Pac and other key industry stakeholders in the McClelland watershed. It is an opportunity for Suncor and Al-Pac, both members of the Canadian Boreal

a Conservation Directive declaring that surface mining and industrial logging will not proceed in the McClelland watershed. Either other methods should be found to remove bitumen without disturbance to the surface lands or the sustaining shallow groundwater network, or the provincial government should provide appropriate compensation for the lease withdrawal to the companies involved. After extinguishing these surface disturbance rights, the government should designate McClelland Lake watershed as a provincial park, with the two large fens protected as ecological reserves. As the Lower Athabasca region is the pilot region for land use planning, McClelland watershed would be an ideal candidate for Alberta's first Conservation Directive.

– Carolyn Campbell



## The Ups and Downs of Alberta's Sour Gas Approvals

*Q: What do you do if the Courts reprimand you for breaking the rules?*

*A: Change the rules.*

For nearly two weeks in November, the Energy Resources Conservation Board (ERCB) suspended all sour gas applications in Alberta while it decided how to respond to a strongly critical Alberta Court of Appeal ruling. For a short time it seemed as if the Court's precedent-setting ruling might result in representation at future sour gas hearings being opened up considerably to give "standing" to far more Albertans. But in the end ERCB decided that, if it was not allowed to ignore its own rules, then it would just change the rules.

On November 3, 2009, in a surprise move, ERCB temporarily suspended new approvals for sour gas wells and pipelines throughout the province. The decision followed an Alberta Court of Appeal ruling, October 28, which dealt a firm slap on the wrist to ERCB and its hearing process. The Court ruled that the Board had incorrectly decided in January 2009 that three residents of the Rocky Rapids area 140 kilometres southwest of Edmonton did not have the right to oppose two proposed sour gas wells close to their properties.

The story begins in 2008 with an application by Grizzly Resources Ltd to drill two sour gas wells near Rocky Rapids. Three women who lived between three and six kilometres from the proposed wells filed an objection. But in a January 16, 2009 decision, ERCB denied them standing at an upcoming hearing. The Board ruled they would not be "directly and adversely affected" by the development.

Although the three residents lived outside the Emergency Planning Zone for the proposed wells, their properties did fall within the Protective Action Zone (PAZ), a relatively new designation defined by ERCB as "(a)n area downwind of a hazardous release where outdoor pollutant concentrations may result in life threatening or serious and possibly irreversible health effects on the public."



*Two of this year's Wilderness Defenders Award winners, James Tweedie and Richard Secord, at a 2003 hearing held by ERCB's predecessor, the Energy Utilities Board. In a rare move, the Board denied the application by Polaris Resources to drill for sour gas in the Whaleback. PHOTO: AWA FILES*

Somewhat bizarrely ERCB ruled that the fact that the residents lived within this PAZ was not sufficient evidence that they would suffer a "possible adverse effect" in the event of a well leak or accident. The Appeal Court disagreed. "(T)hose who live in a PAZ could have their rights directly and adversely affected as a result of a hazardous release," said the Court. "It is difficult to see how any other conclusion could be available."

The Appeal Court ruled that, having mistakenly decided in November 2008 that the residents should not be given standing, ERCB "failed to go on to correct the error it had made at that time when it concluded that the Appellants were not directly and adversely affected by drilling of the wells."

The Court ruling came as a breath of fresh air to opponents of oil and gas developments who consistently have been denied standing by ERCB over the years. "Can you imagine the difference this will make in the number of people who can show up at hearings and must be consulted?" asked Jennifer Klimek, the residents' lawyer, in an *Edmonton Journal* article. "This will certainly change things.

More people will now have a say in sour gas development."

The Court decision clearly worried the ERCB. "The ERCB recognizes the importance of this matter and is reviewing the Court's decision on a priority basis to determine its impact on the sour oil and gas applications process," said a November 3 news release. "Until that determination is made, the ERCB will not issue any licences for sour wells, facilities and pipelines."

But after reviewing the Court of Appeal's decision, ERCB appeared to be comfortable that the Court's emphasis was less on whether ERCB was right or wrong in making its determinations, but more on whether or not it was sticking to its own rules. So rather than agree to extend standing to include all people living in the new PAZs, ERCB decided instead to make the PAZs smaller. "Previously, PAZs were erroneously calculated to be larger than Emergency Planning Zones (EPZs)," the Board said on November 13th. "It was never intended, nor was it necessary, for any PAZ to exceed the size of a corresponding EPZ."

– Nigel Douglas

## Another Alberta Caribou Herd Heads Towards Extirpation

Hot on the heels of the recent demise of Banff National Park's caribou herd (WLA, June 2009), comes the news that a second National Park caribou herd – the South Jasper herd – may be on the verge of extinction.

A November 23rd CBC news article cites an upcoming Parks Canada report that found just four threatened caribou in the Maligne Lake area. This would be a truly shocking decline if this indeed represents the entire remaining herd. In the 1960s, the herd was believed to number 450 individuals; today Parks Canada's website - [http://www.pc.gc.ca/pn-np/ab/Jasper/ne/ne8\\_e.asp](http://www.pc.gc.ca/pn-np/ab/Jasper/ne/ne8_e.asp) - reports an estimate of "around 100." Alberta naturalist Ben Gadd estimated the herd at 40 caribou just last year.

Jasper National Park is home to two distinct caribou herds. The northern A la

Peche herd migrates seasonally between the National Park and the adjacent Willmore Wilderness Park; the South Jasper herd stays in the park throughout the year, mostly in the Maligne/ Tonquin region. The South Jasper herd was identified in the 2005 *Alberta Woodland Caribou Recovery Plan* as in decline; the A la Peche herd is one of only three of the province's eighteen (at the time) herds listed as stable.

As early as 1992, a report for Parks Canada pointed to the Maligne Lake Road and its negative effect on caribou in the park. Snow-ploughing the road for cross-country skiers led to disturbance by skiers and their dogs; it also gave wolves easier access to search for caribou prey. Environmental groups have been calling for the road to be closed in winter.

At the time of writing, a draft Management Plan for Jasper Park is due to be released shortly. The draft plan for Banff, which was released in early October, showed a marked shift away from managing the park for ecological integrity (the legal priority for the park) in favour of maximizing the "visitor experience." So let's hope that the Jasper plan will have the courage to impose restrictions on visitors in a last ditch attempt to save a caribou herd hanging by a thread. Surely that is what our flagship National Parks are supposed to be for.

- Nigel Douglas

### Conservation Recommendations for the South Saskatchewan Region

If the quality of the environment in southern Alberta is not to be further eroded in future, then the province's South Saskatchewan Regional Plan will have to make some hard choices about the limits and thresholds to human activity.

This is the core message of a new AWA report, *Conservation Recommendations for the South Saskatchewan Regional Plan*. The report makes a series of recommendations to the South Saskatchewan Regional Advisory Council, a hand-picked advisory group currently meeting to develop recommendations for the forthcoming Regional Plan.

Ironically, the report came out at exactly the same time as a World Wildlife Fund report that identified the South

Saskatchewan as the "most threatened river" in Canada. That report, *Canada's Rivers at Risk*, awarded this dubious distinction to the South Saskatchewan because of "hundreds of dams and withdrawals of 70 per cent of its flow for agricultural and urban use, not to mention potential climate change impacts."

The government's Land-Use Framework has already made it clear that watershed conservation is the priority for the South Saskatchewan region.

AWA believes that some activities can be entirely compatible with this priority; some will need careful management; and others will be deemed to be unacceptable uses in some places. The South Saskatchewan Regional Plan will need to include clear, enforceable thresholds on human impacts.

Recommendations in AWA's report include:

**Headwaters.** "The LUF's emphasis on watershed and recreation priorities for the Eastern Slopes must be clearly reflected and emphasized in the South Saskatchewan Regional Plan."

**Increased protection.** Less than 2 percent of Alberta's Foothills Natural Region, and less than 1 percent of the Grasslands region are protected. By any standard that is not enough. The report emphasizes: "For all Natural Regions and Subregions, the South Saskatchewan Regional Plan must develop clear targets for legislated protection."

New government mapping of *Environmentally Significant Areas* recognized the southern Eastern Slopes and much of the province's remaining native grasslands as *Nationally Significant*. The report recommends: "All of the areas identified in the Government of Alberta's 2009 Alberta's *Environmentally Significant Areas* report as *Internationally, Nationally or Regionally Significant* must have some form of legislated protection."

The 2009 *Alberta Land Stewardship Act* makes provision for a number of conservation initiatives on privately-owned land, including conservation easements and conservation directives. The report concludes: "The South Saskatchewan Regional Plan must include specific targets for the amount of private land in the region to be conserved

under these different initiatives."

**Groundwater.** It remains unclear whether groundwater will even be discussed in the South Saskatchewan RAC. This must be major consideration in recognition of the crucial role the Eastern Slopes play in the recharge of groundwater supplies.

**Management of the Human Footprint.** Firm threshold targets must be set across the region for a range of indicators of human footprint, including:

- Footprint area (hectares)
- Footprint edge (kilometres)
- Road density (km per km<sup>2</sup>)

These thresholds must be enforced. Procedures must be specified for management directives and options once these thresholds have been met or exceeded.

**Access Management.** "Access management is required for all public land, particularly in the Eastern Slopes. Access levels must be driven by what the land can sustain, not by demand. Motorized access must be allowed only on designated trails."

**Grizzly Bears.** "Grizzly bear recovery, based on the principles and recommendations of the provincial Grizzly Bear Recovery Plan, must be a fundamental part of the South Saskatchewan Regional Plan."

**Industrial Activity.** "There should be no industrial-scale forestry operations south of the Trans-Canada highway."

**Meaningful public participation.** According to a 2007 government public opinion survey, 74.3 percent of respondents believed that "(a)t present the balance between developing and using our land versus conservation of our land is too focused on economic development and growth." As the Government of Alberta has invested considerable time and expense in soliciting the opinions of Albertans, it is imperative that the final Regional Plans accurately reflect their expressed wishes and concerns.

**The full report,** *Conservation Recommendations for the South Saskatchewan Regional Plan*, is available on AWA's website at [www.albertawilderness.ca/wilderness/issues/public-lands/archive](http://www.albertawilderness.ca/wilderness/issues/public-lands/archive)

- Nigel Douglas



***Herb Hammond, Maintaining Whole Systems on Earth's Crown: Ecosystem-Based Conservation Planning for the Boreal Forest, (Slocan Park: Silva Forest Foundation, 2009).***

*Reviewed by Andrew Paul*

Herb Hammond's new book, *Maintaining Whole Systems on Earth's Crown: Ecosystem-based Conservation Planning for the Boreal Forest*, is a valuable manual for landscape-level land-use planning. While its focus is the boreal forest, the principles apply to other ecosystems as well.

Ecosystem-Based Conservation Planning (EBCP) challenges the artificial dichotomy of jobs vs conservation by demonstrating how humans can form respectful relationships within ecosystems. Rather than be preoccupied with problems, Hammond focuses on positive solutions. EBCP helps map priorities over multiple spatial scales to ensure that ecological functioning and connectivity is maintained, community values are protected, and viable economies are sustained. Hammond's procedures are especially valuable in management situations where diverse, often competing interests must be accommodated, such as in community and public land management.

This book builds on Hammond's earlier work *Seeing the Forest among the Trees: The Case for Wholistic Forest Use*. While both books offer compelling philosophical and scientific rationales for EBCP, *Maintaining Whole Systems* is also a veritable "how-to" manual that contains many useful charts and diagrams, including decision-making pathways to help planners keep track of priority concerns as they develop EBCPs. Sample maps and case studies demonstrate how the process works, and Hammond discusses how to use technical tools such as maps, aerial photography, and GIS to gather and utilize spatial data relevant to EBCP.

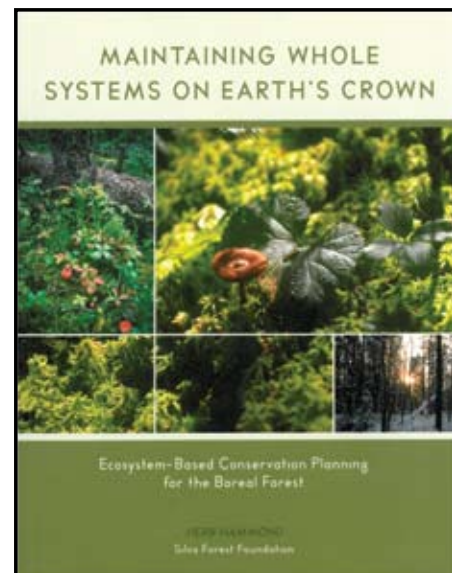
In a nutshell, EBCP progresses as follows. At each successive spatial scale, planners gather information concerning ecosystem functioning, sensitivity to

disturbance, significant or rare natural features needing protection, and the needs and values of local communities. Mappers first design reserve networks to protect ecosystem connectivity and significant or sensitive ecological features. Second, areas with significant cultural values, such as Indigenous use areas and areas with wilderness values for recreation, are mapped. Finally, timber management and other consumptive uses are mapped where they are compatible with ecological and cultural values.

Hammond firmly believes that all values, human and non-human, must be represented and respected in land-use planning. In particular, EBCP values place-based Indigenous knowledge and respects Indigenous rights in land-use decision making. Protecting non-industrial values is given priority over industrial use because industrial development degrades most other values. As Hammond points out, Indigenous peoples, trappers, tourist lodges, and other human users dependent on functioning forest ecosystems have little decision-making power under Canadian forest tenure arrangements today. Hammond discusses the Appreciative Inquiry (AI) process for building group consensus, noting that it is based on mutual respect and a focus on positive achievement rather than problem solving. Further resources for AI are listed in the book.

EBCP is based on a "kincentric" philosophy similar to Indigenous views of nature as a relation, not just a resource. Hammond criticizes the conventional definition of sustainable development as "achieving a balance between ecological, social, and economic objectives." He points out that economies cannot exist outside of human cultures, which in turn cannot exist outside of ecosystems. The planning sequence in EBCP reflects Hammond's understanding of this hierarchical relationship. Hammond argues that since humans do not fully understand the functions of all ecosystem components, it is imperative to maintain the whole.

In timber management units, Hammond advocates "partial cutting" that leaves up to 25 percent of the tree



cover on the site. Before and after photos of partial cutting in the book are difficult to tell apart; they demonstrate well how careful logging can leave the forest intact. Partial cutting mimics small-scale disturbances – the most common type of natural disturbances in the forest. Partial cutting promotes diverse stand structure and ensures that sufficient biomass is returned to the forest, maintaining ecological functioning and ensuring natural regeneration. The benefits of partial cutting are not, however, strictly ecological; partial cutting, by preserving the aesthetic quality of the forest, makes timber management more compatible with other land uses such as recreation.

One could question Hammond's emphasis on "natural" baselines, historical ecology, and Range of Natural Variability (RONV). Henry Lewis has shown that Indigenous management, which Hammond considers to have been within the RONV, did in fact influence boreal ecosystem development for specific cultural goals. Determining what is "natural" is always somewhat arbitrary; because of ecological changes and past human impacts, conditions might not always reflect the potential RONV of strictly protected ecosystems. Is this necessarily bad? It is true that modern industrial use must be limited to keep it from degrading ecosystems, but basing management criteria on "natural conditions" should not preclude the

possibility of beneficial human actions within ecosystems. Thus, as Allan Savory argues, it is important to have a comprehensive or holistic goal or vision focused on the functioning of ecosystem processes in whole-systems perspective. EBCP is an invaluable aid in realizing such goals of whole-system functioning in a land-use planning context.

Presently, forest use in Canada is mainly controlled by provincial governments and large corporations. *Maintaining Whole Systems on Earth's Crown* offers alternatives. The Silva Forest Foundation, which Hammond

founded in Slocan Park, B.C., has helped communities across Canada, including many First Nations, to create their own EBCPs. In the book, Hammond relates the experience of the Innu Nation of Nitassinan (Labrador). The provincial government had informed the Innu that they were developing a forestry plan for the region. Rather than acquiesce, the Innu asked Hammond to aid them in creating an EBCP that would protect ecological and cultural values while allowing for sustainable forestry development. They then presented this plan to government, which initially

balked at the idea. However, by obtaining peer review from eminent scientists, the Innu strengthened their case and began influencing policy concerning their homeland. This is an important lesson for activists: perhaps, rather than relying solely on top-down regulatory action, citizens and communities could work from the grassroots, taking back responsibility and developing plans for the landscapes upon which they depend. Hammond's handbook is a valuable tool to that end. 🍷

## READER'S CORNER

***I. S. MacLaren (ed.), Culturing Wilderness in Jasper National Park: Studies in Two Centuries of Human History in the Upper Athabasca River Watershed, (Edmonton: University of Alberta Press, 2007).***

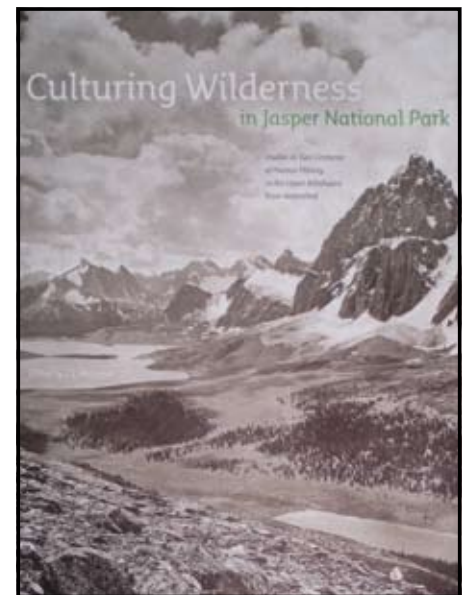
*Reviewed by Paul Way*

This story begins for me on the north side of the Athabasca River. Forced from the loftier highs of alpine discovery by dismal weather, we explored for the first time a gravel road along the valley bottom. With the western wood lilies in full bloom, we came across remnants of the Ewan Moberly homestead in an open field ringed by a series of interpretive signs. The signs told the story of human settlers in a wild land surviving in the face of nature's fury – a story that seemed a bit out of place in the sublime natural beauty of a national park. *Culturing Wilderness in Jasper National Park* tells an untold story — the story of two centuries of human activity in Jasper National Park.

The title in itself suggests the twin goals of the book. The first is to understand Jasper not as a primeval place devoid of human activity, but rather a place steeped in human activities now facing a set of contemporary challenges about interacting with the natural environment. The second theme of the book explores in more detail

how the broader cultural trends that created parks and protected areas across the post-British imperial possessions played out in the case of Jasper National Park. The authors successfully support their conclusions that a comprehensive understanding of ecological history and the cultural expressions of wilderness that have prevailed in the past could vastly improve what is often seen as the biophysical task of managing protected areas in the future.

I.S. MacLaren selected nine writers to tackle different components in this edited collection that celebrates the centenary of the Park. After a forward by former Prime Minister Jean Chrétien and an introduction by the editor, Michael Payne provides unique insight into the role of the Athabasca valley in linking fur trading activities on both sides of the Rocky Mountains. MacLaren next revisits the landscapes depicted in sketches and watercolour paintings by two artists from the 1840s (James Warre and Paul Kane). Peter Murphy describes the changing boundaries of Jasper National Park and publishes an interview with an early homesteader. Pearla Reichwein and Lisa McDermott challenge our perceptions of gendered roles in wilderness by describing Mary Schäffer's survey and explorations of the Maligne Lake area in their appropriately named chapter *Opening the Secret Garden*. C.J. Taylor provides the historical context



of tourism developments and visitor activities in the park during a period of rapid expansion. Gabrielle Zezulka-Mailloux looks at the implications of railway promoters successfully aligning tourism in the national parks to broader narratives of nation building and western expansion. Zac Robinson then looks at how Jasper's wilderness provided opportunities for challenge, exploration and discovery in the form of challenging first ascents for well-to-do climbers.

Eric Higgs provides the capstone chapter which seeks to bridge the gap between the cultural understanding of wilderness and the pursuit of restoring and protecting ecological systems.



After describing results from the Rocky Mountain Repeat Photography Project (<http://bridgland.sunsite.ualberta.ca/>), Higgs' chapter successfully connects the previous essays. He does so by explaining the need for a deeper cultural understanding of the wilderness and human environment interactions at the local scale. He suggests that "*engagement with wildness...creates the respect necessary to ensure that wild places flourish.*" Understanding the linkages between cultural and ecological history, he argues, is necessary before the serious questions about how to maintain or restore ecological integrity can begin to be addressed.

Another strength of the book is that by starting with the premise that Jasper is a cultured landscape it truly lays bare the idea that protected areas are devoid of human influences. This allows for an advanced discussion about the past, present and future role of humans in the park ecosystem that has so far been lacking at this level of detail and regional focus. The respective roles of a cast of players including fur traders, homesteaders, early park administrators, tourism promoters and ecosystem

managers in shaping the current ecosystem in the park are discussed at length throughout the chapters of the book. They tell successfully the human story of what is often viewed exclusively as a natural landscape.

However, two weaknesses emerge in the volume's attempt to understand the cultural history of the region. Four fold-out colour maps are provided showing the park boundaries at different points in time. Unfortunately, while the human features of the maps, such as roads, boundaries and railways, change through time the water features are based on 2006 data. This ignores the changes caused by hydro electric development on the Columbia and North Saskatchewan watersheds. This could be dismissed as an oversight considering that maps contribute to the cultural understanding of the ecological systems that the authors seek to explain. However, it also shows how difficult it is to build a complete cultural inventory of a regional park ecosystem. Secondly, the role of First Nations is only covered as they related to themes covered in the other chapters. The strong ties of First Nations people to the land and the positive contributions

of aboriginal approaches to natural resource management, such as Traditional Ecological Knowledge, surely justifies a separate chapter.

These weaknesses aside MacLaren puts together a solid volume with enough striking images to create the aura of a coffee table book but with the intensity of research and depth of analysis that places it in good company with academic pieces. The text is supported with a full bibliography, in text citations, and a keyword index. The book likely will appeal to those looking for regional information about the human history of Jasper National Park and conservation in the surrounding areas, students of wilderness who wish to understand how our construction of wilderness has changed over time, particularly in the regional context, and wilderness activists who wish to contextualize current conservation campaigns and learn from the lessons of the past.

If it has been said that managing protected areas is really about managing people, this volume provides the much needed step toward bridging the gap between our ecological and cultural understandings of protected areas. 🍷

## LETTERS TO THE EDITOR

### *Recall of the Wild: Gordon Kerr*

Congratulations for your excellent article about Gordon Kerr in the Recall of the Wild section in the last issue of *Wild Lands Advocate*. You made a significant contribution by finding out about this former public servant and outlining his views and activities on conservation. I had been with the Canadian Wildlife Service for 42 years (I am still an Emeritus Research Scientist) and during that time served under at least eleven Regional Directors (may have lost count on one or two of them). No one, after leaving the Service, has continued to

work as effectively as Gordon did on habitat conservation in Alberta. Frankly, I felt badly that his work was always kept at a low profile and, it seemed to me, that he should have been given more recognition. But as you have pointed out, Gordon Kerr is not one to brag about his accomplishments. He is a very modest man and a person with great insights and abilities. I have often wished that the many other gifted and retired administrators within government agencies would show as much dedication to making this a better world. The same applies to the many capable technicians, biologists and research scientists, who

have come and gone and then disappear from the "radar screen." Gordon Kerr's dedication clearly shows that, no matter how very rapid the changes are or how difficult it may be to find solutions, one should never underestimate the POWER OF THE INDIVIDUAL to at least try to make a difference. Many battles are lost or won, but we cannot expect to win any battles if we are not in there trying to make a difference.

Lu Carbyn  
Adjunct Professor,  
University of Alberta  
Emeritus Research Scientist,  
Canadian Wildlife Service.

### *Frank Coggins: Respect for the Uniform – National Park Warden and Back Country Patrolman*

By Vivian Pharis

Born and bred in the Alberta forest, Frank Coggins grew up near Brule, on the banks of the upper Athabasca River and on the doorstep of Willmore Wilderness Park.

It was natural therefore, that as a young man he would expect a backcountry career. His father had been a forest ranger, so young Frank's early education included all the practicalities of rural life - operating equipment, handling tools and animals, even taming broncos.

A summer position in 1952 on a Jasper Park trail crew became the start of a 35-year career. His eventual goal was to be a warden in that park jewel, Kluane. Although his postings took him from the extreme north of Alberta to the extreme south, he never got to Kluane.

Before becoming a warden, Frank proved his worth by ably operating heavy equipment in Banff and breaking in new and cranky horses for the service at Ya Ha Tinda Ranch. Later he would take NAIT's 4-year Resource Conservation course, crammed into 6 weeks, and other training including ski and mountain rescue that he did not enjoy, but found valuable during many searches for lost travelers in the parks.

By 1957 Frank was wearing a warden's uniform and was in charge of the remotely beautiful Clearwater District near Banff's eastern boundary. His duties were to ride or snowshoe the entire district once a month, clear trails, take stock of human and animal activities and report to headquarters.

While on duty in the town of Banff in 1958, Frank ticketed a young woman for allowing her dog to roam at large and it was an auspicious fine. "She didn't hold it against me" chuckled Frank, as Colleen sighed (she's heard this before) while I interviewed them in their Sundre kitchen this November. They married and were assigned to Stony Creek, about 20 km upstream from Lake Minnewanka. This would be their favorite



*Frank Coggins*

and most memorable park home. Colleen Mooney's was an established Banff area family, with uncles in the warden's service and her father the curator of the Banff Museum. She knew well the life she had married into.

As with forest rangers, a warden with a wife usually meant two hard-working recruits for the price of one. A married couple would be issued four horses instead of two and equipped with a rifle, shotgun, revolver, snug cabin, corral and horse feed. A dog usually rounded out the team. As Frank says, 90 percent of wardens had dogs for companionship and protection. Not all dogs enjoyed their duty and the Coggins had one that so disliked a rascal of a bear at Stony that it went miles back to safety. This bear hung around them for two or three summers and they never did know if it was truly dangerous, but it would wait in ambush for them. Frank says that sometimes they had to scurry up a tree; this evasive manoeuvre confused this bear so that she would pace back and forth trying to find where the scent had gone but never looked up.

Patrolling park boundaries during hunting season was another annual duty. Park trophies have long been magnets to

unscrupulous hunters and guides. Frank's Stony Creek district no exception, as it bordered the provincial headwaters of Burnt Timber Creek and the Ghost River. On one occasion, Frank was instrumental in nabbing Calgary poachers, but not before a number of trophy bighorns, mountain goats, elk and a grizzly were taken out of the remote Dormer area. Guides took in American hunters who may not have even known they were in the park. A young porter had been hired to backpack the trophies into the North Ghost; he turned informant after he was double-crossed by being denied a trophy hunt of his own. Frank ferreted out the evidence on the ground before he brought in Alberta Fish and Wildlife Officers. This evidence was matched to heads and hides in Calgary freezers.

A confused, ambushing grizzly was probably not the most fearsome park animal Frank had to face. After various postings in Banff and Kootenay parks, the Coggins were assigned to Wood Buffalo National Park from 1968 to 1972. It was a demanding role and Frank was often forced to leave for days on end his young family that by now had expanded to include two sons. Controlling fires became his main duty. The year 1969 saw him handling crews fighting 20 fires in the park, but by 1972, he was dealing with over 70 fires. That year he spent only four nights at home between April and the extinguishing snows of December. But, the memories of dealing with bison still raise the hair on the back of Frank's neck.

During his wardenship at Wood Buffalo, he constantly captured and slaughtered bison for testing because tuberculosis, anthrax and brucellosis infected many of the 15,000 or so bison. In the dead of the cold winter of 1971, Frank got an emergency call from Ottawa that residents of Fort Chipewyan and other area reserves were on the point of starvation. He was ordered to shoot several hundred bison to stave off a human tragedy. Using an enclosed Bombardier, and assigned a young woman veterinarian to blood test downed animals, he and a small crew set



forth. It was so cold that the veterinarian developed blisters on her fingers from gathering samples. Frank's body suffered too, from repeatedly firing the 375 mm magnum rifle needed to bring down bison. Despite about 6 layers of padding, he became black and blue down his entire right side from the gun's kick.

Although he seldom missed his shot behind the outstretched front leg of a running animal, one mature bull failed to go down and Frank ended up facing it on foot and away from the Bombardier. It turned square on, forcing Frank to take head shots. The 300-grain bullets just bounced off the thick skull and maddened the bull. Those in the Bombadier realized the predicament in the nick of time and were able to administer a side shot.

After the action-filled years in Wood Buffalo, one might think the Coggins would have enjoyed a plum position at Waterton Lakes National Park. Colleen and the boys did, but Frank's feet were itchy and he yearned for Kluane. It never happened though, and Frank's last years in the warden's service were spent in Waterton, where he was told he was "needed" until he retired in 1987.

Frank and Colleen prepared for retirement by buying a property west of

Sundre and moved there in 1987. But Frank could not stay idle long; once his range of practical skills was discovered he found himself working far more hours than he wanted. In 1993, though, a job he could not resist came his way. He soon found himself back in familiar surroundings doing the things he loved – living out of a log cabin, riding, observing, clearing trails and making new ones where they were needed. He had become a back country patrolman for Sustainable Resource Development, his district being the Panther Corners and Red Deer River area in the vicinity of Ya Ha Tinda Ranch. His work had come full circle and he was back where he had began.

Though obviously content now in his Sundre setting, his fourteen years with SRD became increasingly frustrating. Work evolved from the back country patrols and trail work that he loved to front country maintenance and increasing supervision of the growing numbers of people using trailhead campgrounds on the Panther River and near Ya Ha Tinda. Up to 700 people, many with horses and some with ORVs often descended on the area. To Frank these new-age users are a different breed. He explains that while baby boomers may use the

back country, their kids are glued to computers. Frank has seen back country use drop and the front country become a zoo of activity. He feels a land ethic is missing now and people have the attitude that public lands are at their disposal and nobody, uniformed or not, has authority to tell them otherwise. He feels that new equestrian and ATV users share this attitude and it obviously hurts him.

With accelerated activity on the fringes of the back country and a new attitude of disdain for authority, SRD has seen fit to end its official oversight of backcountry recreation. In 2006, Frank and the last 2 other back country patrolmen left on the Eastern Slopes were laid off. Young guardians, often without experience or background were hired to replace them, but were given no horses to get around in the back country. Last year budget cuts meant not even these young guardians were hired and at a recent meeting between SRD and AWA, we were told there would be no guardians in 2010. This is a sad finish to a distinguished career, but Frank and Colleen's tough, practical life has equipped them to carry on with other interests with heads held high and good memories intact. 🍷

## EVENTS

### TUESDAY TALKS

Pre-registration is required for all talks

Time: 7:00 p.m.

Cost: \$5 for adults, \$1 for children

Information/Reservations

Online: [www.Albertawilderness.ca](http://www.Albertawilderness.ca)

Phone: (403) 283-2025

Toll-free: 1-866-313-0713

January 12, 2010

#### LETHBRIDGE

Helen Schuler Coulee Centre

#### HAY-ZAMA WILDLAND PARK

– A VISIT WITH ITS TWIN

#### DALAI LAKE, INNER MONGOLIA

With *Cliff Wallis and Christyann Olson*

This northwestern Alberta site is globally recognized under the Ramsar Wetlands Convention. Cliff and Christyann will highlight Hay-Zama Wildland Park, one of Alberta's best conservation

success stories and the ground-breaking conservation work AWA is part of with Hay-Zama and its twin park Dalai Lakes Nature Reserve in Inner Mongolia.

January 19, 2010

#### EDMONTON

Public Library, Stanely A. Milner Branch

#### ARE BOREAL FORESTS SILENT OR JUST SINGING A DIFFERENT TUNE?

With *Dr. Erin Bayne*

Dr. Erin Bayne will present a photographic overview of the consequences of changing land-use practices in the boreal forest. The implications of these changes for boreal biodiversity will be discussed, with an emphasis on how bird communities are changing and why.

### WINTER HIKE

February 2, 2010

#### SHEEP RIVER VALLEY

Join AWA's Nigel Douglas for a hike in the Sheep River valley, and a chance to make the most of this spectacular time of year.

Cost: \$25.00 for AWA members,

\$30.00 for non-members

Pre-registration is required.

### MUSIC FOR THE WILD

January 30, 2010

#### CALGARY

Watch our website for details.

# WILD ALBERTA

## YOUR GIFT FOR WILDERNESS

*Every winter, Alberta Wilderness Association asks members and donors to consider making a gift to help create awareness and increase protection of our wildlands, wildlife, and wild water.*



PHOTO: D. OLSON

### Will you help us this year?

Please consider the difference you can make by taking a stand and helping AWA. Here are some ideas.

- Send a cash donation by cheque, credit card, or online at <http://shop.albertawilderness.ca>.
- Ask your employer to match your donation to AWA.
- Support the *Wild Lands Advocate* by purchasing a subscription.
- Join Wilderness Partners and become a monthly donor.
- Purchase a gift membership for someone who cares about wilderness.
- Make a memorial donation in memory of loved ones.
- Make a gift of publicly listed securities and save capital gains taxes.
- Make a contribution to the Alberta Wilderness and Wildlife Trust – our legacy fund managed by the Calgary Foundation.
- Leave a gift in your will. Our charitable business number is 11878 1251 RR0001.



Every gift you make helps and is sincerely appreciated.  
For more information, call (403) 283-2025 or (toll-free) 1-866-313-0713.  
All charitable donations qualify for a tax-deductible receipt.

Return Undeliverable Canadian Addresses to:



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

