

VOLUME 36 | NUMBER 4 | WINTER 2007

# Nature Alberta

ALBERTA'S NATURAL HISTORY REVIEW



**DINOSAUR PROVINCIAL PARK** IAN GARDINER  
PHOTOGRAPHED IN JANUARY 2001 USING A NIKON F3HP CAMERA, A NIKON SERIES E 25-150 MM ZOOM LENS AND KODACHROME 64 SLIDE FILM

*feature article*

## Northern Native Grasslands At Risk

FEDERATION OF ALBERTA NATURALISTS



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Birgit Freybe Bateman

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The Federation of Alberta Naturalists is composed of natural history clubs from across the province. The aims of the Federation are:

- (a) To encourage among all Albertans, by all means possible, an increase in their knowledge of natural history and understanding of ecological processes;
- (b) To promote an increase in the exchange of information and views among natural history clubs and societies in Alberta;
- (c) To foster and assist in the formation of additional natural history clubs and societies in Alberta;
- (d) To promote the establishment of natural areas and nature reserves, to conserve and protect species, communities or other features of interest;
- (e) To organize, or coordinate symposia, conferences, field meetings, nature camps, research and other activities whether of a similar or dissimilar nature;
- (f) To provide the naturalists of Alberta with a forum in which questions relating to the conservation of the natural environment may be discussed, so that united positions can be developed on them, and to provide the means of translating these positions into appropriate actions.

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## P R E S I D E N T ' S P A G E

# It is winter now...

BY SANDRA FOSS

*...and it is so cold out that snow crunches underfoot, and the “mist” rising off the river coats all the bushes with hoar frost. At least we have gloriously clear sunny days in Alberta when it is really cold.*

When I walk along the Bow River, I often see Common Mergansers. They overwinter, and only disappear from sight when the river is frozen solid, which seldom happens in this hydro peaking river (the water levels rise and fall daily, which keeps the river open). Flocks of up to sixty birds disappear into the morning mist, as they cruise and fish their way downstream. The flocks sound like goldeneyes when they fly overhead.

Across the river from where I walk, bulldozers have been hard at it since the end of October. The deer appear quite confused as to what is happening to their home, and our 6 o'clock owl (Great Horned Owl) – so named for when he calls will be looking for a new nest spot soon too.

I see flocks of Bohemian Waxwings cruising my neighbourhood, and picking the crabapples on my tree, at least until the local Merlin appears. There is a Downy Woodpecker

who calls regularly at the feeder with suet in it, as well as lots of Black-capped Chickadees, Red & White-breasted Nuthatches and many magpies. Occasionally I spot a Rough-legged Hawk cruising by my window.

The long dark nights are shortening up, and soon it will be spring. I do enjoy winter, as long as I can get out on my cross country skis to enjoy it. With spring on the way, I hope you have all ordered your garden seeds, but if you haven't, it's not too late. Try one of the wonderful heritage seed companies where the fruit and vegetables are chosen because they taste good and are nutritionally superior, and not because they handle well in a mechanical harvester, or have been bred to repel insects! Even if you are in an apartment, put a few lettuce seeds in a pot, and maybe a few herbs, or edge your flowerbeds with a food crop. My basil always does better in the house than in my garden, and it is wonderful to have that fresh

taste of spring! If you are lucky enough to have space, try a fruit (or nut) tree, or some berry bushes. My policy has always been to plant food trees, or edible plants around my house, wherever possible. It could be bird or butterfly edible too.

When you have your garden plan, you need to find a good source for seeds. Often, seeds available locally are hybrids, many likely genetically modified. I have purchased by mail from Stoke's Seeds, among others, for many years. Check out Seeds of Diversity – Canada's heritage seed program at [www.seeds.ca/en.php](http://www.seeds.ca/en.php). They have lists and links to many different organic & heritage seed companies in Alberta and across Canada. Some excellent garden references (how to, and why you should!) are found in Thomas Pawlick's "The End of Food", ISBN 1-56980-302-1, published by Barricade Books Inc. 2006.

Happy gardening!

## EDITOR'S PAGE

# Define, Deny, Distract, Delay...

BY BRIAN PARKER

*Here we go again. We are facing the most significant environmental problem in our history, global warming caused by anthropogenic greenhouse gas (GHG) emissions. And all we see in the way of leadership from the new federal government is a carefully crafted public relations campaign designed to thwart efforts to bring the problem to heel.*

There is a terrible irony in all of this: Canada will be among the nations most severely affected by global warming and yet we are among the most intransigent when it comes to taking action. But let's take a closer look at the public relations campaign. It's an interesting study and we all should understand how it is intended to work.

The first facet of the campaign is to Define the issue in language that is least disturbing to the public. Hence we see "global warming" redefined as "climate change". Why? Because the government correctly perceives that the public responds with more concern to warnings of global warming than of climate change. After all, everyone knows climate change is *normal*, climate has been changing for millennia. The use of 'climate

change' thus lessens public anxiety and reduces pressure on the government to act.

The second facet of the campaign is Denial. We *can't* make significant emission reductions we are told, it is either too expensive or we don't have the necessary technology in place. We *could never* meet Kyoto objectives by the stated deadline. And there is *no* scientific consensus on global warming.

Denial and Definition tie together neatly. If we can be convinced climate change is normal, that there is no scientific consensus on climate change, and we can't meet emission objectives even if we wanted to, then perhaps we will begin asking ourselves if we should implement GHG emissions reductions at all.

The third facet of the campaign is Distraction. To Distract our attention from global warming we're informed of a *real* honest-to-God pollution problem that we *really can* do something about: smog. We are offered, with great fanfare, a new Clean Air Act to address the poor quality of the air in our major cities. And while we are all preoccupied with implementing the latter we come to the last facet of the campaign: Delay. Delay is the crux of the issue from the federal government's perspective: if the campaign is successful the government can Delay reducing GHG emissions for the foreseeable future.

Define, Deny, Distract and Delay, it's a simple and effective approach to manipulating and placating the population



## EDITOR'S PAGE

while doing nothing to slow down global warming. If it all sounds familiar, it is. The approach is identical to that used by the Bush administration to avoid being pressured into implementing GHG emissions controls in the US.

So how do we defeat the carefully crafted spin on this and other issues and at the same time sidestep public perception that environmental interests (EIs)

are “extremist” or “radicalized” and not to be trusted. The key, it seems to me, is changing the way EIs do business. They must go beyond simply pointing out to the public that our country is standing on the railway tracks, looking the wrong way, in front of an oncoming freight train. EIs need to develop a broadly-based alternative vision similar in scope to that of the hard right. They must offer comprehensive,

defensible, well-thought alternative environmental, social and economic policy and, in particular, promote the myriad benefits of changing our ways. The hard right has spent the last 20 years carefully researching, crafting and promoting its agenda, and it has become increasingly effective at manipulating public opinion. It's about time EIs paid attention and learned to do the same.

*“One of the greatest pains to human nature is the pain of a new idea.”*

WALTER BAGEHOT (1826-1877)

## LETTER TO THE EDITOR

## Dear Editor:

BY DENNIS BARESCO

The inside back cover of the Fall 2006 issue omitted the location of the excellent Hans Mueller photos of a nesting Canada Goose in an old fallen plains cottonwood. If you guessed Police Point Park in Medicine Hat, you're right!

The # 1 preferred nesting site for Canada Geese that have overwintered in the 'Hat seems to be the large open cavities in the old – 250 to 300 years old! – gnarly, giant Plains Cottonwoods in Police Point Park, especially the standing ones (live or dead). The main reason might be that the nest is virtually predator proof and can be started much earlier than most ground nests.

The spectacle of Canada Geese choosing, then protecting, their chosen tree is something to behold. The ritual begins in February – coincidentally, usually on or close to Valentine's Day – and is interrupted only by unsettled winter weather conditions. Numerous noisy pairs circle the park, landing and taking off high up in the trees. Should another pair approach a “taken” tree, the honking becomes frenzied. Occasionally, a goose will try to land on an occupied cottonwood, which sometimes results in the very weird sight of these heavy creatures actually hovering for a few seconds!

Police Point's Canada Geese in trees provide a unique early spring opportunity for birders, photographers and anyone interested in seeing natural things out of the ordinary.

## EDITOR'S NOTE:

As both Ernie Kuyt (page 15) and Dennis Baresco discuss, Canada Geese may choose to nest in trees. Adding to these observations, for several years in the mid-1990s your Editor observed Canada Geese nesting in an old Red-tailed Hawk nest at the NW corner of Parkland Natural Area, several miles east of the community of Ministik.

## ALBERTA ISSUES

## Motorcycle & ATV Manufacturer's Code of Ethics for Advertising

FAN and the Alberta Off Highway Vehicle Association (AOHVA) are working on an ethical advertising message campaign for Off Highway Vehicle (OHV) manufacturers. This would include big trucks, quads, SUVs, 4x4s and similar vehicles. Motorcycle manufacturers have already adopted an advertising code of ethics. Because the AOHVA ([www.aohva.com](http://www.aohva.com)) group is a heavy consumer of OHV products, we feel that working with them will have more impact than either of our groups acting independently.

FAN has been sending complaints to natural history organizations about inappropriate ads they run in

their magazines (See Dennis Baresco's article on page 9 for examples). If you see particularly offensive ads, record the pertinent information or send a copy to FAN President S. Foss, or to the office for her attention, and we will deal with them.

On the Off Highway Vehicle front, you might find the research and information on a couple of these US websites of interest.

Wilds Centre for Preventing Roads ([www.wildlandscpr.org](http://www.wildlandscpr.org))

National Trails and Waters Coalition ([www.naturaltrails.org](http://www.naturaltrails.org))

Great Old Broads for Wilderness ([www.greatoldbroads.org](http://www.greatoldbroads.org))

## Feedback

Feedback from previous Issues Pages asked why we didn't include a list of solutions to the concerns we raised. If it was only that easy! For most of the issues, the answer is the same: Write to your government representatives and ask for change.

If you need help to find out who to write to: Check the governments' websites. Federal government at [www.parl.gc.ca](http://www.parl.gc.ca) or Alberta at [www.assembly.ab.ca/lao/mla/mla\\_help.htm](http://www.assembly.ab.ca/lao/mla/mla_help.htm).

## Southern Foothills Study

The purpose of the Southern Foothills Study is to create a base of accurate data on cumulative land use trends within the study area in the Porcupine Hills. It is a unique cumulative effects study being initiated by local residents, not government, that will look at all activities that change the landscape. The proposed study is important to provide background data for

informed land use planning and to understand the potential effect of all types of land use development on an ecosystem that provides significant ecological goods and services to Alberta.

Many people who live and work in the study area are concerned that the wave of land use pressures, which include activities such as

recreation, mining, agriculture, forestry, residential acreages, and conventional and non-conventional oil and gas development, will irreparably alter and perhaps damage this key watershed, the ecosystem, and the culture that stewards it.

For further information and a list of supporters please visit: [www.salts-landtrust.org/sfs](http://www.salts-landtrust.org/sfs)

## ALBERTA ISSUES

## Suffield National Wildlife Area

Intervenor funding has been granted to several organizations participating in the environmental impact assessment: Alberta Wilderness Association for biological/cumulative effects, Nature Canada for legislative matters and international treaties, and Grasslands Naturalists for the economic analysis and viability of the project.

FAN and Grasslands Naturalists Board Members, some of the Suffield Coalition Committee and writer Andrew Nikiforuk had a field trip to the National Wildlife Area in October, as part of the FAN Board meeting. We saw some of the historical

sites - medicine wheels, tepee rings, some of the areas where endangered species occur, and a few of the many impacts of gas extraction. We saw deer and Pronghorn, Coyotes, some meadowlarks and even a Harlan's Hawk.

A recently released report on Land Spraying While Drilling (LWD) revealed a number of "operational deficiencies", which led to negative environmental effects on grasslands at CFB Suffield and elsewhere. A moratorium was placed on LWD on public lands but the practice still continues on pipeline rights-of-way at CFB Suffield, although we were told "the record

keeping is not good". We visited a site where drilling sludge had been applied too thickly and five years later the site is still occupied by invasive weeds. On the trip we learned EnCana is pressing the Base Commander to allow LWD elsewhere on native grassland in CFB Suffield and that EnCana is doing its own studies on LWD plots at Suffield with results to be released in a year or two. The LWD review by Alberta Sustainable Resource Development was written in 2003 but was prevented from being released by Alberta Energy/Industry(?) probably because it revealed glaring flaws in the way industry operates, including failure to meet standards.

## Thaydene Nene National Park Candidate

This national park candidate was first nominated in the 1970's, to represent Natural Region 17, Northwestern boreal uplands. Thaydene Nene, meaning "land of our ancestors", will protect thousands of km<sup>2</sup> of spruce forest, glacially-formed lakes and one-foot thick carpets of lichens that blanket the ground between the trees. Vast bands of caribou mass up on the edge of the woods and spend the harshest winter months in the spruce and pine forests. The region is home to fur-bearing creatures such as Lynx, wolf, Red Fox, Wolverine and Marten as well as Moose and

Black Bear. Lake Trout, whitefish and huge Northern Pike thrive in the cold, nutrient-poor lakes and rivers.

In October 2006, a memorandum of understanding was signed between the federal government and the Lutsel K'e First Nation to begin the process of assessing the feasibility of this area of interest (now 33,000 km<sup>2</sup>). It was nominated by the Lutsel K'e Dene First Nation and is located within their traditional territory. This area has high mineral exploration potential, particularly uranium, with claims

being staked within the proposed park area. The main issue at this stage will be deferring claim staking activity until the lands are formally withdrawn through the Territorial Lands Act.

This park candidate has recently picked up momentum and at the request of the Lutsel K'e First Nation, Nature Canada (and other environmental organizations) have actively voiced support for the establishment of this park. Nature Canada has urged government to do a full environmental assessment on a proposal for a uranium mine and raised awareness on their website [www.naturecanada.ca](http://www.naturecanada.ca). For more information, check out the website!



## ALBERTA ISSUES

## Looking Ahead

The “new” Federal Government is creating for itself an abysmal record on everything involving the environment, including climate change and endangered species. Funding has been cut, decisions have been delayed, and actions are being postponed. Make a difference in the next election: actively support an individual or political party that includes strong environmental policies in its platform!

## New Alberta Parks Plan

The Alberta government is developing a new Parks Plan in relative secrecy. If you want to protect and enhance the current parks system, please remind your MLA that Alberta Parks are important to you! If you don't know who your MLA is or how to contact them, look in: [www.alberta.ca](http://www.alberta.ca).

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## Conservation Groups Sue Federal Government

Conservation groups have filed a lawsuit against federal Environment Minister Rona Ambrose for her ministry's refusal to identify critical habitat in the recovery strategy for the endangered Piping Plover. They argue that by neglecting to identify critical habitat for the Piping Plover, the government is failing to properly implement the Species at Risk Act (SARA). SARA protects the habitat of endangered species only if it is specifically identified.



## MUSKRAT

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# Visitor at the Fishing Hole

BY LAURIE L. LYWAK



*This ice fishing trip was about to become one of the most memorable ever. We, my husband and I, woke up early, eager to get the day underway.*

The alarm clock by the bed went off and we were quickly out of bed. Lunch was made – hot chocolate, sandwiches and snacks - fishing gear gathered and warm clothes packed. Quickly, we loaded our truck and began the drive out of Edmonton, heading west on highway 16 to Wabamun Lake. Wabamun Lake was a good early winter fishing lake for Northern Pike and Lake Whitefish, at least before the oil spill.

We arrived at the lake and parked in our usual spot. The mild temperature, just below freezing, the wind blowing gently from the west and the early morning sun warming our faces, were in our favour. We loaded our gear onto a toboggan and set out onto the ice towards our favorite spot. Many fishers were already out drilling holes and setting up their shelters. The ice was about 8 inches thick, enough to support a small army, but was shifting slightly, resulting in loud booming noises. It sounded like a war was going on under the ice. We set up our rods and lures and I unrolled my big

black tarp and foamie from our duffle bag. I lay on the foam, which insulates me from the cold and allows me to spend hours on the ice looking down the hole. I quickly pulled the tarp over my head, which lets me see well under the ice, and started fishing.

Life under the tarp is interesting and filled with surprises. Lying down, my face is close to the hole, usually within 6 inches of the water's surface. Fish are easily visible as they swim about. Smaller fish such as Yellow Perch often spend several minutes pecking at bait, while large whitefish simply swim in and inhale the baited hook or lure. Pike often appear as a slashing blur as they rush in from beyond the edge of my vision. Some fish approach only to spend several minutes staring at the bait or lure before they swim on, apparently suspicious something isn't quite right.

On this day, I was jigging a small metal lure that 'danced' in the water with each pull on the line. After about an hour I had caught and released several pike and whitefish. Then, unexpectedly, a shimmering, silvery-brown blob

appeared at the bottom of the hole! It turned up into the hole and rose to the surface, paying no attention to my fishing tackle. I had no time to respond, my only option was to stay quiet and observe from only a few inches away. As the creature reached the surface it stretched out its forepaws and clung to the edge of the ice hole. I watched its small body move up and down with each breath. Its eyes shone, looking straight up into mine. Air bubbles trapped in its fur coat slowly bubbled out into the water. Its leathery tail curled around the inside of the far side of the ice hole. After several minutes it let go of the ice, turned its head down and swam back down the hole with several strong kicks of its hind legs, quickly slipping past the bottom edge of the hole and disappearing from my sight. I continued fishing at the same hole for another hour and a half and during this time, it made several more visits, each about 20 minutes apart and lasting 2 to 3 minutes. This little creature, a Muskrat, was using my fishing hole as a breathing hole!

I have spent many hours ice fishing over the past two decades, but this experience was unique. We were two creatures sharing a small hole in the ice: one seeking the air above, one in search of the fish below.

# Advertising Power

BY DENNIS BARESCO

*In today's society, advertising – whether written, on TV, radio or the Web – is probably the most powerful and persuasive method there is in sending a message to the public.*

Quality ads not only give awareness and inform; they also touch us emotionally and influence our thoughts subconsciously. Somewhat indirectly, that's also why advertisers are so sensitive about offending or even giving the perception of offending the buying masses.

For those of us with an "agenda" (eg., the naturalist agenda is to assist people to respect and protect nature), an offensive or unethical ad presents us with an opportunity – and an easily accomplished one, at that! – to do something for nature that may well have an effect many times greater than the effort required. Think about it: even a single letter to a magazine pointing out an unethical ad could result in several hundred thousand people NOT being negatively influenced in the future!

I've seen two examples of unethical ads recently:

- 1) in *Canadian Geographic Travel Special Issue* (Winter

2006-2007, pg 27), a Toyota Tacoma is shown towing another vehicle in a creek. The message is: Don't worry about getting stuck as you rip n' roar through mountain creeks in your Toyota truck. The subconscious message: creeks are for rugged driving. For shame, Canadian Geographic – and Toyota!

- 2) In *Audubon Magazine* (Sept-Oct 2006, pg 45), there is an ad by Arizona showing a jet-ski zooming through a gap in reeds. In the greatest irony, the ad is promoting bird watching. Yes, there's nothing birders like more than a screaming jet-ski! The overt message is: Adventure, speed, and great birding in AZ. The subconscious message: adventure & speed are the priority use for lakes and reed beds.

When you see such ads, you have an opportunity to do something very positive

for nature. Simply write the advertiser(s) and let them know how you feel. Email, fax, phone, and snail mail addresses are always written somewhere in magazines.

Equally effective, if not more so, you can contact Advertising Standards of Canada. They investigate after receiving even one complaint. Go to their website for info: [www.adstandards.com](http://www.adstandards.com).

You don't need to get Pulitzer Prize fancy; simply identify the ad, why you find it offensive or unethical, what you hope they'll do about it, and who you are.

## Remember:

*your one message could easily affect half-a-million people. Talk about good return on your investment!*



# Northern Native Grasslands At Risk

BY MARGOT HERVIEUX

*Kleskun Hill Natural Area, located about 50 km east of Grande Prairie, protects 90 ha (220 acres) of upland native prairie in the Peace River Parkland natural sub-region of north-western Alberta.*

These grasslands contain a unique assemblage of plants and animals, many of which are more typically associated with the southern prairie. Plants at the northern end of their range include Prickly Pear Cactus, Tufted White Prairie Aster, and Low Goldenrod. Prairie birds found in the hills include Western Meadowlark, Vesper

Sparrow, Upland Sandpiper and Say's Phoebe. There are also at least eight species of grassland butterfly, and a number of species of moth, with disjunct populations in the Peace River Parkland; five of these butterflies are found in the Kleskun Hill Natural Area.

Over the past five years, the Alberta Conservation Association

(ACA) has compiled an inventory of remaining native grassland in the Peace region. Historically, there were three major areas of prairie covering as much as a million ha around Grande Prairie, along the north side of the Peace River and around Spirit River. According to the ACA study, less than half of one percent of the upland





PRAIRIE CROCUS MARGOT HERVIEUX

grassland remains. Almost all of the remnants are less than 16 ha in size and Kleskun Hill Natural Area is one of only two protected areas containing native upland grassland in the entire Peace River Parkland.

In addition to remnant native prairie, Kleskun Hill Natural Area also protects eroded hills with exposed sand and siltstone formations dating back over 80 million years. A variety of fossils have been found in and around the site including dinosaur bone fragments. The most significant finds are microfossils belonging to an assemblage of small mammals and reptiles.

This nationally significant protected area is now being threatened by a sub-division proposal. The County of Grande Prairie is currently considering an application for rezoning 36 ha of native grassland on the southern boundary of the natural area for country residential development. This type of development would seriously threaten the ecological integrity of the native prairie due to the lack of buffers, inappropriate and uncontrolled recreational activity, invasive plants and pet predation on grassland birds. Native prairie and potential fossil locations would also be destroyed on the development site.

In response to this proposal, the Peace Parkland Naturalists, in partnership with the Nature Conservancy of Canada, the Alberta Conservation Association and others, are attempting to purchase two parcels of land adjacent to the natural area in order to conserve some of this critical habitat.

*Anyone requiring more information or wishing to assist with this fund raising project can contact Margot Hervieux at [hervieux@telusplanet.net](mailto:hervieux@telusplanet.net) or (780) 539-6102.*

# An Historical Perspective on Alberta's Current Wolf War

BY DICK DEKKER

*Alberta's on-again off-again war on wolves started soon after the arrival of the Europeans. They employed all available lethal means, including guns, traps and poison.*

But what sealed the wolf's doom was the simultaneous destruction of its food base: the hoofed mammals. By the end of the 18<sup>th</sup> century, human greed had robbed most of this province of its edible and fur-bearing wildlife.

A change for the better began in the early 1900s with the enactment of game laws and the establishment of our national parks. Deer, Elk, and Moose made a slow come-back, but the return of the wolf was seen with misgivings. During the 1940s, they were shot on sight in Banff and Jasper National Parks.

In 1952-55, Alberta unleashed the most intensive poisoning campaign ever, anytime, anywhere. The stated reason was that rabies had been identified in a northern fox. To prevent the feared disease from spreading south, the province intended to exterminate all wild canids in a wide buffer zone around human settlements. To that end, government agents distributed nearly one million units of cyanide and strychnine

to trappers and landowners. There were 800 fluoro-acetate bait stations in the final year of the campaign. The official tally of the victims was 5,200 wolves, 171,000 Coyotes, and 55,000 foxes. Non-target predators and scavengers eating from the poison baits were decimated as well, including martens, Lynx, bears, eagles and Ravens (Dekker 1997).

A more respectful age for wildlife dawned in the 1960s. Among the increasingly urban public, nature appreciation grew and we embraced all of our warm-blooded fellow creatures, including the formerly despised and persecuted carnivores. Celebrated in magazines, books and films, the big bad wolf of lore went through a metamorphosis and became as popular and harmless as Bambi. Attitudes among professional wildlife managers changed as well. Their slogan --to borrow a famous phrase from the Beatles-- became "let it be." The theory was that human hunters had no reason to begrudge the wolf his

prey. In a well-balanced ecosystem, large predators were said to function as agents of health, weeding out the weak and infirm among their prey species. Alberta's wolves were allowed to make a natural come-back. Family packs grew in number and size, repopulating parts of their former range and dispersing into adjacent farmlands. There, the setting of poison baits became a common routine for Fish and Wildlife officers. Hunters, however, had little reason to complain. Due to the previous scarcity of predators, mild winters and good game regulations, hoofed mammals were abundant on wilderness lands.

The armistice in the war on wolves barely lasted a decade. The pendulum of tolerance was about to swing the other way again. At the whim of Mother Nature, large mammal abundance is subject to cyclic highs and lows. In the early 1970s, superimposed on the rising numbers of carnivores, the herbivores were hit hard by a series of severe winters. Food-stressed and harassed Moose and Elk abundance collapsed. After many detailed field studies on predation, the theories of wildlife



## An Historical Perspective on Alberta's Current Wolf War...continued

managers came full circle. Too many wolves were killing too many hoofed mammals in direct competition with human hunters and outfitters. Calls for remedial action followed. On December 29, 1982, *The Edmonton Journal* ran a story headlined "Wolf population explosion raises howls for controls." The war on wolves resumed full blast during the eighties. It started in Alaska. British Columbia and Yukon soon followed. The objectives were straightforward: to make more venison and trophies available for human hunters on wilderness lands. However, this time around, the biologists shied away from using poison baits. Instead, they reverted to a method considered more humane and inspired by the Vietnam war: search and destroy with helicopter gunships.

The imagery of government personnel shotgunning a spooked pack of wolves from the air shocked the largely non-hunting public and sparked a tidal wave of protest in the national and international media. It led to a frenzy of demonstrations in California and tourism boycotts in Alaska. Despite an ever escalating chorus of protest, led by environmental crusader Paul Watson, regional biologists in British Columbia persisted in

shooting wolves. However, in the spring of 1986, they were reined in by their political masters. The stop order followed on the heels of an announcement by "Friends of The Wolf" and their American affiliates that they were planning a major tourism boycott at Expo '86 to be held in Vancouver that summer. To calm the turmoil and debate wolf control, the University of British Columbia, in partnership with government and private conservation groups, organized a wolf management symposium in May 1988. In a terse presentation, provincial biologist Dr. John Elliott reported that he had personally shot 996 wolves from the air over two winters. In 1988, three years after the carnage, he considered his efforts to have been a waste of time. The wolves were back at their former strength. The total expenditures of the campaign, in helicopter rental and manpower, were in the order of \$2,500-\$3,000 per dead wolf. Similar costs were reported by biologists from Alaska.

In Alaska, support for the controversial wolf kills had come mainly from people who were concerned about the shrinking inventory of Moose, which was a subsistence staple in this northern state. However, the Canadian focus was mainly on the declines of Woodland Caribou.

In defense of a regional wolf cull, a Yukon biologist stated that the economic importance of caribou, in pounds of meat, was greater than the monetary value of wolf fur. Another, more convincing argument was raised in British Columbia where researchers claimed that local populations of Woodland Caribou were especially hit hard by wolves. The reason was that mountain habitats, formerly the exclusive domain of caribou, were increasingly being invaded by Moose, which in turn attracted more wolves. Part of the argument was that wolf predation pressure was proportionally heavier on caribou than on Moose. The only way to save the threatened Woodland Caribou herds from extinction, the researchers warned, was to reduce the number of predators. This view was soon echoed by caribou researchers in Alberta.

Information in the above article was gleaned from *WolfNews*, a quarterly newsletter published by the Canadian Wolf Defenders and sponsored by World Wildlife Fund Canada from 1982 to 1992. Editor Dick Dekker.

Dekker, D. 1997. *Wolves of the Rocky Mountains, from Jasper to Yellowstone*. Hancock House Publishers, Surrey, BC.

## BOOK REVIEW

# Best of Alberta

## Day Trips from Calgary, Revised Edition

REVIEW BY LAURIE L. LYWAK

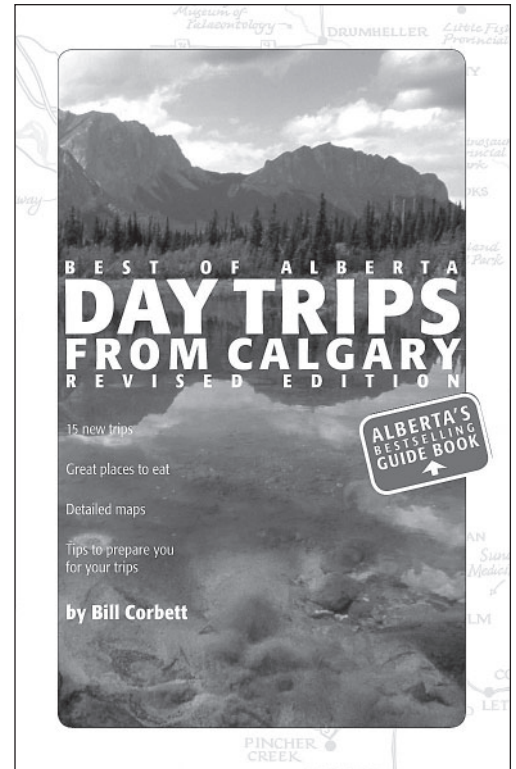
*The 2006 revised edition of “Best of Alberta: Day Trips From Calgary”, by Calgaryan Bill Corbett, is an essential reference for planning a daytrip to the outskirts of Calgary.*

According to Corbett, choose any direction, and within a two-hour drive of Calgary the reader can experience some of the most breathtaking landscapes, museums, historical and heritage sites in western Canada. All that's needed along with this guide is a day off, a roadmap, a tank of gas and you are on your way.

Corbett describes 70 different day trips within a two-hour one-way drive of Calgary. From the Royal Tyrell Museum to the near-ghost town of Dorothy, ancient aboriginal sundials and buffalo-jumps, the Torrington gopher hole museum and Rumsey Ecological Reserve, Corbett covers a wide variety of possible destinations. Regardless of one's age or inclination there is a destination of interest to just about everyone from amateur historians, naturalists and those simply interested in a scenic drive in the country. Each trip discussion includes information

on local geology, history and natural history, as appropriate to each site or community, and gives us interesting insights that broaden our knowledge of south-central Alberta. For those who like an on-the-road lunch Corbett also suggests a variety of venues that provide meals and beverages along the way.

As an Edmontonian who frequently visits the Calgary area, I found this book encouraged me to travel some new roads and see more of southern Alberta. I'm more likely to explore when I have an idea of what I might see, and Corbett provides me with the information needed to take the next exit off highway 2 and see more of our province. Best of all, this book frequently leads me away from the mountain parks and onto the prairies, where the landscapes and expansive views are equally spectacular. I found it worthwhile buying, as Corbett suggests, the Southern Alberta



**by Bill Corbett;** 5.5 x 8.5, 285 pages, paperback, \$19.95 CDN, Whitecap Books, ISBN 1-55285-766-2

Range and Township Road Map to go along with the guide. The map is optional but I found it useful when I started exploring on my own. I now put the book in my glove-box, along with the map, every time I head south from Edmonton.

I recommend this book to naturalists, tourists, photographers, historians and students. With summer holidays on the horizon and guests coming to southern Alberta, I recommend this book as a starting point for an interesting summer season. It will guide both novice and experienced travelers to new and interesting places.

# Just what was going on here?

BY ERNIE KUYT

*For about 30 years, Elise and I have managed from four to seven beehives near Ellerslie Road in south Edmonton*

A small willow and poplar woodlot near our present apiary is the usual haunt of a nesting pair of Great Horned Owls or Red-tailed Hawks. Sometimes both species nest there in the same year, but on opposite sides of the woodlot. The nests usually are located about 10 to 12 m up in a mature aspen.

With Elsie removing insulation from our over-wintered hives on 11 April 2006, I explored the nearby woods and sighted a Great Horned Owl on a nest used in previous years by both owls and hawks. I returned the next day to photograph the owl. A small fuzzy-headed owllet could be seen peeking over the nest edge (bottom photo).

Expecting some activity near the nest, I returned on 5 May, but did not at first see any birds in the area. Thinking that perhaps the adult owls were away hunting, I whistled, expecting a young

owl to show itself. To my amazement, a Canada Goose was now on the nest, and still there on 12 May, when I took the top photo. On the same day I noted a Red-tailed Hawk occupying a large sticknest on the opposite side of the woodlot. That nest was successful, as on 26 May I could see a large young hawk on the nest.

It is not the first time that I have seen a Canada Goose nesting in a sticknest high up in a tree, and so have others (The Blue Jay, Vol. 64:2, p. 103), but for a goose to nest so deep in 'enemy' country seems odd.

Unfortunately, being out of the country until 18 June, I was unable to determine if the goose was successful in hatching eggs or how the goslings fared after tumbling out of the nest.





## BOOK REVIEW

# Alberta Beneath Our Feet

## The Story of Our Rocks and Fossils

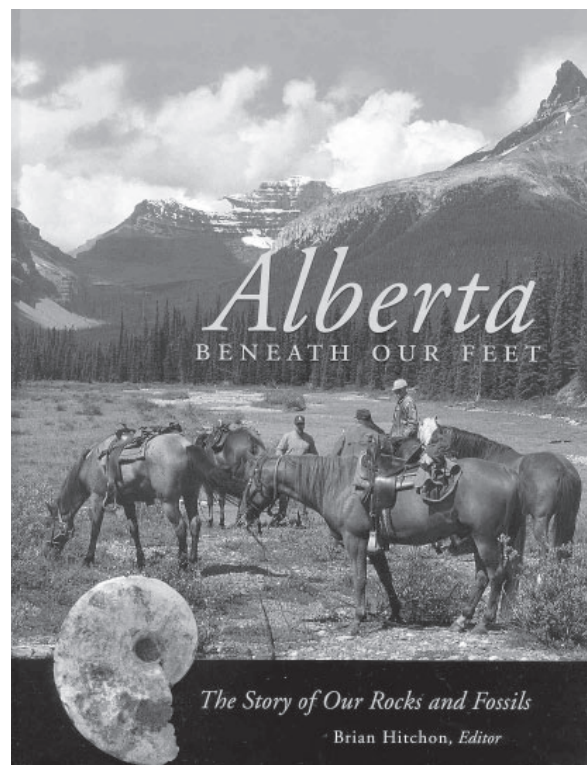
REVIEW BY BRIAN R. PARKER

*"Alberta Beneath Our Feet: The Story of Our Rocks and Fossils", edited by Brian Hitchon, offers readers a comprehensive tour of 4 billion years of geological history from an Alberta perspective.*

Beginning with the Big Bang and the creation of the earth, the authors work forward through time and consider the major geological events that led to the formation of Alberta as we know it today. We follow the migration of ancient continents across the globe (as they carry Alberta with them), the opening and closing of inland seas, periods of continental accretion, mountain building and erosion and the origin and evolution of life as exposed by the fossil record. In the present, the authors describe the legacy of that long and varied geological history: Alberta's valuable rock, mineral, fossil and groundwater resources. Finally, in a nod to the many of us that live in urban areas, we are offered an evaluation of the geology of our major urban areas, including a list of easily accessible sites that offer good views of local geology and/or geological processes.

Hitchon and his team of co-authors hold our attention firm by incorporating many interesting facts and sidebars throughout their text. We learn of trilobite hash, the Bruderheim meteorite event, volcanic ash in the North Saskatchewan River Valley, the use of man-made caverns in deep salt deposits as storage reservoirs, the Chicxulub meteorite event that helped bring an end to the dinosaurs, how local geology shaped different patterns of urban development in Edmonton and Calgary, and even how to pan for gold. There is something in this book of interest to just about everyone.

Complementing and enhancing the text are literally hundreds of high quality photographs, almost all in colour, of rocks, minerals, geological formations and fossils as well as more than 170 colour maps and line drawings. This book could equally well serve



**by Brian Hitchon editor**

9 x 11, 248 pages, 177 maps and diagrams, 330 photographs, 13 tables, \$75 CDN plus \$10 postage and handling and GST.

Available direct from the publisher at: Geoscience Publishing, P.O. Box 79088, Sherwood Park, Alberta T8A 5S3.

ISBN 0-9680844-2-7 (hardcover)

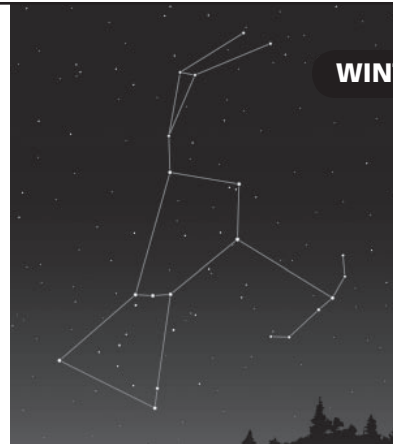
as a coffee table centerpiece as an introductory lesson in geology.

Overall, "Alberta Beneath Our Feet" is a well-written, very well illustrated text that, due to the use of non-technical language, is suited to a wide range of audiences, from amateur to academic. Best of all, the authors show us that the study of geology *really* is interesting and includes much more than deciphering the stratigraphy of local rock outcrops. This is a great book: an essential reference for anyone with a general interest in Alberta or a specific interest in geology.

# Celestial Happenings

## Winter/Spring - February to April

BY JOHN MCFAUL



### FEATURED CONSTELLATION – ORION

The bright stars of the winter constellations are beautiful to behold. Chief among these are the sparkling stellar beacons of the mighty hunter Orion. Orion is one of the most majestic of the 88 constellations that grace our earthly sky. The constellation consists of four bright stars that depict the shoulders and the legs of the hunter plus the famous belt of three stars from which dangles his bejeweled sword. In February Orion resides in the southern sky and gradually is to be found further to the west each evening until he leaves the celestial stage in mid-March.

In Greek mythology the giant Orion was the son of Poseidon. He was renowned for his hunting prowess. Apollo was upset about the ardor that Orion was showing to Apollo's twin sister Artemis (goddess of the hunt and the Moon). Thus he sent Scorpius, the scorpion, to kill Orion. One story tells that Orion escaped by jumping into the sea. While there Apollo tricked Artemis to shoot him with an arrow. Artemis then placed Orion in the sky as far from the scorpion as possible.

The principal luminaries of Orion are Betelgeuse in his left shoulder and Rigel in his right foot. Both stars are giants. Betelgeuse is

known as a red supergiant, whose diameter is estimated to be 650 times that of our Sun. Rigel is about 70 times the Sun's diameter. It is easy to see the different colours of these two stars. Betelgeuse has a relatively cool surface temperature of 3600 K and thus glows red. Our Sun has a surface temperature of 5800 K and shines with a warm yellow light. Rigel sparkles with a blue-white light as a result of a surface temperature estimated to be 11000 K. These two stars are younger than the Sun and due to their rapid use of their fuel they will extinguish themselves sooner. Theory predicts that both stars will end their lives as supernovas. Perhaps Betelgeuse will briefly be as bright as the half Moon before

possibly fading away to become a black hole.

The three belt stars are thought to have been used as the inspiration for the alignment of the great pyramids of Egypt. They point downward to the brightest star in our night sky. This is Sirius, in the constellation Canis Major. Sirius was important to the ancient Egyptians as a predictor of the flooding of the Nile.

From the belt stars hangs the sword of Orion. With binoculars one can see that the fuzzy "middle star" of the sword is actually a dust and gas cloud. This is the Great Orion Nebula. It is located about 1500 light-years from Earth. A light year is approximately 9.5 trillion kilometers. This enormous cloud is thought to be producing many new stars.

### CELESTIAL HAPPENINGS

**Sun:** Rise - Feb 1 (8:17 MST), March 1 (7:25 MST), April 1 (7:16 MDT)  
Set - Feb 1 (17:31 MST), March 1 (18:21 MST), April 1 (20:13 MDT)

*Note: Day Light Savings Time will start on March 11th.*

**Moon:** Full - Feb 2, March 3, April 2  
New - Feb 17, March 19, April 17

*\*On March 3rd there will be a total eclipse of the Moon. However the eclipse will be just finishing as the Moon rises over the Alberta plains.\**

**Planets:** Saturn is in Leo near the star Regulus. It can be seen in the south-east climbing higher in the night sky as the hours and months progress.  
Venus is to be found low in the western sky shortly after sunset. Next to the Moon and the Sun it is the brightest celestial object.

Jupiter and Mars rise in the early hours of the morning sky.

**Meteor Shower:** Lyrids, April 21, 15/hour in a dark sky

## FAN CLUB PAGE



# Beaverhill Bird Observatory

## 1984 to 2006

BY LISA PRIESTLEY

*The Beaverhill Bird Observatory (BBO) is a non-profit charitable organization that was established in 1984. We became incorporated in 1988, and are the second oldest bird-banding station in Canada.*

Our mandate is: to promote community interest in birds and the natural world, to promote the preservation and conservation of Canada's natural heritage, to conduct studies of migrant and resident birds, to assist the work of amateurs and professional biologists and students who are carrying out compatible observations and research work, to engage in educational activities that promote an appreciation for Beaverhill Lake and the natural history of Alberta, and to cooperate with organizations with similar objectives.

Our main research station is located on the southeast shore of Beaverhill Lake in the Beaverhill Lake Natural Area east of Tofield, Alberta. During migration, the lake is extremely important for waterfowl, shorebirds, songbirds, and raptors such as the Peregrine Falcon. The lake provides habitat for a variety of species, including the endangered Piping Plover, during the summer. Due to these attributes, the lake has been designated a National Nature Viewpoint by the Canadian Nature Federation, a Wetland of International Importance under

the Ramsar Convention and an Important Bird Area of Global Importance. In 1987, the BBO was designated the steward of the Beaverhill Lake Natural Area, a protected area on the southeast end of the lake. A bird-banding laboratory was built in 1986. Over the past 20 years the laboratory has been staffed by summer students who, along with volunteers, have been banding and counting birds in and around the natural area.

### MAIN PROGRAMS

Our songbird migration monitoring project was initiated in 1984 and became a fully standardized program in 1990. We use a combination of standardized banding and daily bird counts developed by the Canadian Migration Monitoring Network and that are now used at a network of stations across southern Canada and the northern U.S. The data collected provides us with much needed baseline data on population trends of northern breeding birds.

We are involved with a summer monitoring program called Monitoring Avian Productivity

and Survivorship (MAPS). The program was created by The Institute for Bird Populations in 1989 to assess and monitor the vital rates and population dynamics of over 120 species of North American landbirds in order to provide critical conservation and management information on their populations. The program utilizes mist netting and banding at a continent-wide network of monitoring stations staffed by both professional biologists and highly trained volunteers ([www.birdpop.org/maps.htm](http://www.birdpop.org/maps.htm)).

A pilot Northern Saw-whet Owl migration monitoring program was started in 1997, to determine if saw-whets migrate through the Natural Area. From 2002 through 2006, a full time study has been conducted. The objectives of this project are to determine how many saw-whets migrate through the Beaverhill Lake region, the timing of their migration and the age and sex of the migrating birds. Over 850 saw-whet owls have been captured and banded. We have been documenting the fall migration of other birds of prey through surveys and passive trapping techniques since 1997.

We monitor two sets of songbird nestboxes: 1) a Tree Swallow Nestbox Grid at Beaverhill Lake and 2) Elson's Bluebird Trail along roadsides by Beaverhill Lake, Elk Island National Park, and Fort Saskatchewan. We also have 100 saw-whet owl nest boxes in forested



## Beaverhill Bird Observatory, 1984 to 2006 ...continued

areas on private and provincial land around the Ministik and Beaverhill regions.

Our public education includes a variety of activities. We are on site at the Beaverhill Lake Natural Area throughout the spring, summer, and fall for people to come and see the banding operations, and learn how we study the birds. We have two major events for the public: The BIG Birding Breakfast and Steaks and Saw-whets. We also visit a variety of schools throughout Alberta, giving presentations on birds, banding, raptors, owls, endangered species, and ecology. The Royal Alberta Museum and John Janzen Nature Center also invite us to come and speak to school groups and families as part of their summer programs. Finally, we are invited to and participate in annual events

including: Beaverhill Lake Snow Goose Festival, Tofield Spring Nature Festival, Ellis Bird Farm Bluebird Festival, Forest Explorers (Peace River), Migratory Bird Day (Inglewood Bird Sanctuary),

and the Songbird Festival (Lesser Slave Lake Bird Observatory).

Two major volunteer programs are also run through the bird observatory:

- 1) A raptor nest card program was initiated by the Alberta government in 1988, for raptor banders and researchers to collect information on nest locations of birds of prey. Results will lead to a better understanding of habitat use, productivity, and phenology (timing of nesting), which will help with status assessment and management.
- 2) The Alberta Nocturnal Owl Survey (ANOS) has been running since 1998, with the goals of: obtaining information on distribution and relative abundance of nocturnal owls in Alberta, collecting information that will allow estimation of population trends of nocturnal owls at regional and provincial scales, as well as contributing to a

North America-wide program, and last, determining habitat associations of nocturnal owls. The Beaverhill Bird Observatory also took the lead in developing guidelines for a national owl survey program

We have been involved with supporting Endangered Species work, particularly with the Burrowing Owl. This work includes: Conservation of Burrowing Owls including surveys, studies of over-winter survival, diet and foraging ecology of Burrowing Owls in central Mexico, funded by National Fish and Wildlife Foundation 2000-2004; participating in the North American Burrowing Owl Conservation Action Plan, drafted under contract to Commission for Environmental Cooperation 2004; providing funding for proceedings and international attendees at the Second International Burrowing Owl Symposium, Ogden, Utah and published in *Journal of Raptor Research* 35:(4)269-418; and conducting surveys and banding of songbirds in eastern Guatemala with USGS and FUNDAECO in 1993 and 1994.

### ACKNOWLEDGEMENTS

Our work would not be possible without funding and in-kind support from the following agencies: Alberta Community Development, Alberta Conservation Association, Alberta Ecotrust, Alberta Sport, Recreation, Parks, and Wildlife Foundation, Alberta Sustainable Resource Development, Canadian Wildlife Service (Environment Canada), Federation of Alberta Naturalists, Manning Diversified, Mountain Equipment Co-op, Nature Canada, Student Career Placement Program, Shell Environment Fund, TD Friends of the Environment Foundation.



SAVANNAH SPARROW LISA PRIESTLY



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*Nature Alberta will accept never before published, high quality photographs of Alberta landscapes, wildlife, flora and related subjects in competition for publication, in full colour, on the front or back cover.*

Nature Alberta requires contributors to include the photographer's name, street address, e-mail address (if available), location where photograph was taken, the subject and how the photograph was taken (digital/film camera/lens/filter used, etc.) with their submission. If a photograph includes identifiable persons, it must be accompanied by a signed release granting Nature Alberta explicit permission to publish the likenesses of the individuals in the photograph.

Minor digital/darkroom enhancement of images is allowable, but must be disclosed to the Editor. Composite images, such as generated by adding wildlife to a landscape image or combining two landscape images, are not acceptable. The Editor reserves the right to refuse any image and to crop images to fit the front/back cover page format. Photographs may be held for publication in future issues or, by Editor's choice, may be included as black-and-white images within the body of the magazine.

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**PORTAGE LAKE COLONIAL BIRD  
NESTING COLONY, NEAR LAC LA  
BICHE SUZANNE EARLE**

PHOTOGRAPHED IN JUNE 2004 USING A KONICA  
DIGITAL REVIO KD 400Z CAMERA.





# Nature *gallery*



**MOOSE, LIVINGSTONE RANGE** RAYMOND TOAL  
PHOTOGRAPHED IN 2005 USING A CANON EOS 20D DIGITAL CAMERA AND 300 MM F4L LENS



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