

# Nature Alberta

C E L E B R A T I N G   O U R   N A T U R A L   H E R I T A G E



**PLAYFUL LEAST CHIPMUNK PUPS AT MORaine LAKE, BANFF NATIONAL PARK. SEE THE FEATURE STORY (PAGE 22). SANDRA HAWKINS**

*feature article*

## Friends in High Places



**A MALE SHARP-TAILED GROUSE PERFORMING ITS FASCINATING DAWN COURTSHIP DANCE! SEE THIS BIRD IN A RICK PRICE VIDEO, "SHARP-TAIL LOVE DANCE" ON YOUTUBE, <[WWW.YOUTUBE.COM/WATCH?V=CEQYT\\_I0KS4](http://WWW.YOUTUBE.COM/WATCH?V=CEQYT_I0KS4)>. RICK PRICE**

*Nature Alberta:  
Celebrating our natural heritage*

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11759 GROAT ROAD, EDMONTON, AB T5M 3K6  
PHONE. 780.427.8124 FAX. 780.422.2663  
EMAIL. na@naturealberta.ca

EDITOR. **DENNIS BARESCO**  
EMAIL. **na@naturealberta.ca**  
CIRCULATION. **TED HINDMARCH**  
LAYOUT. **BROKEN ARROW SOLUTIONS INC.**

THANKS TO THE PROOFREADERS WHO ASSISTED IN PRODUCING THIS ISSUE:  
IAN FOSS, SANDRA FOSS, ELAINE GERMYN, SUZANNE LORINCZI,  
VAL SCHOLEFIELD, JUNE VERMEULEN.

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Nature Alberta 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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# Editor's Page

BY DENNIS BARESCO

## AWESOMENESS!

"I started out as a child," said Bill Cosby in one of his early stand-up comedy records. So did your Editor – a child with an inordinate interest in nature: ants, birds, trees, sky . . . pretty well everything I could see, touch, smell and occasionally taste. More than likely, that interest was nurtured because my mother insisted (to my delight) that our family go for a drive most Sundays and mostly in the country, down prairie roads and trails. Many of my first nature experiences came from those trips. I also used to bicycle down to Police Point Park to explore; or walk up to Lussier's Springs, the lush, swampy, spring-filled hillside behind our house and across the railway tracks. Nature was all a lot of fun. Nature was really awesome!

It still is fun and awesome. Even the normal is – like the sound

of Canada Geese and Western Meadowlarks, or a Black-capped Chickadee and Red-breasted Nuthatch zipping about in my backyard, or several Mule Deer nonchalantly meandering down the back alley during the day. The awesomeness of nature – the beauty, the thrill, the stimulation – is hard to put into words...so I won't, because if you're reading this, you probably already know what I mean. Though I will say that John Warden, in his regular column in Nature Alberta, comes as close as anyone has (read this edition's "Finding Peace in a Dandelion" pg 16).

Of course, there are many people who see nature differently: as an impediment to more mercenary pursuits or indulgent personal gratification or twisted ideology. I'd feel sorry for these poor blockheads, except they are

causing, to varying degrees, so much harm to every aspect of civilized society. There is one thing about blockheads that's fun: they are so darn easy to satirize!

Oh well, I'll keep enjoying the awesomeness of nature while doing what I can to slow the blockheads. I'm not the only one, of course. Helmut Amelang knows awesomeness in his excitement about "My Big Tree" (pg 21). So does Sandra Hawkins, who has often written about awesome places she loves; her "Friends in High Places" is this edition's Feature Story. Then there's Charlotte Wasyluk; check out the article "Prairie Birder" (pg 20) and then do go to her blog (<http://prairiebirder.wordpress.com>).

There's some good science in this edition: about wing-tagged Golden Eagles, Elk home range exploration and bat tracking. Of course, it's not the kind of science that's in vogue with the blockheads; it's the kind of science that was once prized – you know, science as a way to knowledge and understanding.

A very important article outlines what we all can do, with minimal effort, to keep nature awesome; it's Kevin Van Tighem's "The Best Chance for our Best Places" (pg 34). Please read it and follow Kevin's lead.

**A WEINER ROAST WITH YOUR EDITOR, HIS SISTER AND DAD ON ONE OF THOSE GREAT "PRAIRIE EXPLORATION" COUNTRY DRIVES.** ROSALIA BARESCO



EDITOR'S PAGE cont'd...

## OKAY, WHICH IS IT?

A December 2012 poll by Ipsos Reid, commissioned by the Canadian Wildlife Federation, found that “Canadians overwhelmingly support a strong federal government commitment to protecting species at risk in Canada – no matter where they are found, and regardless of their status in other countries” (from Bird Studies Canada Latest News, Dec 21, 2012). The study, said the BSC article, found that “97% of Canadians view protecting Canada’s endangered animals and plants as an important issue.” Wow, that’s encouraging, isn’t it?

They also found that: “A large majority (85%) also agree that federal laws protecting species at risk are essential to the diversity and abundance of wildlife, which in turn are crucial to our economy and health.” That’s really awesome!

But then the not-so-awesome: the study found that “96% feel that the federal government’s current commitment to the protection and recovery of Canada’s species at risk should be maintained or strengthened.” That’s actually two answers in one, which skews the answers (at least the answers in the article). How many of that 96% feel the current commitment should be maintained, and how many that it should be strengthened?

The answer to that would provide a vital statistic: that is, given the federal government’s evisceration of the Species at Risk Act and most other associated protections, if we knew the “maintained” percentage, then we’d know the percentage of blockheads in Canada. And that would be awesome.

## On the Covers:



### FRONT COVER

Least Chipmunks (*Tamias minimus*) are our most common chipmunk and are found almost everywhere in Alberta except the prairies (there is a separate population in the Cypress Hills). Super-fast and agile during the day, they bed down for the night before sunset. Sandra Hawkins captured this playful pair of pups in Banff. See the Feature Story, page 22.



### INSIDE FRONT COVER

Sharp-tailed Grouse (*Tympanuchus phasianellus*) is the grouse of the prairies, often erroneously referred to as a “prairie chicken” which is a different, all-but-extinct species in Canada. The Sharp-tailed Grouse courtship dance is great fun to watch and, unlike Greater Sage-Grouse, one can often get very close without “Sharpies” being overly concerned. Have a look at this same bird in a Rick Price video on YouTube, “Sharp-tail Love Dance” (41 sec).



### INSIDE BACK COVER

Trevor Churchill is a new birder who became interested in birding by taking a birdwatching course given by Gus Yaki, as sponsored by the Friends of Fish Creek Park. Said Trevor: “I was going to go looking for Bluebirds out of town as I’ve never seen them before but decided to stay in town because of the weather. Luckily, Voitier’s Flats proved a terrific viewing site with approximately 100 of them keeping us entertained for some time.” Voitier’s Flats is in Fish Creek Park at the south end of Elbow Drive in Calgary.



### BACK COVER

Southern Red-backed Vole, also called Gapper’s Red-backed Vole (*Myodes gapperi*; syn *Clethrionomys gapperi*), is one of the most common rodents in the regions where it is found: essentially any forested habitat, large or small, but close to water (sloughs, bogs, springs, etc.). Len Pettitt’s lovely photo of this vole also includes a Seven-spotted Ladybug (*Coccinella septempunctata*).

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## ALBERTA ISSUES IN BRIEF

## EC Restricts Pesticides

The European Commission has announced two-year restrictions on three neonicotinoids (nicotine-like chemicals that are the world's most widely-used class of insecticides). The Royal Society for the Protection of Birds welcomed the decision, saying these pesticide restrictions are great news for bees and other pollinating insects. It should be noted that a two-years only ban is just a stopgap measure and will be somewhat pointless without followup.

Earlier this spring, American Bird Conservancy (ABC) called for a ban on the use of neonicotinoids as seed treatments and seed coatings pending an independent review of the products' effects on birds and other wildlife. ABC commissioned world-renowned

environmental toxicologist Dr. Pierre Mineau to conduct a review of 200 studies on these chemicals. His assessment concluded that neonicotinoids are lethal to birds and the aquatic systems on which they depend. Visit the ABC website to read the full report, "The Impact of the Nation's Most Widely Used Insecticides on Birds" ([www.abcbirds.org/abcprograms/policy/toxins/Neonic\\_FINAL.pdf](http://www.abcbirds.org/abcprograms/policy/toxins/Neonic_FINAL.pdf)). ABC is particularly concerned that the bird seed sold by manufacturers for backyard bird feeders is free from neonicotinoids; their report found that a single corn kernel coated with a neonicotinoid can kill a songbird.

To no one's surprise, pesticide companies loudly opposed the European Food Safety Authority conclusions, claiming, despite the scientific findings, that pesticides have no impact on bee colonies. (The poisons do not kill bees outright, but instead impact their behavior by disrupting brain functioning.) Equally to no one's surprise, Health Canada, through its Pest Management Regulatory Agency, claimed that it is reviewing the situation, stating that more investigation is needed but that it has no intention of following the EC's decision and that "if warranted, regulatory action can be taken at any time to further protect pollinators." The U.S. Environmental Protection Agency is also stalling for time, delaying any action until 2018.

From BSC "Latest News": May 3, 2013



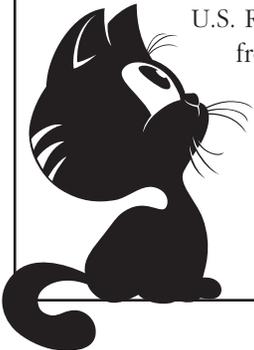
## Cats Kill Billions of Birds

A peer-reviewed study published in the journal *Nature Communications* reports that outdoor cats are the greatest source of human-caused mortality for birds and mammals in the

U.S. Research scientists from the Smithsonian Conservation Biology Institute and the U.S. Fish

and Wildlife Service's Division of Migratory Birds reviewed 90 previous studies and found that free-ranging cats cause substantially greater wildlife mortality than previously thought. They estimate that free-ranging domestic cats kill 1.4 to 3.7 billion birds and 6.9 to 20.7 billion mammals annually in the U.S., with about 69% of bird mortality

from cat predation and 89% of the mammal mortality caused by un-owned cats (rather than owned pets). To read the article, "The impact of free-ranging domestic cats on wildlife of the United States" by Scott R. Loss, Tom Will, and Peter P. Marra, go to: [www.abcbirds.org/abcprograms/policy/cats/pdf/Loss\\_et\\_al\\_2013.pdf](http://www.abcbirds.org/abcprograms/policy/cats/pdf/Loss_et_al_2013.pdf)



## Wild Bees = Better Crops

An international study co-authored by University of Calgary biologist Lawrence Harder has offered proof of what many people already suspected: wild bees are better pollinators than honeybees. “Basically, the more of those wild insects there were, the more fruit was produced in that particular field,” said Harder, quoted in a CBC News article by Emily Chung (March 1, 2013; <http://cbc.sh/u5PWNV>). The study was published online in the journal *Science Express*, and looked at the effect of honeybees (which are an introduced species) and wild pollinators on yields of 41 crops (including Alberta-grown crops such as canola, strawberries, pumpkin, tomatoes, onions, sunflowers and red clover) in 600 fields in 20 countries.

The CBC News article on the subject stated that “many wild insects serve as pollinators also. Most of them are among the 20,000 species of bees, such as bumblebees, mason bees, and many that are less familiar. ‘Most bees are kind of a centimetre long, and most people would think they were a fly or something,’ Harder said.”

Harder also suggested, in the article, that: “While farmers may be tempted to clear and plant all available agricultural land, the study suggests that leaving patches of land in their natural state could improve the yields of some crops by providing

habitat for wild pollinators.” In fact, anyone travelling around Alberta can consistently see fields being stripped to get maximum crop space, an activity that is more likely a result of lack of biological knowledge on the part of the farmer. Alberta Agriculture has a role here to promote the maintaining of native plants around fields of crops as habitat and a food source for all these native pollinating insects, even if the crop is one that is not dependent on pollinators.



### CAT KILL BILLIONS OF BIRDS cont'd...

As reported in The State of Canada's Birds 2012 Report <[www.stateofcanadasbirds.org](http://www.stateofcanadasbirds.org)>, outdoor cats kill an estimated 100 million birds each year in Canada. For details, stay tuned to the online scientific journal Avian Conservation and Ecology <[www.ace-eco.org](http://www.ace-eco.org)> in the months to come. An article about bird predation by house cats in Canada

will appear as part of a series of papers on anthropogenic sources of bird mortality. ACE is sponsored by the Society of Canadian Ornithologists and Bird Studies Canada.

From BSC Latest News, February 8, 2013



DR RELING/WIKI CREATIVE COMMONS



ALBERTA WILDERNESS ASSOCIATION

NEWS RELEASE, ALBERTA WILDERNESS ASSOCIATION. MAY 3, 2013

## Alberta Defers New Energy Leasing in Two Caribou Herd Ranges

For the first time, Alberta is deferring the sale of new mineral rights across the entire range of two of its fifteen caribou herds until Cabinet first adopts range plans describing how critical habitat will be protected to recover those two populations.

In a letter to Alberta Wilderness Association (AWA), Alberta Energy Minister Ken Hughes stated that effective immediately, new mineral rights sales will be halted across the Little Smoky and A La Pêche herd ranges northeast of Jasper National Park until range plans are approved in 2014.

“We greatly appreciate the Redford government’s leadership in taking a step that previous Alberta

governments have not taken, to stop adding new lease pressures to these caribou when they are already far past the levels they can tolerate,” says Carolyn Campbell, conservation specialist at Alberta Wilderness Association. “This is an important first step in maintaining habitat necessary for these two herds’ survival. We look forward to additional positive steps by government and industry as we work towards restoring caribou populations and their ranges in Alberta.”

The federal government’s boreal woodland caribou strategy, finalized in October 2012, mandates that provinces will develop range plans for

woodland caribou survival. Caribou range plans will describe how critical habitat will be protected to attain a minimum of 65% undisturbed habitat over time, and provide a range-specific path forward for the recovery of that caribou population.

Industrial disturbance of caribou habitat is recognized as the underlying driver of steep declines in Alberta’s caribou populations. The Little Smoky range currently has less than 5% undisturbed habitat. This rights sale deferral decision affects two of the fifteen Alberta caribou populations on provincial lands.

For more information: Carolyn Campbell, Alberta Wilderness Association (403) 283-2025

## Bill 202: Rest in (Troubled) Peace

Bill 202, the Private Member’s Bill put before the Alberta legislature by Dr. Neil Brown (PC MLA, Calgary MacKay, Nosehill), was defeated in April on second reading by a vote of 42 to 6. Dr. Brown was the only Progressive Conservative member to support the Bill; the only others voting in favour were one Liberal (Swann), one NDP (Eggen) and three Wildrose (Anglin, Donovan and Wilson).

It is unfortunate that the Bill got defeated, but it did raise the profile on the lack of transparency in the Public Lands Act. The Bill was elegantly simple. It only applied to provincial public lands in southern Alberta (mostly native pastures) and only to the sale (privatization) of those lands. If someone wanted to buy these public lands, the Bill would have required that: 1) wildlife assessments prepared for the

property would have to be made public; and, 2) there would be a sixty day waiting period to allow public comment on the sale.

Thanks to everyone who helped to support this Bill. And thanks to Neil Brown for creating Bill 202. His efforts certainly brought attention to this issue.

From a report by Greg Wagner

# In Memoriam

## Dawn Dickinson

February 3rd 1930 – April 2nd 2013

With the passing of Dawn Dickinson on April 2nd 2013, Alberta lost one of its most dedicated, knowledgeable and respected stewards of the environment, and Nature Alberta lost a dear friend and long-serving Director and volunteer.

As a naturalist, Dawn's passion for the Prairies and the Cypress Hills was limitless. As a biologist, she steadfastly maintained her principles that science and facts should guide conservation and management.

Born in Lethbridge AB, Dawn grew up in England where she developed her life-long love of natural landscapes through frequent walks over England's South Downs and later over the splendour of Dartmoor. She returned to Lethbridge in her twenties, then came to Medicine Hat for a summer job surveying elk for Alberta Fish and Wildlife, which gave her an understanding of the conflicts which could occur over land use and started her never-ending fascination with and dedication to conservation.

Her life as a biologist took her across Western Canada and the Arctic before she finally settled in Medicine Hat. Thereafter, she tirelessly volunteered for the

Grasslands Naturalists, Nature Alberta/Federation of Alberta Naturalists and the Alberta Wilderness Association. As well, Dawn was very proud of her involvement in the early 1990's in the Citizens Environmental Protection Committee of Project Swiftsure, which was the Department of National Defence's response to public concern regarding the safe disposal of stored chemical warfare agents at CFB Suffield; the process that evolved with the committee is considered to be one of the most successful of its kind in Canada.

For Nature Alberta, Dawn served for over ten years as the Board member for Grasslands Naturalists and later as an appointed Director; she volunteered on a number of committees and received two Nature Alberta awards: the Loran Goulden Memorial Award (2007) and the Honourary Lifetime Award (2008).

Dawn was an astute organizer, putting together a number of ambitious and successful workshops and symposia, including the Cypress Hills Forest Management Workshop and the Meridian Dam Forum;



MILK RIVER COUNTRY IN 1993.



DAWN (1955) IN HER CONVERTIBLE SPORTS CAR.

the latter was the first time that the public was able to hear a balanced perspective on the effects of the proposed dam along the South Saskatchewan River. She was always willing to voice or write the naturalist and scientific perspective and did so effectively in many public forums, workshops and open houses.

Dawn did film scripts for Karvonen Films, a brochure on Sharp-tailed Grouse for Fish & Wildlife, a reference on Cypress Hills ungulates, magazine articles, and many dozens of scientific and consultative reports, briefs and critiques of legislation and draft conservation plans. She also wrote books: *Prairie River: a canoe and wildlife viewing guide to the South Saskatchewan River*; the lyrical volume *A Flight of Deer*; and *Caught in the Spin: the story of the wild horses of CFB Suffield*; all are available through the Nature Alberta bookstore. A fourth book, *Landscape with Elk*, about the Cypress Hills, is yet to be published.

Never think that Dawn's life and conservation efforts were confined to just scientific papers and presentations. She delighted in expressing her love of nature through painting, photography and poetry. And she loved adventure; she once took a solo trip to Mexico by scooter (yes, scooter!) and went

on many canoe trips – for example, a two week solo journey in the Yukon in her very heavy wooden canoe.

Dawn was considerate and gentle. Yet when dealing with environmental issues, she had a no-nonsense tenacity and inner resolve. Her single-minded determination to base decisions on sound science resulted in her receiving many awards and honours for her work as a professional zoologist, biologist and naturalist; these included the City of Medicine Hat Civic Award for the Environment (1997); the Canadian Nature Federation Volunteer Award (2003); Prairie Conservation and Endangered Species Conference Award (2004); Alberta Wilderness Defender Award (2005), and the aforementioned Nature Alberta awards. Although her determination was not always popular, she was widely respected for her credibility and integrity, including by many of the ranching families of southeastern Alberta.

What motivated her ceaseless dedication? Her answer was in an AWA *Wildlands Advocate* article:

*“You’ve had so much pleasure in the natural places you’ve worked in and been to, you have a feeling of obligation. Because you’ve been given so much, you owe the land itself something.”*



**1956 AT BROCKETT AB, WHERE DAWN WORKED AS A SPEECH THERAPIST, AND WHERE SHE QUIETLY ENCOURAGED THE CHILDREN TO SPEAK THEIR NATIVE TONGUE, CONTRARY TO THE RULES.**

A celebration of Dawn's life was held April 22nd (Earth Day) at the Police Point Park Nature Centre in Medicine Hat, where the fifty attendees heard many delightful stories about Dawn's adventures, her intrepid nature and her love of the Prairies. All in all, it was a splendid social event that Dawn would most certainly have appreciated.

Dawn is survived by her brother Edward in England.

## PRAIRIE PASSAGES » AN EVENING WITH MARGARET ATWOOD AND GRAEME GIBSON

Thursday, June 27, 2013  
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6:30 p.m. Cocktails  
7:30 p.m. Dinner

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# Eating Tomorrow

BY LORNE FITCH

*It was a sight to behold and one greater to comprehend the eating of, that chocolate cream pie.*

We had whipped it together from graham cracker crumbs and chocolate pudding, shaken and then chilled in a snow bank on a backpacking trip. The anticipation of eating it brought me to the level of a child, thinking only of immediate gratification. My two companions showed considerably more restraint, electing to divide each of their respective thirds in half, to have a piece at breakfast the next morning. I ate my third immediately. The saved piece of pie was enclosed in a rock cairn to protect it from marauders. I was teased unmercifully about how good the remainder would taste in the morning, had I saved some of my pie.

The early glow of morning light revealed the cairn had been transformed into a scatter of rocks. No pie remains were left and the aluminum pie plate retained gouges on its surface. A Mule Deer doe was beating a hasty retreat from the scene saving me from instant suspicion. But, a closer inspection of the crime scene with all the intensity of a CSI unit showed a Porcupine was the culprit. Somewhere in the headwaters of the Castle

River there may well be a line of Porcupines still hardwired to remember a meal of non-wood, chocolate ambrosia tinged with a slight metallic aftertaste.

It was my turn to laugh, since I had lost nothing in this porcupine perpetrated crime. The moral of the story, I pontificated, was that “gluttony is its own reward.” Saving a piece of the pie was foolish, because how could we predict the events of the future, and indeed the tragic loss of the saved pie? Eating it all, now, was the smart thing to do. It was only later, upon reflection that I realized how much the incident revealed of human nature and our province, if not the world.

There is a similar orthodoxy, verging on a religion, over economic development in Alberta. The mantra goes something like “we can do everything, everywhere, anytime, all the time, at the same time, on the same place”. And it goes on and on in spite of the persistent signs of stress, of landscapes unraveling and of species driven to the category of “imperiled” ...or worse, “gone.”

The alternative to admitting the pace is too extreme and we’ve exceeded thresholds is to continue to tinker, fiddle, adjust, redial, patch over, prevaricate, deny and generally ignore the signs. Keeping the engines of industry revved up, red lined and economic activity growing is the prime directive.

Sadly, that describes Alberta and what the province does. Tar sands developments spreading at an exponential rate on top of caribou habitat. Timber harvest, an almost frantic pursuit of the last merchantable tree, in watersheds with Bull Trout, Westslope Cutthroat Trout and Grizzlies as well as the water supplies for downstream communities. Gas wells, pipelines and roads tracking native prairie where Greater Sage-Grouse hang on by a feather. Aren’t we remarkable? We make the common rare; the rare endangered; and the endangered gone. It would be more remarkable, maybe in the category of miraculous, to reverse that process.

It is frustrating to sit on species recovery plans and note the intransigence, even belligerence of industry and the timidity of government over protection and restoration of species at risk and their critical habitats. Equally unsettling is



*Lorne Fitch is a Professional Biologist, Adjunct Professor with the University of Calgary and a retired Alberta Fish and Wildlife Biologist. He is a well-known speaker, writer and photographer, living in Lethbridge AB. “Eating Tomorrow” is the eighth in a series of articles by Lorne.*

there appears to be little energy and few resources left to keep other species, like Pronghorn as an example, from joining the list of the damned. We need the equivalent of a Schindler's list for critters that may be on the brink of a downwards spiral and an accompanying hero to rescue them.

In Alberta, when the canary dies we think we can simply buy another. We don't grasp, metaphorically, what the canary represents. It is an opportunity to use a sensitive or indicator species as a distant early warning system to alert us, to signal problems we, as humans, will encounter. If the canary, metaphorical or otherwise, dies it's too late. We've missed, ignored or overridden the signal at that point.

The problem is, many of us aren't clear on where you go to buy more actual Alberta canaries like caribou, Grizzlies, Greater Sage-Grouse, cutthroat trout and the numerous, non-charismatic, micro fauna and flora on the growing list of species at risk. There's no address for the endangered species store and even if there were such a mythical place, I'll bet they don't take credit cards. At least, I'll bet, they won't take a credit card from the province of Alberta. We're already overdrawn at the biodiversity bank account.

Once they're gone, it's too late to dial back, ease the throttle of progress back a hair from redline, point fingers or wring our collective hands and promise it will never happen again. As Aldo Leopold correctly observed, "A little repentance just before a species goes over the brink is enough to

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*We need the equivalent of a Schindler's list for critters that may be on the brink of a downwards spiral and an accompanying hero to rescue them.*

---

make us feel virtuous. When the species is gone we have a good cry and repeat the performance."

So why, one might ask, is the performance repeated? Species missing in action is a consequence of turning their essential habitats into battle zones of industrial, agricultural and residential activity. At a frantic pace of development, both spatially and temporally, many native species lose out in the race. It isn't a race they have run before. It isn't a race they can run. The focus on purely economic outputs divides and transforms habitats into smaller and smaller units, fragmenting them, severing connections, reducing quality until those habitats no longer meet the needs of native plants, animals and fish.

Economists use a term "discounting the future" to describe the phenomena where rewards in the present, the now, are valued more highly than rewards in the distant future. I suppose that as individuals and also as society we find it difficult to delay gratification. We think it imperative to clutch and grab as much as we can now. To eat the chocolate cream pie now is better than the prospect of having a piece in the future, or so goes the thought process. It continues

on to a barrel of oil, a bushel of canola or a truckload of dimensional lumber provides more security now than the future prospect of these commodities plus fresh, abundant water supplies, healthy landscapes, the full expression of biodiversity and the delivery of ecosystem services.

Wade Davis, an Explorer-In-Residence of the National Geographic Society, points out that "The cost of destroying a natural asset or its inherent worth if left intact has no metric in the economic calculations that support the industrialization of the wild. As long as there is the promise of revenue flows and employment, it merely requires permission to proceed. We take this as a given for it is the foundation of our system, the way commerce extracts value and profit in a resource driven economy."

The cost of exercising all our options now is lost or missed opportunities and options for the future. Many natural assets can slip through the cracks because of a failure to value them appropriately. We "eat our future" as Australian biologist Tim Flannery observes. What develops is a syndrome of fire sale clearances on certain resources, at a reduced value, with little insight into how use could be sustainable with the maintenance of other resource values. In the race to grab it all now there are losers. The discount produces a dichotomy between those whose goal is short term reward and those with a longer view and concern about future conditions. It is also a mockery of our rhetoric about conservation and stewardship.

Aldo Leopold summed it up with, "We of the minority see a law of diminishing returns in progress; our opponents do not."

## BOOK REVIEW

# Foodshed: An Edible Alberta Alphabet

REVIEW BY: TED HINDMARCH

Spring has finally arrived in Alberta, after a long, long winter. With spring, many of our thoughts turn to fresh local produce from the garden, farmers' markets, and farm-gate kiosks. At Nature Alberta, these thoughts include support to sustainable practices for protection of our natural environment.

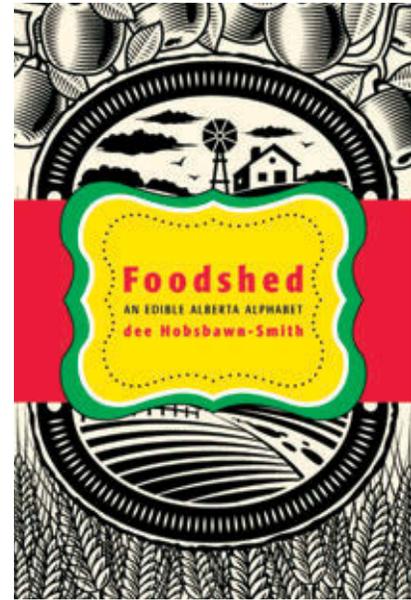
For those longing for local produce, check out a new source of information on food sources from sustainable small farm producers in the province. In her 2012 book *Foodshed: an edible Alberta alphabet* published by Touchwood Editions, Dee Hobsbawn-Smith, a twenty-seven year old former Calgary resident and entrepreneur, has produced a wonderful compilation of growers and producers from across the four corners of our province. Divided into Peace, North, Central, and South regions, the book covers producers who enrich our food production with their organic or low footprint farming methods.

*Foodshed* is a must read for Albertans who would like to investigate eco-friendly food sources within the Albertan foodshed (described as the area between where food is produced and where food is consumed). Not only does it provide some alternative sources for produce across a wide range of products, it also provides insight into the operations of these producers, and both the challenges (regulatory and climate-related) and the rewards of their operations. From zero carbon footprint market garden farming by using oxen to family operated grass-fed beef operations, pasture-

raised pork, organic orchards and wineries, and prairie fish farming, this book covers a wide spectrum for the reader and consumer to explore.

Dee Hobsbawn-Smith has tackled this book in rather a unique way. She has sorted it by alphabet according to the produce: for example A is for asparagus, B is for Berries, Q is for Quackers (ducks) etc. Part 1, therefore, jumps around the province, and some of the items covered under a certain alphabet letter are not always self-evident. The author has recognized this, however, and has provided an off-set through an introduction with maps breaking down the producers' names and locations, a quick guide on page five of what is covered under the A-Z listing, and a comprehensive index at the back. Not only does each entry cover interesting information about the producers and their products for seventy-eight producers in total, but there are some interesting recipes provided for each of the categories.

Part 2 of *Foodshed* goes even further by covering facts and figures under headings of: changing landscape, *terroir* and our global diet; sustainability, environmental issues, animals and grass; government involvement and labour; finding local food; and home cooking. Throughout the book there are information pages related to topics such as challenges related to milk board quotas, genetic engineering, etc. The Community Supported Agriculture (CSA) movement is explored, where clients purchase



By Dee Hobsbawn-Smith. 288 pgs; CDN\$ 19.95; an e-edition is also available.

annual subscriptions or shares in the operation, and in some cases a weekly allocation of volunteer hours, in return for a share of the produce. At time of publication sixteen of these CSAs were in operation near major centers in the province, and most were overbooked. This shows that the CSA movement still has room to expand.

Not only is this a book of interest to environment-sensitive consumers, but it is an excellent source of information to have along when touring around the province. Some of the locations covered are certainly worth a visit when passing through their areas.

Overall, *Foodshed* is an absorbing and very personal read on agricultural paths being pursued within our province and about those committed producers who have selected these more environmentally friendly choices in food production. This gem of a book provides us some solutions to those choices we can all make in selecting the food we eat while helping improve the diversity and local economy of a healthy balanced and sustainable small footprint agrarian eco-system.

## BOOK REVIEWS

## The Crossley ID Guide: Raptors

REVIEW BY: CHARLOTTE WASYLIK, FROM HER PRAIRIEBIRDER BLOG  
(TO LEARN MORE ABOUT CHARLOTTE AND HER BLOG, SEE PG 20)

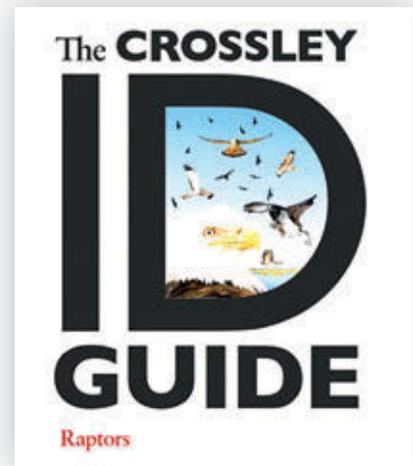
When I heard sometime last year that a new Crossley ID guide was coming out in April, I was very excited, and even happier to learn that it was a Raptor ID guide. Then last month, my mom surprised me with the guide she had ordered back in January. I've been able to read through the guide and it's wonderful!

Raptor experts and co-authors Richard Crossley, Jerry Liguori, and Brian Sullivan have teamed up to create a great raptor guide filled with hundreds of colour photographs and very helpful text. Jerry Liguori, who is a photographer as well, has written two previous books on hawks: *Hawks from Every Angle: How to Identify Raptors in Flight* (Princeton University Press, 2005) and *Hawks at a Distance: Identification of Migrant Raptors* (Princeton University Press, 2011). Mr.

Liguori has a great website – be sure to see his amazing photographs of raptors and other birds.

Brian Sullivan is the Project Leader for eBird, and photo editor for both the Cornell Lab's Birds of North America Online, and for the American Birding Association journal, *North American Birds*. Mr. Sullivan is also a co-author of the forthcoming *Princeton Guide to North American Birds*.

The raptor guide follows the same principle as previous books by Richard Crossley – that of pattern recognition or gestalt, instead of field marks. I wrote a bit on that principle back in March in my review of Mr. Crossley's *Shorebird Guide*. The raptor ID guide includes 101 color plates of all 34 species of diurnal



raptors that regularly breed in Canada and the United States. And almost half of the book is filled with the species accounts and excellent range maps.

You would think with all the colored plates that the guide would be heavier and thicker, so I was very pleasantly surprised to find that it's actually quite light and portable; the weight is helped by the binding, which is paper flexibound (turtleback) instead of a heavier hardcover. If you're planning a trip and you're specifically going to watch raptors, this guide definitely deserves a place in your backpack or bag. I highly recommend this field guide!

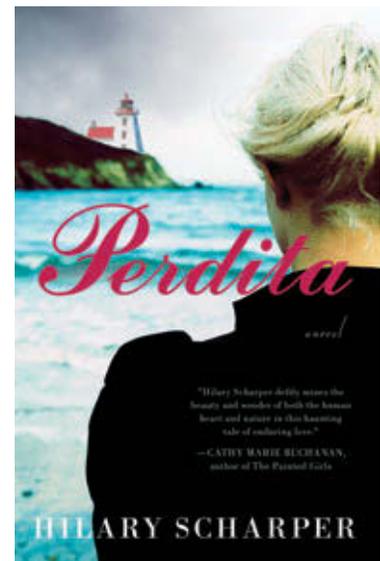
## Perdita

A novel with a novel idea for outreach and public appreciation of the birds of Canada: That's the new Simon & Schuster publication *Perdita* by Hilary Scharper.

Scharper was deeply influenced by famed Harvard biologist E. O. Wilson, and she weaves Wilson's concept of "biophilia" into a captivating tale of love, self-discovery and the deep interconnection of all reality. The book also speaks to the recent call

by David Suzuki and Richard Louv to seek a deeper connection to Nature through the imagination and the arts.

The author teaches wilderness and cultural approaches to nature at the University of Toronto. More information on "Perdita" is available at [www.perditabook.ca/](http://www.perditabook.ca/)



By Hilary Scharper.

# Nature Alberta NEWS



## Prairie and Endangered Species Conference

Nature Alberta was at the 10th Prairie and Endangered Species Conference in Red Deer February 19th to 22nd, 2013. The Alberta Prairie Conservation Forum and the Alberta Society of Professional Biologists hosted the Conference.

We had a booth set up, talked to many of our good friends and made many new friends! The 11th Prairie Conservation and Endangered Species Conference will be held in Saskatchewan in 2014.



**NATURE ALBERTA EXECUTIVE DIRECTOR PETRA ROWELL (LEFT) CHATS WITH DOROTHY DICKSON.** MYRNA PEARMAN

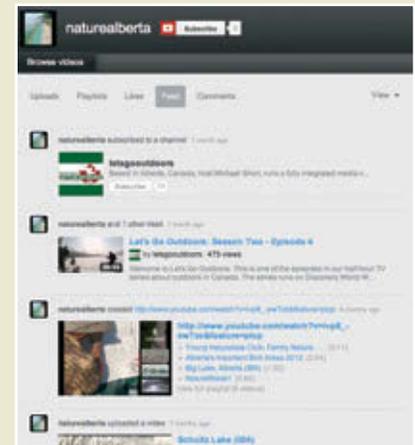
## New Executive and Directors

Linda Howitt-Taylor agreed to stand for nomination at the AGM and was elected as Vice-President. The remainder of the Executive is unchanged. (For a list of all Executive and Directors, see page 1.) However, we welcomed some new faces at the Board table this AGM:

- **John and Linda Stewart** – Nature Calgary primary and alternate reps
- **Joseph Hnatiuk** – Vice-President and new alternate for Lethbridge Field Naturalists Society
- **Chris Pfeifle** – Vice-President and new alternate for Buffalo Lake Naturalists

## Nature Alberta & YouTube

Cheyenne Kean, Nature Alberta's Communications Specialist, wants you to know that Nature Alberta has its own YouTube channel now. All kinds of "good stuff" is there for you to view. Visit: [youtube.com/naturealberta](http://youtube.com/naturealberta)



## GST REQUIRED

Changes at Revenue Canada mean that Nature Alberta will be required to charge the 5% federal goods and services tax on memberships. As a result, membership will be \$20 + \$1gst = \$21; if you wish a hard copy of the magazine, it will cost you an extra \$10 + 50¢ gst for a total of \$30 + \$1.50gst = \$31.50. Extended Memberships will be \$15 + 75¢ gst = \$15.75.

## Counting Butterflies! The ALG Alberta Butterfly Big Year Contest 2013

The Alberta Lepidopterists' Guild (ALG) has a great project on the go! Between March 1 and November 15, 2013 ALG wants to know how many live butterfly species you can observe in Alberta. Contestants must submit all of their observations to the eButterfly website and submit a species list to the ALG Butterfly Big Year committee by Nov. 15, 2013.

The Alberta Lepidopterists' Guild website ([www.biology.ualberta.ca/uasm/alg/](http://www.biology.ualberta.ca/uasm/alg/)) gives more details on this competition and how to submit your sightings on eButterfly. ALG reminds contestants that they must obtain their own permits and permissions to enter protected areas or private lands.



## Board and Annual General Meeting and Awards Dinner

The Nature Alberta Board and Annual General Meeting was held in Edmonton April 26-28, 2013. While much was accomplished, it wasn't all work and meetings. A Saturday field trip took in the Snow Goose Chase, with the Awards Banquet and celebration that evening. Photos of our Snow Goose Field Trip with the Young Naturalists are posted on the Nature Alberta Facebook page.

Our guest speaker at the banquet was Tara Narwani from the Alberta Biodiversity Monitoring Institute. Tara provided an update on the coverage and some of the reports that the Institute has published. She also shared some news with us about some new species and range extensions in Alberta, as well as the future possibilities for Citizen Science.

## NA Corporate Club Folding

Nature Alberta has received confirmation from Grant Henry that they are folding the Fort McMurray Field Naturalist Club. They have been unable to find anyone to keep the club going. Fort McMurray was a Corporate Club.

We have removed the club from our Corporate membership as of the April AGM. This reduces NA from eleven to ten corporate members, which gives us a capacity of six appointed directors (plus Past President, who is an additional appointed director). Currently there are four appointed director positions filled.

**AFTER THE BANQUET, THE AUDIENCE TURNED ITS ATTENTION TO SPEAKER TARA NARWANI.. VID BIJELIC**



## Awards: Loran L. Goulden Memorial Award

Cherry Dodd is the recipient of the Loran L. Goulden Memorial Award 2012. Cherry helped found the Edmonton Naturalization Group (a Nature Alberta Affiliate Club) in the 1990's. She has tremendous knowledge about local native plants and has worked on virtually every aspect concerning them. She has contributed immensely to school and community groups wanting to create native plantings or naturalizations on their grounds. She has also worked with the City of Edmonton on naturalization projects and noxious weed control. And she's written a book and many articles on native



wildflowers. All in all, she's been a hard working volunteer and an inspiration to many Edmontonians to follow her lead.

The Loran L. Goulden Memorial Award is given annually by

Nature Alberta for outstanding contributions to natural history in Alberta. The award recognizes both specific and long-term aggregate contributions to any field of Alberta natural history.

## Awards: Frank and Alice Harper Memorial Award

Wayne Kinsella is the recipient of the Frank and Alice Harper Memorial Award 2012. Wayne has been a long-time, super volunteer for the Buffalo Lake Naturalists (a Nature Alberta Corporate Club). His leadership and the numerous roles he has played in the club have been critical to club membership and success. It is most fitting that Wayne be recognized and commended for the many years of devotion to keeping nature exploration at the forefront of the club's activities.

The Frank and Alice Harper Memorial Award recognizes long-term volunteer service to a local Nature Alberta Club working towards the betterment, efficiency, administration, operation and/or fulfillment of the Club's mandate.



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#### **Panama ~ Canopy Tower & Canopy Lodge ~ Feb 15 to 26, 2014**

Looking for a mid-winter birding get-a-way? Join us in Panama for an exciting birding & nature tour where up to 300 species of birds and several unique animals will be encountered. Led by Panamanian expert guides, we stay at just two nature lodges on this holiday making for minimal travel & maximized birding time. \$4200 (CAD) from Panama City.

#### **BC ~ Vancouver & the Okanagan ~ Aug 19 to 25, 2013**

Avocet Tours is based in the Okanagan, so why not travel with the local experts? We begin in Vancouver with flocks of migrant shorebirds, then make our way to the sun-drenched Okanagan Valley, home to all sorts of great birds & animals. Up to 200 species of birds possible, as well as beautiful scenery. \$1750 (CAD) from Vancouver, BC

*\*\*See our website for more details on these and other tours we offer\*\**



JOHN WARDEN

## Close to Home: Nature Photography in Alberta

# Finding Peace in a Dandelion

BY JOHN WARDEN

It didn't seem likely that I would ever write an article or focus my photography around the themes of loneliness and sorrow. So I struck those topics off my list of ideas.

It was a few years ago that I had made the list: possible topics

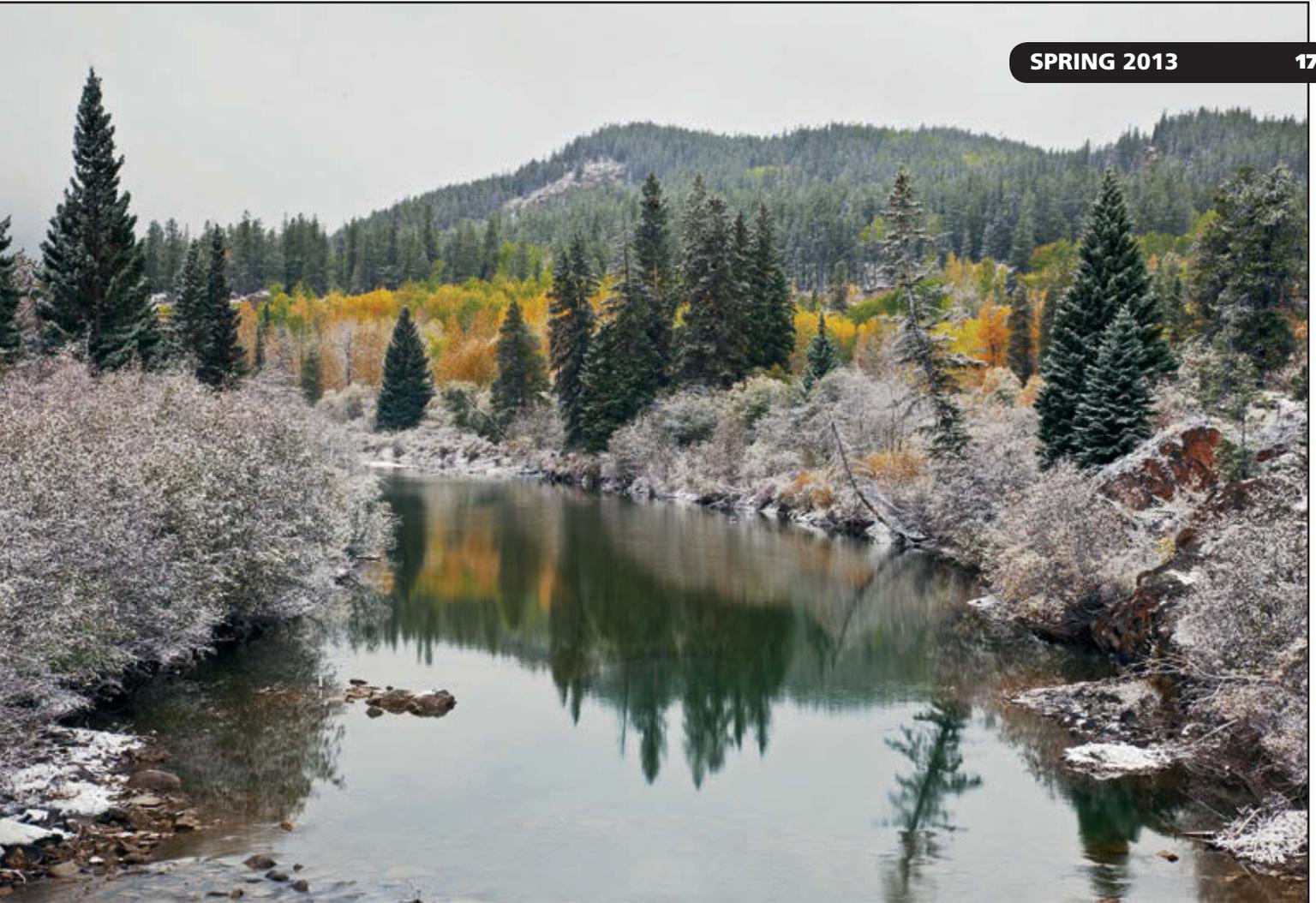
that might inspire an idea for my photography or a story for my writing. Many of those ideas came from Patricia Donegan's book, *Haiku Mind*<sup>1</sup>, which is a wonderful book for nature lovers. Donegan describes the haiku form of poetry as an apparently simple, yet deeply poetic way of

expressing "a crystalline moment of heightened awareness". Interesting, that's exactly how I think of nature photography.

I made a list of the 108 topics presented in her book, along with some of my own thoughts, as an idea catalogue. Fighting

JOHN WARDEN





JOHN WARDEN

the doldrums of winter one day and looking for inspiration, I was going through the list and saw the words loneliness and sorrow. That's when I hit the delete key. The very next day I read Meghan Power's book *The History of Jasper*.

In her book, Power talks about the World War Two internment camps located west of the Jasper town site in Jasper National Park. Japanese men had been relocated from the west coast to work on the Yellowhead – Blue River

Highway, and Power mentions that:

*When not working, the men passed the time playing baseball, planting traditional Japanese gardens and writing Haiku poems.*

Now there was an idea, an inspiration even. Could I find one of those poems? In fact, I found much more than I was looking for. I found the elegant imagery of Takeo Ujo Nakano<sup>2</sup>, and his wonderful descriptions of 'crystalline moments'. I also discovered how the powerful

emotions of loneliness and sorrow can be the catalysts of resolve.

Separated from his wife and daughter in 1942 by the act of relocation, Nakano was first assigned to the Yellowhead Road Camp, just across the Alberta border in B.C., in the shadow of Mount Robson. Though facing adversity, he was inspired and excited even about the challenge of creating beautiful poems to reflect his surroundings stating that "[his] poetry would serve to both give order to [his] perception of nature and to give expression to that perception." It's not just his

<sup>1</sup> Shambhala, 2008

<sup>2</sup> Nakano, Takeo Ujo, (2012). *Within the Barbed Wire Fence: A Japanese Man's account of his Internment in Canada*. James Lorimer and Company Ltd, Toronto

poetry, though; I found his prose to be equally evocative:

*Suddenly, bright lights broke through the clouds. To my surprise I found that I was witnessing the forming of a rainbow. It grew and grew until it had erected a great arch to span the crests of seven mountains. The splendour spread out before my eyes permeated my being until I felt first filled to satiety, then strangely subdued. It was though my personality had been engulfed by something much larger. I was left numbed. Looking around to the west, I saw that the sun had started to descend towards the edge of the mountains. As it did so the glaciers on the peaks changed colour moment by moment – now pink, then mauve, then deep purple and finally grey. There in that vast classroom of nature, the compelling power sought by my spirit had been found. I had been writing (poetry) for years, but here, my spirit first learned the excitement of the poetic urge.*

This is a wonderful example of a 'crystalline moment of heightened awareness' captured using the words of feeling and emotion that seem to come so naturally to the poet.

After three weeks at the Yellowhead Camp, Nakano was transferred to the nearby Road Camp at Decoigne, near Jasper, Alberta. Moving from the familiarity of the Yellowhead Camp, to the unknown of Decoigne was at first blush, another adversity, but, he also understood that:

*A change of surroundings would supply new objects for my curiosity and thus would stimulate fresh thought.*

Nakano's time at Decoigne was filled with his observations of the wildlife and wildflowers that abounded around the camp. He talks of the beavers and bears he observed in the adjacent river and describes the flowers:

*Dandelions bloomed like stars. Growing at our feet were the wild roses of Alberta. I picked some, then added daisies, buttercups, violets and other flowers from the abundance around us. Even today, several decades later, the names of these pretty flowers remind me of the peace of those days.*

To find peace in a Dandelion – how wonderful. It's through the words and ideas of Donegan and Nakano that I've come to think of heightened awareness as a bridge between the physical, the mental and the spiritual. With heightened awareness, the poet and the artist are able to cross over into the deeper realms of aesthetic feelings. They are able to go beyond the ordinary to explore and experience feelings of majesty, solitude and tranquility, of the mysterious and the subtle.

Internment wasn't all peacefulness and tranquility though for Takeo Nakano. The separation from his family and his relocation affected him deeply and there was often an aching loneliness to his words.

*At those times when my loneliness was particularly acute, I went to stand under the night sky. It seemed to rain something sympathetic upon me. As I gently closed my eyes to feel the moonlight on their lids, the*

*present misery seemed to dissipate and I was back with my wife and child.*

*There at that distant camp, I looked up to moonlit peaks to the west and sent my thought over to them, my family, on the other side [of the mountains].*

Loneliness and sorrow were not to be his only adversaries. The hopelessness of despair was also waiting for him. Told that the Decoigne camp was closing and that he would be sent back to the interior of B.C. where he would be reunited with his family, he was, at the last minute, sent to another camp. Then, because he protested this arbitrary and unfair treatment, he was sent to the prisoner of war camp at Angler, Ontario.

Yet still, even from 'behind the wire' at Angler, Nakano persevered:

*I was conscious of a strong will to live life fully. Mere existence would not do. I resolved to think and to act positively, to prepare for a happier future with my family.*

*If only I opened my eyes I was free to see around me such dear objects of delight as a dew-studded web across the grass, or the faintest pulsation of a butterfly that had just alighted. If I were responsive, these were constantly ready to fire me to poetic composition. I came to realize that if I observed subjects carefully, I could, as it were, simply bring forth the poetry that grew within me, one by one.*

If only we were all to open our eyes and see the things around us that are dear to us.

Nakano was eventually released from Angler and was reunited with



JOHN WARDEN

his wife and daughter in Toronto, where they made their new home. He continued to write poetry and, in 1964, was one of twelve winners in Japan's annual Imperial Poetry Contest, that year attracting nearly 47,000 entries. His poem, not a three line haiku, but a five line 'tanka' is worth repeating here:

*As final resting place,  
Canada is chosen.  
On citizenship paper;  
Signing  
Hand trembles.*

In the face of separation,  
loneliness, sorrow and despair,  
Takeo Nakano was able to open

his eyes and see the beauty of the natural world around him. He was able to find peace in a Dandelion. Through the gift of his prose and his poetry we discover the spirit of a fine man, a man of heightened awareness and resolve, who chose – to be Canadian.



[www.jwardenphotography.com](http://www.jwardenphotography.com)

John Warden's website ([www.jwardenphotography.com](http://www.jwardenphotography.com)) is definitely worth a visit for excellent photos of wildlife and landscapes in Alberta and beyond. John also posts articles on his blog (<http://jwardenphotography.blogspot.com/>) from previous *Nature Alberta* magazines.

*Drop in and say hello!*

# Prairie Birder: A Great Resource and Blog

BY DENNIS BARESCO



*She describes her site as: “Looking for birds at home on our farm, and anywhere my family travels.” She provides great little stories and her own photos of her birding experiences. She adds links to a wide variety of bird news and to other bird bloggers. Perhaps best of all, her site is truly interesting even if you’re not a birder!*

“She” is sixteen year old Charlotte Wasylik and she operates an amazing site/blog that is highly recommended: <http://prairiebirder.wordpress.com>. You can sign up to follow her blogs via email.

In describing herself on her site, Charlotte states: “I’m a young birder and enjoy birding, so I decided in late 2010 I should start a blog to record and write

about my sightings. I live on the prairies in Alberta, Canada, where I couldn’t be happier, with a big open sky, prairie, and lots of open water. I live on a farm with many animals — rabbits, chickens, beef cattle, horses, and a dog (who sometimes comes birding with me) — and many varieties of birds.”

Charlotte’s avian life list for Alberta, begun 2009, is an impressive 149 species. However, her total life list is equally impressive: 238 species from birding “on the island of Nevis in the West Indies and in New York City, both places where my late grandparents used to live.” In August of last year, she was selected to take part in the Long Point Bird Observatory’s Young Ornithologists’ Workshop. This April, she helped the Edmonton Nature Club and Nature Alberta’s Kelsie Sharun with the Young

Naturalists’ Corner at the Snow Goose Chase in Tofield AB.

Charlotte is on Facebook (as Charlotte Wasylik) and last summer started the Facebook group, “Alberta Birds”; the page, as she explains, is “for birders to post photographs (and videos) of, questions about, and just generally discuss the birds in this province. If you bird in Alberta, or plan to bird here on a visit, or would just like to see the wonderful avian species we have in our province, please come join us!”

Charlotte is also on Twitter as Prairie Birder, @birding111 (<https://twitter.com/birding111>). Make a point of signing up for her blog, or at least reading it; you will not regret it: <http://prairiebirder.wordpress.com>.

Charlotte is a member of the Vermilion River Naturalist Society, a Nature Alberta Corporate Club.



<http://prairiebirder.wordpress.com>

EDITOR'S NOTE:

In response to the article "Giants Among Us!" by Norm Brownlee in the Winter 2012 *Nature Alberta* (Vol 41, No. 4), Helmut Amelang wanted to share his big tree with our readers.

# "My Big Tree"

BY HELMUT AMELANG

*I'm sending you a few images of "my big tree" (Fig 1a, Fig 1b) in the riverflat southwest of Drayton Valley.*

The yellow T on the picture (Fig 2) means that TransAlta had it marked for cutting down because it is on a powerline right-of-way. But I stopped the crew doing the cutting. After I talked to our District Forester about it, he got 10 acres under protection. I hope it will stay that way.

For many years it was the home of a pair of Great Horned Owls. Sometimes in early 2000 a brown Black Bear used it for its winter den (Fig 3). In November 2006, I saw a little, black, Black Bear in the cavity high up in the tree, its head just showing (Fig 4). Not very good images, but proof that they were there!

On April 11, 2012 I walked up to the tree. I did not get a good measurement, but as a bonus, I did hear the Great Horned Owl calling. I had not heard or seen any of them for a few years. On May 13, 2012



FIG 1A (LEFT) & FIG 1B (RIGHT); NOTE THE CAVITY IN FIG 1B. HELMUT AMELANG

we did not hear the Owl calling. Kind of early for them to be leaving the nest. I found a half eggshell under the tree.

P.S.: It took me a long time to get some help to measure that big tree. The circumference is 14 feet 10 inches, one meter above ground (Fig 5).



FIG 4.

HELMUT AMELANG

FIG 2. HELMUT AMELANG



FIG 3. HELMUT AMELANG

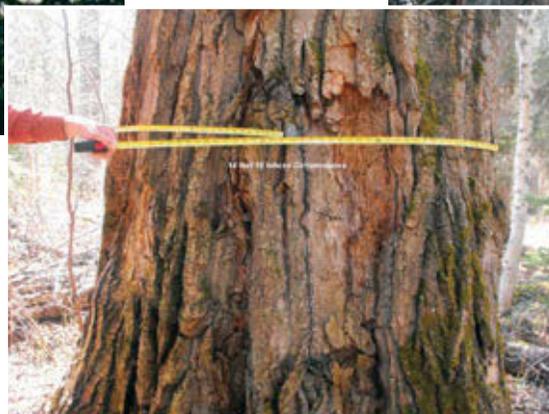


FIG 5.

HELMUT AMELANG

FEATURE ARTICLE

# Friends in High Places

BY SANDRA C. HAWKINS

PEYTO LAKE, BANFF NATIONAL PARK. SANDRA HAWKINS

*The Friends of Jasper National Park encourage visitors to get active and enjoy nature by cultivating “Friends in High Places”.*

They use this theme as a logo on some of the merchandise they sell for fundraising purposes. The

monies raised are dedicated to preserving the park’s natural and cultural history.

small amount of upward travel, can lead from the undulating ballet of wind-kissed prairie grasses to a wintry shock of ice and snow near or above tree line.

Many visitors to our mountain parks may not realize that a short vertical journey is the equivalent of travelling over great expanses of latitude. A summer’s hike in Waterton Lakes, Banff or Jasper National Parks, with a relatively

The corresponding change in an eco-system for each rise in elevation is referred to as the *catena of terrestrial ecosystems*. With increasing altitude, environmental factors such as temperature, soil composition, and moisture availability tend to vary. Other factors such as degree of incline (*angle of repose*) and whether a location is situated on a windward or leeward slope (influence of *adiabatic lapse rates*)



**A BIGHORN SHEEP LAMB AT RED ROCK CANYON IN WATERTON NATIONAL PARK – ALL LEGS!** SANDRA HAWKINS



**A GRIZZLY AND A BLACK BEAR ENJOYING THE KANANASKIS TRAIL.** SANDRA HAWKINS

also contribute to the composition of resident flora and fauna.

Take a walk on the wild side and go vertical. Revel in the joy of the high country. Maximize your alpine experience by taking the opportunity to compact the possibility of encountering a dazzling array of scenic vistas, and the creatures that inhabit them, into a relatively short travel distance. Although many trails should be tackled only by those who are in top physical condition, the national parks offer many opportunities for people of all capabilities to overcome their fears of being “vertically challenged”. When in doubt, check before you venture out with the knowledgeable and friendly

park staff at the various visitor centres.

As one who enjoys nature photography, I like to avoid the beaten track and explore the high country as much as possible. There are many locations that allow visitors to Alberta’s mountain parks to observe and enjoy (with minimal physical exertion) the animals, birds, butterflies and wildflowers of higher elevations. Here are some of my favourites:

#### **WATERTON LAKES NATIONAL PARK**

**Cameron Lake Road:** This scenic road enjoys a steady climb up to beautiful Cameron Lake. Watch for Bear Grass (*Xerophyllum tenax*) and Steller’s Jay (*Cyanocitta stelleri*). Be wary of Bighorn Sheep (*Ovis canadensis*) that sometimes frequent the road



**A PIKA (*OCHOTONA PRINCEPS*) IN JASPER NATIONAL PARK, ABOVE MEDICINE LAKE.** SANDRA HAWKINS



**STORM IN THE MOUNTAINS OFF HIGHWAY 940.** SANDRA HAWKINS

side. The melodious Townsend's Solitaire (*Myadestes townsendi*) may be perched along stream edges as it gracefully catches air borne insects. Upon reaching the Cameron Lake parking lot, visitors have a choice of trails of varying difficulty to explore. Listen in early summer for the long, low, lovely whistle of the

Varied Thrush (*Ixoreus naevius*). Be particularly cautious of bears in this area. Grizzlies (*Ursus arctos horribilis*) are not uncommon in the dense rainforest-like vegetation along the shores of Cameron Lake. Watch for Elk (*Cervus canadensis*), Moose (*Alces alces*) and Mule Deer (*Odocoileus hemionus*) as they seek an escape from the summer's heat.

**ALTERNATIVE DRIVE:**  
**Red Rock Canyon Road.** Bighorn Sheep commonly visit the parking

lot. Use binoculars to "glass" the surrounding rocky ledges for Mountain Goat (*Oreamnos americanus*).

**JASPER NATIONAL PARK**

**Maligne Lake Road:** From Jasper town site, take the bridge across the Athabasca River and continue driving past the turquoise water of beautiful Medicine Lake. Here the road clings to the edge of a towering rocky rampart. The slopes of the mountains are very steep and may be prone to rock slides. This type of formation where layers of rock may slide



**A GOLDEN-MANTLED GROUND SQUIRREL GROOMS ON BEARS HUMP TRAIL, WATERTON LAKES NATIONAL PARK.** SANDRA HAWKINS

past one another due to the presence of fracture planes is sometimes referred to as “*slickensides*”. Stop safely at one of the many lookouts and watch for Bighorn Sheep, Hoary Marmot (*Marmota caligata*) (aka “whistle pigs”), and tiny Rocky Mountain Pika (*Ochotona princeps*) (aka “rock rabbits”) that may be busily gathering their winter’s hay.

**ALTERNATIVE DRIVE: Mt. Edith Cavell Road.** A steep, winding road with many hairpin turns leads up to the Angel Glacier. Listen for the raucous screech of Clark’s Nutcracker (*Nucifraga columbiana*) as they harvest the seeds of high altitude pines.

#### **BANFF NATIONAL PARK**

**Moraine Lake Road:** Located approximately 15km southwest of Lake Louise town site, this road leads up to higher country where many of the species already listed may be found. Watch for Common Goldeneye ducks (*Bucephala clangula*) with their tiny young. These birds prefer to nest on higher mountain lakes. Try not to overlook the small game such as Least Chipmunk (*Tamias minimus*) and Golden-mantled Ground Squirrel (*Callospermophilus lateralis*).

They often haunt the picnic areas. Do not feed them: A fed animal is a dead animal.

**ALTERNATIVE TRAIL:** If health and mobility permit, hike up to **Peyto Lake** viewpoint for a superlative mountain vista and revel in the wildflower array along the path. Many of the flowers here bloom much later in the season as they must first wait for the snows at this higher altitude to melt.

***Time an issue?*** Drive along the **Icefields Parkway** or the **Kananaskis Trail**. A drive may not be as intimate as a hike, but it may provide visitors with a taste for future adventures if one vows to cultivate “Friends in High Places”. Ski lifts and gondola rides (and the roads that lead to them) also provide access to higher altitudes. Remember, the chances of seeing wildlife are increased if you are out at the beginning or end of the day.



THE HIGH COUNTRY OF JASPER NATIONAL PARK. SANDRA HAWKINS

If you plan to visit the high country, whether to an organized park or a more secluded locale, you might consider the wisdom of the words below and enjoy the serenity that follows by climbing your own “jade green mountain”.

*you ask  
why i perch on a jade green  
mountain?  
i laugh  
but say nothing  
my heart  
free  
like a peach blossom  
in the flowing stream  
going by  
in the depths in another world  
not among men*

- LI PO (701-762), CHINESE POET

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A CLARK’S NUTCRACKER AT THE MT. EDITH CAVELL PARKING LOT, JASPER NATIONAL PARK. SANDRA HAWKINS



# The Story of Bumble

BY MYRNA PEARMAN

*On the warm, sunny afternoon of Tuesday, March 19th 2013, Nature Alberta Board member Claudia Cameron and I stopped by the Raven Trout Brood Rearing Station, located south of Caroline, to view their spectacular show fish pond and enjoy the gurgling spring-fed creek.*

We had the opportunity to talk to the technician at the site, Brian Charles, who told us that he hadn't seen the American Dipper that often overwinters near the open water, but that he had been watching a Great Horned Owl catching fish in one of their brood ponds. We were astounded – a Great Horned Owl fishing! In broad daylight! We were pleased to learn that station staff had no problem sharing a few fish with this wild neighbour.

Brian invited us into the compound and sure enough, sitting atop one of the tall metal fenceposts was a small, dark, grizzled-looking Great Horned Owl. Its eyes were a deep, intense yellow. He (we assumed male by its small size) squirmed on the perch, as if in discomfort. Within a few minutes he flew down to a snowbank near one of the ponds, walked over to the

bank and stared intently into the waters. His left foot was obviously swollen. Soon bored, he returned to the perch and proceeded to nap. We got a few pictures and then assumed that he'd already consumed his daily quota of one fish and would thus sleep for the remainder of the afternoon.

As we were leaving, however, we saw him fly back to the pond. His landing spot was blocked from view by a large snow bank, so I quietly climbed over the bank and was delighted to see him feeding on a fresh catch. Not wanting to bother him further, I snapped a few photos and we left. Brian wondered if he had bumblefoot. According to Wikipedia, "bumblefoot" is a bacterial infection and inflammatory reaction on the feet of birds and rodents. Whatever his problem was, we decided that Bumble would be an appropriate name for him.

We returned again on Friday in hopes of watching Bumble in

action. Although the day was sunny, the temperature was near freezing and the south wind blew bitterly cold. Brian again graciously let us into the compound and, as usual, Bumble was sitting atop his perch.

It was a long, cold wait until Bumble stirred. His first move was to fly to the edge of a small pier at the north edge of the pond from which he could monitor the activity in the water below. Suddenly, he dropped straight down into the shallows. Splashing about for several seconds, he returned to shore without a meal. By then it was fish feeding time, so Brian threw several containers of fish food near where Bumble was sitting. Instantly, the waters were churning with hungry trout. Three more times Bumble jumped in and flopped about in a vain attempt to snag a fish. He gave up after the fourth try; wet and weak, he retreated to the shore. He perked up, however, when Brian netted a fish for him: he



*Myrna Pearman is well known in Alberta as a writer, naturalist and the biologist/Site Services Manager at the Ellis Bird Farm. She is also very active with the Red Deer River Naturalists and in 2011 received their Owl Award for significant contributions to the organization.*

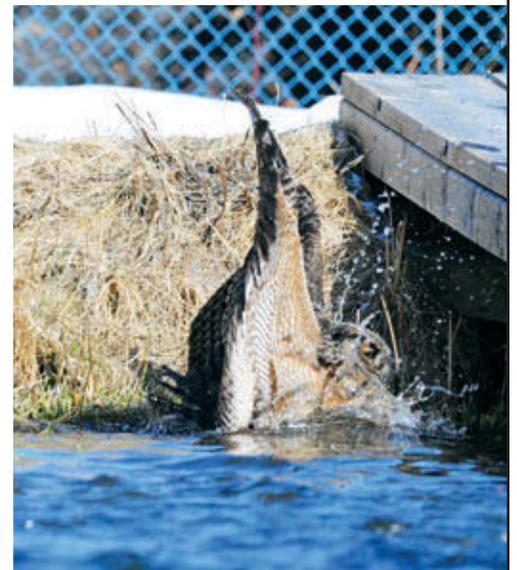
immediately pounced on it, using his bad leg to steady the flopping fish while he pulled at its gills. A long struggle ensued, including several hard smacks to the head, before he could eat.

It was obvious that Bumble was not in great shape so we called Medicine River Wildlife Centre (MRWC). When they came to collect him on Saturday, he was out of reach, asleep on his high

perch. However, on Sunday morning, Brian was able to capture him without protest and MRWC returned to pick him up. After examining his foot, they determined that it had been broken. The foot had not healed properly and was badly infected. Although Bumble responded initially to antibiotics and was eating, the infection continued to spread and he succumbed a week later.

Bumble's bad foot was a serious handicap, but for most of the winter he was able to stay alive by changing his behavior in some very significant "un-owl-like" ways – by hunting during the day and by actively plunging into water to catch fish. He was a remarkable example of how creative, tenacious and adaptable wild creatures can be when it comes to survival.

PHOTOS BY MYRNA PEARMAN



# Collaborative Research: Exploring Elk home range behaviour in Southwestern Alberta

BY DANA SEIDEL

*I spent my summer traipsing around the foothills of the Canadian Rockies. An outdoor enthusiast's dream to be sure, but less glamorous perhaps than first comes to mind.*

Hiking has long been a passion of mine but even I wasn't quite prepared for five long months of treks more frequently off than on trails, across more steep hills than level ground, and often through dense shrub rather than open grassland. You see, when you are following Elk, you don't always like where you end up.

In winter 2012, Nature Alberta and I partnered to apply for community research funds from Mountain Equipment Coop. Together we secured over half the support for my individual Masters project with the goal of studying how Elk develop home ranges in SW Alberta. My goal was to help us better understand how Elk and similar foraging species build their home ranges by studying underlying mechanics: their foraging behavior and their movements.

Home ranges are found across many different types of animals

and yet scientists have little understanding of why or how home ranges form. In 2009, Bram Van Moorter and others<sup>1</sup> published a model proposing how foraging animals might develop their home range. Their idea was that foragers not only remembered areas of their home range, particularly successful foraging patches, but also remembered how long it had been since they had eaten there. This two-part memory system created time between visits to allow for plants to regrow and thus the patch's value to rebound. They successfully simulated repeated returns to known foraging patches and the emergence of a stable home range. To me this idea seemed brilliantly simple and a biologically plausible explanation that I wanted to explore in greater depth.

The challenge was testing such a detailed model on a large scale. Though the nuts and bolts of

Van Moorter's model involved both depletion and renewal of these patches, I had no way of monitoring depletion or growth rates across multiple Elks' entire ranges. To do that I would have needed to spend my field season counting individual Elk bites and literally watching grass grow. This didn't seem practical for understanding the overall home range behavior. Assessing Elk memory also left us with a seemingly insurmountable challenge - you can't exactly interview an Elk. Instead I chose to explore the broader idea of patch quality. My question boiled down to: "Why is an Elk choosing to forage in this place rather than other known areas of its home range?" It seemed to me that if I could answer this, I would be able to predict where Elk would form their home ranges relative to other portions of the landscape. Such predictive ability could potentially be very powerful for management.

As I started researching this project, I began to realize how complex "quality"

<sup>1</sup> Van Moorter B., Visscher D., Benhamou S., Borger L., Boyce M. S., Gaillard J.-M. 2009 Memory keeps you at home: a mechanistic model for home range emergence. *Oikos* 118, 641–652.



*Dana Paige Seidel is a M.Sc. student at the University of Alberta under the supervision of Dr. Mark Boyce. She earned her B.Sc. in Natural Resources from Cornell University in 2011, and is interested in animal movement, landscape ecology, and theoretical ecology. She is thrilled to be partnered with Nature Alberta on this project and happy to answer questions on everything from models in ecology to her favourite hikes in Waterton Lakes National Park.*



**PRAIRIE MEETS MOUNTAINS: A VIEW OF WATERTON LAKES NATIONAL PARK, HOME TO ONE OF THE SEVEN ELK HERDS STUDIED BY THE MONTANE ELK PROJECT. DANA SEIDEL**

could be. A patch's value to an Elk may not be as simple as just the amount of available appetizing biomass. In reality, a patch's value can be influenced by both negative and positive forces. Negative influences might be high density of predators in an area, exclusion by other foragers, proximity to roads, or high human activity. High biomass, especially from preferred, nutritious sources, or even protective cover might be considered attractants or positive stimuli. It was my goal to gather data on as many possible factors as feasible to most accurately assess patches' attractive value to Elk.

My project was based out of Pincher Creek, Alberta. From May 2012 through September 2012, I followed radio-collared Elk in two herds: those just west and

east of the Livingstone range and those living within the boundaries of Waterton Lakes National Park. Choosing these two herds allowed me to explore the differences in Elk behavior across land management types: crown, private, and national parks land. My Elk were fitted with GPS radio-collars during professional captures that were contracted during the previous three winters. These radio-collars gave me the locations of Elk in the area every 2-hours. For the 20 radio-collared Elk within my two herds, I downloaded and clustered their location data weekly.

Then the hard work began. I visited a "patch," where the Elk had foraged, and a "non-patch," a point that the Elk passed by that week, for each Elk each week.

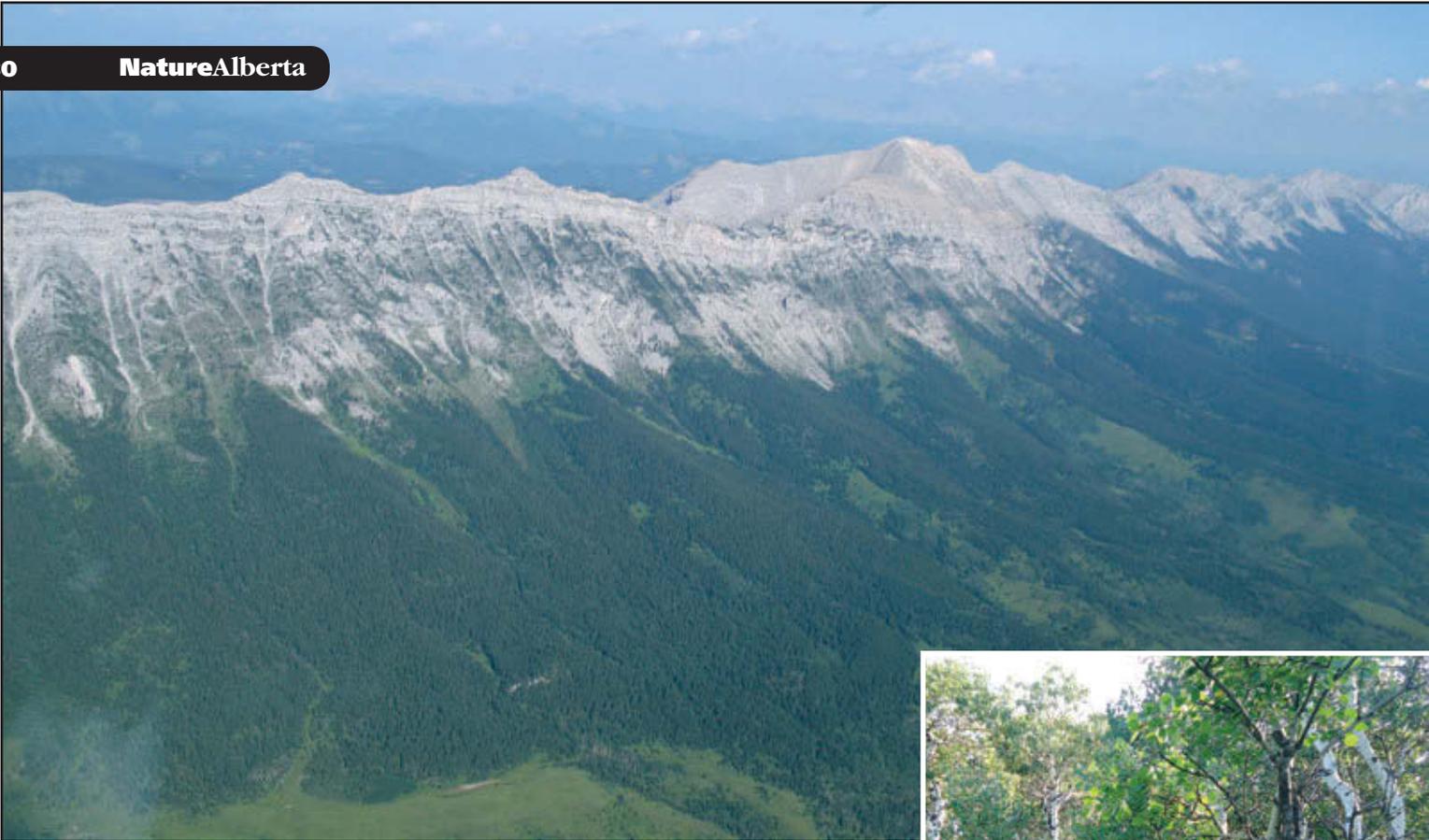
**TECHNICIAN LIZ LEIPOLD SORTING GRASSES AND FORBS WHILE CLIPPING FOR BIOMASS ESTIMATION AT A NONPATCH, JULY 2012. DANA SEIDEL**



**FEMALE ELK IN YOUNG ASPEN AT DUSK. TYLER SGRO**

I carefully recorded information on the natural characteristics of the places where radio-collared Elk had lingered and compared them to areas they passed through. My team and I painstakingly collected data on the areas – slope, aspect, cover type,





**ARIAL VIEW OF THE LIVINGSTONE RANGE FROM HELICOPTER, JULY 2012.** DANA SEIDEL

species present, and biomass estimates – all in the hopes of better understanding what Elk were selecting in foraging patches.

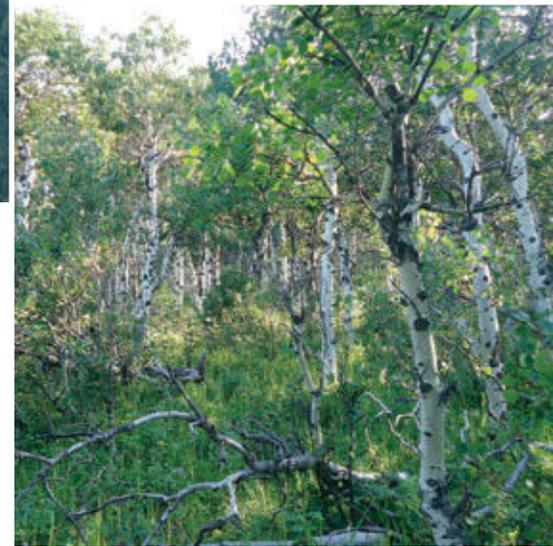
Over the summer, I found myself in hundreds of different patches: patches in dense shrub, on lakeshores, in open grasslands; patches on the crests of high hills; patches in open wetlands; patches in dense pine forest; patches in regenerating aspen; patches with Elk in them, patches with bears in them, and patches with cattle in them. In total I sampled 208 individual sites and the ample amount of data I collected will help me to illuminate patterns and connections among these diverse sites.

This summer has left me with a few fading scars, a mountain of fine-scale data, and plenty of questions yet to be answered. All

of my hard-earned data need to be rigorously assessed in the upcoming months before any conclusions can be reached.

My curiosity is continuously piqued by patterns that I saw in the field last summer. I saw Elk regularly returning to patches, and selection behaviours that differed by sex and among herds. I am eager to explore these and many other questions from the data collected last summer. This is still work in progress but I am hopeful that our work and Van Moorter et al's model can help us to learn more about how the underlying landscape and Elk foraging behaviour influence the formation of their home ranges.

My project is a small contingent of the larger collaborative Montane Elk Project. For more information, please check out [www.montaneelk.com](http://www.montaneelk.com).



**AN EXAMPLE OF A SHRUBBIER PATCH.** LIZ LEIPOLD



**A LARGE SUMMER GROUP OF ELK FORAGE ON HILLSIDE WEST OF THE LIVINGSTONE RANGE.** LIZ LEIPOLD

# Wing-tagged Golden Eagle observed at Waterton Lakes National Park

BY CYNDI M. SMITH<sup>1</sup>, ROBERT DOMENECH<sup>2</sup>, AND ROBERT A. WATT<sup>3</sup>

*During the last two decades, thousands of Golden Eagles (*Aquila chrysaetos*) have been observed migrating north in the spring and south in the fall along the front ranges of Alberta's Rocky Mountains (Sherrington 1993, 2003). The eastern slope of the Rockies provide favourable thermals, and in southern Alberta these long-distance migrants begin spreading out onto winter ranges (Goodrich and Smith 2008).*

These birds have been assumed to migrate between breeding areas in northwestern Canada, Alaska and even as far as Siberia, and wintering areas throughout the midwestern USA and even south into Mexico. Individually marked birds, though, can offer insights into exactly where individuals are travelling to and from, how far they have moved, how long they live, as well as causes of mortalities. In the spring of 2009, a small piece of the puzzle slipped into place when a wing-tagged eagle was remotely photographed at an intercept feeding site in Waterton Lakes National Park (WLNP), in the very southwest corner of the province.

The purpose of the Spring Intercept Feeding Program, coordinated by Alberta Environment and Sustainable Development, is to use strategically placed wildlife carcasses (collected all winter by highway crews) to intercept

Grizzly Bears who have come out of their dens and are heading to lower, snow-free elevations to feed on greening vegetation (Government of Alberta 2010). These lower elevations are often on ranchlands, frequently leading to livestock depredation and conflicts with humans. By intercepting the bears before they reach the ranchlands, they delay the bears long enough for the snow to melt in other areas with less opportunity for conflict, and for calving and lambing to be completed. As part of the assessment of the program, in 2009 motion sensitive cameras were installed at 14 of the drop sites, to document what species are attracted and how long they use the site.

On April 1, 2009, a motion sensitive camera (Reconyx™ PC90 Covert Professional) was set up at an intercept feeding site on Mokowan Butte, near the eastern boundary of WLNP (Fig. 1). A



**FIG 1.** BANDING (YELLOW DIAMOND) AND RE-SIGHTING (RED CIRCLE) LOCATIONS, AND POSSIBLE NATAL AREA (OVAL) OF WING-TAGGED GOLDEN EAGLE C-81.

deer carcass was dropped by helicopter at the site on April 7. The camera was retrieved on June 2, 2009, and the images downloaded and classified for wildlife activity.

The first Golden Eagle, untagged, was observed on the carcass on April 17. On the afternoon of April 21, a Golden Eagle with a blue vinyl wing tag, with white alpha-numeric code "C-81", was

<sup>1</sup> Parks Canada, Waterton Lakes National Park, P.O. Box 200, Waterton Park, AB T0K 1N0

<sup>2</sup> Raptor View Research Institute, P.O. Box 4323, Missoula, MT 59806

<sup>3</sup> P.O. Box 711, Pincher Creek, AB T0K 1W0

photographed feeding on the carcass (Fig. 2) for 75 minutes. C-81 returned again the next morning, feeding for 50 minutes. She returned three more times during that day, staying for 12, 3 and 6 minutes, respectively. She returned again on April 23, staying only for 2 minutes before leaving. Later the same day she returned and fed for 37 minutes. The temperature dropped and it snowed overnight. On April 24, C-81 was photographed in the morning, flying away from the site, and may have been feeding just out of view of the camera. She returned two more times that day, feeding for 45 and 75 minutes, respectively (Fig. 3), which was the last time she was photographed at the carcass. On April 25, an untagged Golden Eagle was observed feeding.

C-81 had been captured on October 21, 2007, on Grassy Mountain at the south end of the Big Belt Mountains, about 75 km southeast of Helena, Montana, by Raptor View Research Institute (RVRI) scientists. This is a distance of about 350 km as the eagle flies, although she likely wintered farther south. She was aged as a hatch-year bird by plumage, so was entering her 3rd year when photographed in WLNP. Her sex was confirmed through DNA testing. Blood samples taken at the time of capture were tested for lead, and C-81 had very low levels ( $< 4$  micrograms/deciliter). Anything  $> 10$   $\mu\text{g}/\text{dL}$  is greater than expected background levels, and several Golden Eagles tested have had blood-lead levels  $> 100$   $\mu\text{g}/\text{dL}$  (Domenech and Langner

2009). The use of lead-core ammunition for hunting is the major source of lead exposure in Golden Eagles, as well as many other predatory, opportunistic and scavenging species that feed on lead-tainted carcasses or gut piles. Nearly half of the Golden Eagles sampled by RVRI have had elevated blood-lead levels (RVRI 2012).

A thumb-sized feather sample taken from C-81 when she was captured was used to estimate the general area where she was born (Fig. 1). The ratio of deuterium to hydrogen (stable hydrogen isotopes) in rainfall varies consistently with latitude across North America. That “signature” is transferred through diet into the feathers grown by birds living in the area, both juveniles growing their first set of feathers and by adults replacing moulted feathers (Hobson 1999). C-81’s isotopic signature was  $-153.4$ , which indicates she most likely was hatched and raised in the Yukon or Northwest Territories (Lott and Smith 2006). Long-term observations at monitoring sites in Alberta have demonstrated that immature eagles pass north later in the spring than adults (Sherrington 2003), which fits C-81’s pattern.

At the time of observation, C-81 was the third eagle winged-tagged by RVRI to be photographed with remote cameras on carcasses, which is proving to be an effective way of getting encounters. Since 2004, 188 Golden Eagles have been wing-tagged by RVRI in Montana, of which 32 have been re-sighted, an encounter rate of



**FIG 2.** GOLDEN EAGLE C-81 ON ITS FIRST DAY AT THE DEER CARCASS. NOTE THAT THE TIME STAMP ON THE PHOTOGRAPH SHOWS AM WHEN IT SHOULD BE PM. PARKS CANADA



**FIG 3.** GOLDEN EAGLE C-81 ON ITS LAST DAY AT THE DEER CARCASS, AFTER HEAVY SNOWFALL. NOTE THAT THE TIME STAMP ON THE PHOTOGRAPH SHOWS PM WHEN IT SHOULD BE AM. PARKS CANADA

17%, which is considerably higher than leg band recovery rates (RVRI 2012).

There have been six other sightings of wing-tagged Golden Eagles in Alberta (Table 1), three of which were positively identified. Any observations of wing-tagged Golden Eagles should be sent to Rob Domenech (rob.domenech@raptorview.org), with details on when and where the bird was encountered, the condition of the bird at the time (alive and healthy, dead, injured) and your full contact information. Even a partial reading of the code might be enough for its identity to be established.

**TABLE 1.** Summary of wing-tagged golden eagle observations in Alberta, 2006-2012, in chronological order.

Wing Tag #	Where banded	When banded	When Seen	Where Seen
Unknown	-	-	19 Oct 2006	Livingstone Range
Unknown	-	-	28 May 2008	Crowsnest Pass
C-81	Grassy Mtn, MT	21 Oct 2007	24 Apr 2009	Waterton Lakes NP
Unknown	-	-	17 Nov 2009	Crowsnest Pass
C-90*	Nora Ridge, MT**	23 Oct 2008	10 Oct 2010	Jasper NP
C-102	Nora Ridge, MT	10 Oct 2009	24 March 2012	Mountain View
C-138***	Nora Ridge, MT	29 Sept 2011	25 May 2012	Cowley

\* C-90 was killed when it collided with a vehicle along the Icefields Parkway (Hwy 93). It had been observed in the summers of 2008 and 2009 in Denali National Park, Alaska.

\*\* Nora Ridge is about 21 km east of Lincoln, MT.

\*\*\* C-138 was observed in the same area multiple times during the spring and summer of 2012.

Golden Eagles are top predators in the ecosystem and may be harbingers of ecological changes. Trend analysis of autumn raptor counts in western North America show that Golden Eagle counts declined significantly at five of the 10 sites analyzed, including Mount Lorette, Alberta (Smith et al. 2008). While some of the decline appeared to be correlated with regional variations in precipitation and drought (Smith et al. 2008), other causes may be related to food availability and large scale land use changes (Sherrington 2003). Ongoing research from a variety of projects, from migration counts to wing-tagging and satellite telemetry, will help to track these trends.

**ACKNOWLEDGEMENTS**

We thank Greg Hale, biologist with Alberta Environment and Sustainable Resource Development in Pincher Creek, coordinator of the Spring Intercept Feeding Program, for his assistance. Earlier drafts of this manuscript benefitted from reviews by Peter Achuff and Lisa Bate.

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# The Best Chance for our Best Places

Will the South Saskatchewan Regional Plan deliver restoration or more degradation?



BY KEVIN VAN TIGHEM

*We've been down this road before, right? The Alberta government responds to controversy by promising a new plan, and then launches a complicated planning process with lots of public consultation. Then the plan comes out and vanishes onto a shelf. As Harry Potter would say: "Mischief managed."*

But this time it is different. The South Saskatchewan Regional Plan (SSRP), a draft of which is due out this summer and fall for public consultation, will have the force of law once the government signs off on the final version. It will change things all through the Bow, Oldman and Milk River drainages.

Will it change things for the better? That's up to us. It's our plan.

The big conservation issues in southern Alberta revolve around water scarcity, habitat loss and fragmentation (particularly in the grassland areas), species at risk and the dwindling supply of wildland recreational opportunities for a booming human population. The SSRP – a product of the visionary Alberta Land Stewardship Act – is meant to address all those issues.

A lot of vested interests are lined up to keep the SSRP from delivering conservation results that might affect them. Off-road vehicle users want to be able to keep "mud-bogging" (turning sensitive wetlands and creek meadows into eroding mudholes). Irrigators are keen on using water more efficiently, but want any water those efficiencies free up to go into more irrigation, not into

restoring water levels in shrunken prairie rivers. Oil and gas lobby groups have fought hard and, so far, successfully against a "no-net-loss" wetland policy in spite of the massive loss of sloughs and shallow wetlands across the prairies. The Alberta Forest Service wants more clearcut logging in the Castle Special Place and in the "Critical Wildlife" and "Prime Protection" zones farther north.

So the odds are against a truly progressive and visionary SSRP, one that addresses southern Alberta's serious environmental challenges in meaningful and effective ways. That is, unless Albertans who care about conservation and the future roll up their sleeves and wade into what could be one of the most important public consultations that has come our way in a long, long time.

What are some of the things to look for in the SSRP as proof that it really delivers?

## HEADWATERS RESTORATION

The Bow and Oldman Rivers gather up the flow of dozens of small creeks draining out of some of the most spectacular and wildlife-rich landscapes in North America. Flowing east, they bring that water

to cities, farms and industries where most of us live. And that's all there is. We depend utterly on the health of those headwaters for virtually every drop of water we use.

When we go to visit the source of all that liquid gold, we find green landscapes, elk, bears, the play of light on mountain faces...truly unique and special places. Water is not the only gift that high country gives us, just the most vital.

We also, unfortunately, find a legacy of damage from a century of multiple abuses. Large clearcuts, tire-ripped off-road vehicle vandalism areas, spidery networks of gas, logging and woods roads, muddy creeks that used to flow clear and sweet over clean gravel beds – this is a landscape that seems, at times, to attract more abuse than respect.

An unhealthy watershed isn't just a depressing place to visit – especially for those of us who have been around long enough to remember the pristine glory of our high country in the mid-twentieth century – it robs us of our water security. Our rivers now bring 12% less water than they used to, and that water comes more often as damaging spring floods, leaving the streams shrunken and tepid in the summer.

Water security matters. Already, the government has put a moratorium on



KEVIN VAN TIGHEN

to all your friends and family, too, so they can add their names too. Think of how those mountains and foothills have enriched our lives. Our headwaters deserve our support.

### WETLANDS

Oil and gas lobby groups have fought hard against including any provision for “no net loss” of wetlands anywhere in Alberta, including in the SSRP, for fear of the precedent that would establish, especially in the oilsands region where recent losses are massive.

But southern Alberta has lost well more than 75% of its most productive small wetlands over the past century. Those wetlands are the most productive habitats on the prairie landscape, providing habitat for waterfowl, shorebirds, amphibians and other species, many of which are now threatened or endangered by habitat loss. Wetlands are not just about habitat: they are vital groundwater recharge areas. As more and more people tap into underground water sources, it’s going to become more vital than ever that these areas that trap snowmelt and rainfall and release it into those water aquifers are protected and restored.

The SSRP should include at the least, a commitment to *no-net-loss of our remaining prairie wetlands*, with tangible requirements that industry, developers or others who disturb wetlands replace them with similar wetland habitat elsewhere. In fact, given the huge wetland deficit our history has given us, a truly meaningful plan would

*protect all surviving wetlands* and, where damage is unavoidable, require similar habitat to be *restored elsewhere on a ratio more like ten ha of new wetland for every one ha disturbed*. It should include economic incentives to help farmers and ranchers profit from wetland restoration. They can’t afford to do it for free, after all.

### GRASSLAND

Barely a third of the original prairie grassland in southern Alberta survives today. That’s why longspur, pipit, sage grouse and snake populations are crashing. Prairie Canada is our biodiversity hall of shame: almost half of Canada’s species at risk are prairie species. To a large degree that’s because of habitat loss. Much of the native grassland that survives is only marginally useful for the most sensitive wildlife species because it is so fragmented and disrupted by oil and gas development, powerlines, wind turbines and other disturbances.

There are still a few large tracts of grassland left – either undisturbed original prairie owned by the government and leased to ranchers for grazing, or abandoned tax-recovery lands that have recovered most of their original plant species and are now administered by municipalities as cattle-producing land. Cattle ranching has helped to save these lands and contributed to their habitat diversity. But their future as grazing land is

issuing new water licenses in the South Saskatchewan watershed: all the available water is spoken for. Yet if headwaters damage continues to increase even as the climate warms, there will be less in future. And the region’s population is projected to double in the next 25 years. This is not a pretty picture.

The SSRP should *make headwaters restoration and protection the over-riding policy priority for the foothills and high country*. If logging continues, it should be far more sensitive and designed to enhance water supply, not to maximize wood supply. *Off-road vehicles should be restricted* to carefully-designed trails that avoid wetlands, stream valleys and other sensitive sites. The *Castle Special Place should finally get the legislated protection as a wildland park* that it deserves. Abandoned roads should not only be closed but also restored to the original landscape contours so that groundwater flows are restored.

Besides commenting on the draft SSRP there is a simple way to send this message – an online petition going the rounds right now: [www.avaaz.org/en/petition/Treat\\_our\\_Alberta\\_headwaters\\_like\\_the\\_treasures\\_they\\_are/](http://www.avaaz.org/en/petition/Treat_our_Alberta_headwaters_like_the_treasures_they_are/)

Anyone who cares about our foothills and Front Ranges can log in to the petition site and register as a supporter. It would help to send the web address for this petition

### OFF ROAD VEHICLE DAMAGE IN THE HEADWATERS OF THE BOW RIVER.

KEVIN VAN TIGHEN





not assured – as recently as the Potatogate controversy of 2010 the government proposed to sell large blocks to irrigation farmers. Even where there are no immediate plans to sell them for cultivation, these large blocks of land are threatened by energy development which creates linear strips of disturbance that eat away at their ecological health by spreading weeds and creating non-native grass monocultures.

For the SSRP to turn things around in our threatened prairie grasslands, the surviving large tracts of native prairie need effective protection and continued cattle grazing. That means *designating public grasslands as Heritage Rangeland* – legislated protection that keeps them secure from new surface disturbance by energy companies – while at the same time issuing *new*

**BARELY A THIRD OF OUR ORIGINAL NATIVE PRAIRIE SURVIVES. THE SSRP IS OUR BEST HOPE FOR PROTECTING THAT FROM FURTHER INDUSTRIAL DEVELOPMENT AND TO START RESTORING WHAT'S BEEN LOST.** KEVIN VAN TIGHEM

*longer-term grazing leases to the ranchers* who rely on them and have proven themselves to be good land stewards.

But that's not enough. Alberta has lost far too much native grassland and needs to get some back.

Besides, a lot of what survives is privately owned, not public land. A truly strategic SSRP would include strong measures to pay ranchers not only to continue to protect their private grasslands, but to restore to native prairie what is now marginal cropland in or near environmentally significant areas. A wise goal for southern Alberta would be to *marshal market forces to restore native grassland cover to at least 50% of the prairie landscape*, up from the current 35%. There is no reason why farmers should only earn income from crop production: there should be strong markets for the ecological goods and services that the most progressive agricultural families produce at their own cost today, but that others have destroyed or impaired because of the lack of economic value from things like burrowing owl habitat, sage grouse leks and native vegetation.

#### **KURT VONNEGUT WAS WRONG**

American novelist Kurt Vonnegut, in a particularly dour and pessimistic moment, once said, *"Everything is going to get worse and worse and never get better again."* It can be tempting to surrender to the comfortable hopelessness of cynicism and conclude that he was right. Cynicism demands so little of us. But given the ecosystems,

wildlife and future human generations relying on us to give them a future, it would be a sad failure on our part. This is the time to prove that Vonnegut was wrong.

The South Saskatchewan Regional Plan is the second of a series of regional plans that will, eventually, cover the whole province. It may be the most challenging, if only because so much of our province's population lives, works and plays in the Bow and Oldman watersheds. But that's why it's also so important that we work hard and stubbornly to get it right. It matters to the much-abused foothills, grasslands and wetlands of southern Alberta, but it also matters for the precedents that will be set there – precedents that will determine the quality of other regions' land use plans.

If there was ever a time to set aside disbelief, cynicism or self-doubt and make the effort to communicate with MLAs, government planners and those involved in finalizing the SSRP, it's now.

The draft plan will be flawed: that's inevitable. But it's a draft. The final plan is the plan that matters. It will be produced this fall after the government has heard from all of us. It might be the wrong plan, the one you get when you can't be bothered but others can. But it could also turn out to be the right plan – the plan that proves Vonnegut wrong and turns the conservation story of southern Alberta from deepening gloom into growing hope.

That will only happen, however, if every naturalist, conservationist, rancher, water-drinker and wildland recreationist in Alberta takes the time to participate in some active citizenship. We're the only ones who can ensure our government produces the South Saskatchewan Regional Plan we need and deserve.

More info: <https://landuse.alberta.ca/RegionalPlans/SouthSaskatchewanRegion/>

## **JUST DO IT!**

Anyone who cares about our foothills and Front Ranges can log in to an on-line petition site and register as a supporter. [www.avaaz.org/en/petition/Treat\\_our\\_Alberta\\_headwaters\\_like\\_the\\_treasures\\_they\\_are/](http://www.avaaz.org/en/petition/Treat_our_Alberta_headwaters_like_the_treasures_they_are/)

Send the web address to all your friends and family so they can add their names, too. And, be sure to comment on the draft SSRP.

# First Hand: Even More Great Wildlife Encounters

## “Urban Coyote”

BY RICK PRICE

A Coyote, waiting for his opportunity to cross the Spray River Bridge, near Bow Falls. Yep, he's an urban Coyote. Why do I say that? Well my son Cody works for the Town of Banff and from what he tells me the Coyotes follow the Ravens to the town solid waste management facility when the goodies are brought in from the many restaurant bins.

RICK PRICE

The Ravens will actually follow the trucks. When the load is dumped in the fenced-off facility, the Ravens grab as much as they can and fly over the fence. This is where the Coyotes come in; they lay in hiding and attack the Ravens. The Ravens fly off and leave the goodies to the Coyotes. Cody says

there have been as many as a dozen Coyotes playing this cat and mouse game at once.

RICK PRICE





**BOHEMIAN WAXWINGS CAME BY LAST WEEK AND CLEANED UP THE OLD APPLES. WE WERE FORTUNATE THEY DIDN'T HIT THE WINDOWS THIS TIME. WE'VE HAD TO TAKE IN SOME; MY HUSBAND PUTS THEM UNDER A BOX, FEEDS THEM WATER UNTIL THEY ARE ABLE TO FLY, THEN LETS THEM GO..**

JEAN AND DICK CONNOR



**DICK TOOK A FEW PICTURES OF A RED SQUIRREL RUNNING BACK & FORTH TRYING TO GET THIS SHARP-SHINNED HAWK TO MOVE. THE HAWK JUST LOOKED AT HIM.**

JEAN AND DICK CONNOR



**THIS PILEATED WOODPECKER CAME BY FOR A VISIT EVERY YEAR BUT THIS YEAR. JEAN AND DICK CONNOR**

## Busy Yard!

BY JEAN CONNOR

*Jean and her husband Dick live in Edmonton in Rio Terrace just a 1/2 block from the river.*



**A BIRD FEEDER MY BROTHER MADE. WE ALSO HAVE A BIRD FEEDER THAT LOOKS LIKE A JAPANESE TEMPLE.. JEAN AND DICK CONNOR**



**A STOAT CAME AND CHASED THE MICE FROM UNDER THE DECK INTO THE SNOW, THEN TOOK THEM SOMEWHERE. THESE ARE THE PHOTOS I TOOK WHEN WE FIRST SAW HIM. IN THE PHOTO WITH HIS MOUTH OPEN, WE THINK HE WAS AFTER A MOUSE. JEAN AND DICK CONNOR**





LEN PETTITT

## Get Outa Here!

BY LEN PETTITT

This photo was taken April 14th at the Hermitage Park area. The Great Blue Heron had been feeding in the small area of open water while the Canada Geese watched from on the shore. When

the Canada Geese entered the water I focused to get a photo of them together. When this action was suddenly initiated, I was (luckily) able to seize the moment.

If you have a first-hand experience with nature, send it in and share it with other naturalists. After all – there are 8 million stories in the Nature City. Yours...could be one of them.

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LEN PETTIT

**BLUEBIRDS ARE USUALLY OUT IN THE OPEN – ON A FENCE POST, BARBED WIRE, OR NESTBOX – MAKING THEM EXCELLENT PHOTOGRAPHIC SUBJECTS.**

## Wildlife! Starring... Mountain Bluebird

BY DENNIS BARESCO

*It's hard to get bluer than a male Mountain Bluebird! Not just any blue – a bright sky blue.*

There are a number of birds that seem the quintessential proof that spring is actually here. Not so much American Robins anymore, as there are increasing numbers in Alberta all winter. Western Meadowlarks are a good sign. So are gulls. But Mountain Bluebirds mean that blue skies are here for good – well, at least until autumn.

Of course, Mountain Bluebirds (*Sialia currucoides*), arriving back in Alberta as they do around mid-March after wintering

as far south as Mexico, are among that group of spring migrants that invariably struggle through heavy snowfalls.

Mountain Bluebirds are obligate cavity nesters, which is both good and bad. Bad because they have been driven out of areas where other cavity nesters like European Starlings and the similar sized English Sparrows are prevalent. So you will seldom, if ever, see Mountain Bluebirds nesting in urban areas and farmsteads. Nestboxes,



RICK PRICE

which are the main nesting sites for Mountain Bluebirds, are vulnerable to everything from rodents to racoons, from cattle to vandals.

The good part: Many Albertans take great delight in helping to monitor and maintain nestboxes along Mountain Bluebird trails of which there are quite a number throughout the lower half of Alberta. Monitoring is a thrilling activity; check out your area for a chance to take part!

Although Tree Swallows compete for the nestboxes, the trails have greatly helped re-establish populations of Mountain Bluebirds. Both species, of course, are helpful for insect control: aerial (flying) insects for Tree Swallows; ground insects for bluebirds. Note that since both species are heavily dependent on insects, they are both obligated to head for warmer climes in winter.

As beautiful as Mountain Bluebirds are, as delightful as is the sight of a flash of blue across a grassy field, don't expect a sweet song; it's essentially a weak, low warble... "soft of voice" is how Salt and Salt describe it in their classic book, *Birds of Alberta* (1976). It must be said that the name "Mountain Bluebird" is a tad misleading, as

it can be found throughout the prairies and parkland.

A personal note: I've seen many, many Mountain Bluebirds, in particular in the Cypress Hills and Eagle Butte area, but only once in my life have I seen one nesting in a natural cavity. It was during the first Alberta Bird

Atlas project and I was surveying a square in the Oyen AB area. The nest was in a rather novel position: above it and to the left in the tree was a nesting Swainson's Hawk; above it and to the right was a nesting Great Horned Owl. I don't know how that turned out...for any of the trio!



**TWO YOUNG MOUNTAIN BLUEBIRDS IN THE CYPRESS HILLS. RICK PRICE**



## FIRST TRAIL

According to *The Atlas of Breeding Birds of Alberta*...

"the first formal bluebird trail was established in 1971 near Elk Island Park by Joy Finlay and the Edmonton Junior Naturalists."

BACKYARD HABITAT CAN EASILY  
BE VERY ATTRACTIVE. BBC.CO.UK



## Up Close Naturally: Landscaping for Wildlife

BY MARGOT HERVIEUX

*No matter what the winter weather, early March is nesting time for a handful of local birds.*

Spring is here and now is a good time to start planning those landscaping projects, both for this and following years. Whether you have an urban lot, acreage or larger farm, be sure to consider wildlife habitat in your plans.

The best way to incorporate wildlife habitat into your property is by maintaining diversity. Try to include both trees and shrubs and if you are doing new planting include a variety of plants. Also use native plants wherever possible. They need less water, are more resistant to diseases and pests and are a natural part of the local ecosystem.

In addition to plant diversity also try for structural diversity. Aim to include plants of different heights and plant in groups. On larger properties try to maintain blocks of habitat and, wherever possible, connect those blocks, not just on your land but with surrounding landscape. Leaving brush along

fence lines and roadways is one way to keep those connections.

One important way that you can maintain wildlife habitat is by leaving standing dead trees and deadfall. These trees are used by woodpeckers for food and nesting sites and their abandoned holes are also used by all kinds of other creatures, from flying squirrels and falcons to ducks and owls. If you have concerns about leaving a dead tree, consider topping it instead of cutting it down completely.

Deadfall also provides habitat for many animals including the insects, spiders and other invertebrates that are food for birds and small mammals. The decaying plant material also releases nutrients for the surrounding trees.

If you have a property without much natural vegetation, there are other things you can do besides just planting. Brush or rock piles provide shelter for hares, chipmunks and rodent-eating weasels. Properly placed nest boxes will attract Tree Swallows, Bufflehead ducks and even small owls.

Maintaining or creating ponds or other wetlands is also valuable

for both the wildlife and the land. These wet places act as sponges, holding and gradually releasing water over time. They also help to reduce flooding and are home to countless creatures. By keeping buffers of vegetation around wet areas and keeping out livestock, pets, and vehicles, landowners can do a lot to increase the natural values of their property.

There are lots of resources available for landowners interested in creating or maintaining wildlife habitat. The book *NatureScope Alberta* by Myrna Pearman is full of valuable, Alberta information (available from the Nature Alberta bookstore). A good website to start with is the Alberta Land Stewardship Association at [www.landstewardship.org](http://www.landstewardship.org). There you can find a variety of resources as well as links to other organizations. For information on protecting or enhancing wetlands visit the Ducks Unlimited website at [www.ducks.ca](http://www.ducks.ca) or visit their local office.

Loss of habitat is the number one factor affecting plants and animals in Alberta and around the world. We all have a role to play in protecting habitat and what better place to start than in our own backyards.



*Margot also writes a column for the Peace Country Sun, archived copies of which are available at [www.peacecountrysun.com](http://www.peacecountrysun.com).*

## CELESTIAL HAPPENINGS

# Starry Nights

## Summer (June to August)

BY JOHN MCFAUL

**FEATURED CONSTELLATIONS: PHOENIX, GRUS, PAVO, TUCANA**

A small flock of celestial birds may be seen flitting about the southern skies during the summer months. These constellations were part of a group of twelve constellations named by Petrus Plancius who was a Dutch cartographer and astronomer. They first appeared on a celestial globe in 1598 and Johann Bayer's famous star atlas of 1603, the *Uranometria*.

Phoenix is perhaps the most famous one as it represents the bird that rises from fire. The story is of the mythical bird living for 500 years and then it mounts a pyre to be consumed in flames, but is reborn again. It was important to the ancient Egyptians as a symbol of renewal and immortality.

Grus represents a Crane. Perhaps it is symbolic of the stork of heaven as mentioned in Jeremiah 8:7. The crane was also a symbol of astronomers in ancient Egypt.

The constellation Pavo is a depiction of a peacock with 100 eyes scattered about its tail feathers. These eyes were placed there by Juno the wife of Jupiter. They were the eyes of the giant Argus who was tasked by Juno to guard Io from Jupiter. Argus was lulled into sleep by Mercury. After the last of his 100 eyes closed he was slain by Mercury. This allowed Jupiter to turn Io back into a human from the heifer that Juno had previously

made her. Another myth states that Argos, the builder of the great ship Argo, was turned into a peacock by Juno and placed amongst the stars.

Tucana is the celestial version of the exotic Toucan which had intrigued the 16th century explorers of Brazil and Paraguay. Found within the border of Tucana is the

Small Magellanic Cloud. It is a satellite galaxy of our Milky Way containing several hundred million stars. Within Tucana is the Hubble Deep Field South, the location of a survey of galaxies conducted over a two week period by the Hubble Space Telescope in 1998. It revealed thousands of galaxies that lay billions of light years from Earth.

**CELESTIAL HAPPENINGS**

**Sun:** Rise – June 1 (5:11 MDT), July 1 (5:09 MDT), August 1 (5:50 MDT)  
Set – June 1 (21:53 MDT), July 1 (22:06 MDT), August 1 (21:29 MDT)  
Summer Solstice: June 20th 23:04 MDT

**Moon:** Full – June 23 (super moon), July 22, August 20  
New – June 8, July 8, August 6

**Planets:** **Mercury** may be seen low above the western horizon just after sunset during the middle of June. On June 12th it will be furthest from the sun and on June 20th it will be just below Venus in the bright twilight. In early August it may be seen low in the eastern sky about an hour before sunrise. The crescent moon will be nearby on August 4th.

**Venus** is visible low in the western sky from June through August. It is just above Mercury on June 22nd and close to the moon on June 10th, July 10th and August 9th.

**Mars** spends the summer months rising before the sun in the eastern sky. On the morning of July 22nd it will be very close to Jupiter. The crescent moon will be close to Mars and Jupiter on July 6th and August 4th.

**Jupiter** is to be found above the ENE horizon from mid-July through August.

**Saturn** remains about 15 degrees to the left of the bright star Spica in the constellation Virgo throughout the summer months. In June it stands about 30 degrees above the southern horizon at sunset. By mid-August it will be low in the western sky just after sunset. Watch for the moon pairing up with Saturn on August 12th.

**Meteor Shower:** Delta Aquirids (July 29th, 20/hour in a dark sky), Perseids (August 12th, 50/hour)

*The rate of meteors observed is for dark skies well away from city lights and with no Moon.*

## YEAR OF THE BAT

# Tracking Bats on the Wing

Two Boston University colleagues – biology graduate student Nathan Fuller and visiting scholar Kenn Sebesta, an engineer – may have found an inexpensive method to track bats, one that requires considerably less effort and much greater success than present methods, even GPS tags and radio telemetry. It's an unmanned aerial vehicle – a modified model airplane. Although still in its early stages, the goal is a fully autonomous airborne platform that can follow bats more or less on its own and cost less than \$500 in parts.

With their Automated Tracking and Localization Aerial System (ATLAS), ground crews will be uplinked to what amounts to a self-guided, flying antenna that's in almost continuous contact with a flying bat, while calculating its own position and that of the bat using an onboard GPS receiver. ATLAS will fly at an altitude of 350 feet; once a signal is detected, ATLAS will automatically go into an orbit around the source until it triangulates on the radio-tagged bat. The pair hope to be tracking bats autonomously by this summer. They also hope that ATLAS could

transform the way wildlife radio telemetry is conducted in the future. ATLAS should be able to track almost any organism from the air at a fraction of the cost of traditional radio telemetry techniques.

Support for this exciting development comes from a Bat Conservation International (BCI) Student Research Scholarship.

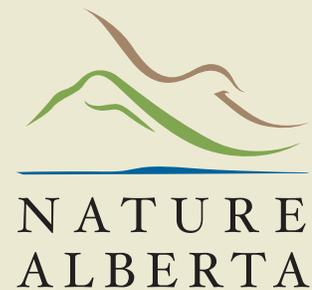


**A TEST FLIGHT FOR ATLAS, A BAT-TRACKING MODEL AIRPLANE.**

[Article and photo taken from the BCI e-Newsletter, December 2012, Vol 10, No 12. The full story of ATLAS and its possibilities is in the Winter 2012 issue of BATS magazine. To help support BCI Student Research Scholarship recipients like these, as well as other critical bat-conservation projects, please visit [batcon.org/donate](http://batcon.org/donate).]

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**MOUNTAIN BLUEBIRDS AT VOITIER'S FLATS; THE FEMALE IS OBVIOUSLY MUCH BETTER CAMOUFLAGED!  
SEE "ON THE COVERS" (PG 3), AND "WILDLIFE STARRING" (PG 40).  
TREVOR CHURCHILL**



# Nature *gallery*



SOUTHERN RED-BACKED VOLE . . . WITH A LADYBUG. SEE "ON THE COVERS" (PG 3). LEN PETTITT



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