

# Nature Alberta

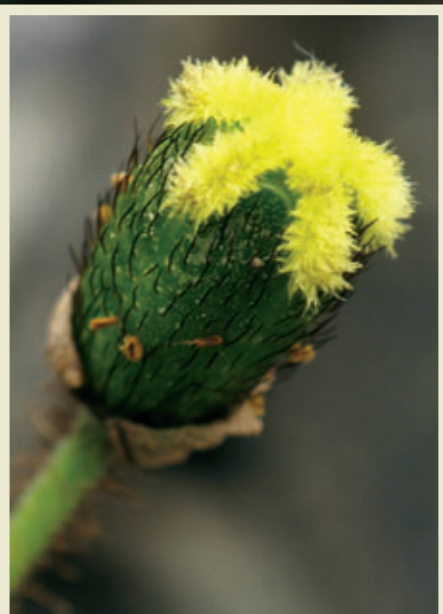
C E L E B R A T I N G   O U R   N A T U R A L   H E R I T A G E



**THE FACE OF ROCKY MOUNTAIN WILDLIFE. NOTE GPS COLLAR. SEE THE FEATURE STORY (PAGE 24).**  
JOHN MARRIOTT

*feature article*

## WOLVES in Alberta: A Perspective



**FIG 1. WHITE-FLOWERED ALPINE POPPY, AND SEED CAPSULE; PHOTOGRAPHED AT THE PURPLE MOUND, BANFF NATIONAL PARK ON 15 JULY 2013; SEE THE STORY, PAGE 20. WILLIAM J. LEACH**



**WESTERN BLUEBIRDS, ALL IN A ROW!**  
SUSAN SLY



*Nature Alberta:  
Celebrating our natural heritage*

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SPRING ISSUE.**FEBRUARY 28**  
SUMMER ISSUE.**MAY 31**  
FALL ISSUE.**AUGUST 31**  
WINTER ISSUE.**NOVEMBER 30**

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

## THE DEDICATED NATURALIST!

The previous edition of *Nature Alberta* had a story (page 36) about Eurasian Collared-Doves, motivated by observation from Presgrave Winter in Viking AB. Later, "Pres" sent me an email outlining some of his naturalist activities. It's impressive indeed, to the point where I just had to share his note with you! Said Pres:

"I have subscribed to *Nature Alberta* for many years now and enjoy it very much. I have been interested in nature for a long time and have had a Bluebird Trail in our area since 1977. At present I have 1,100 nestboxes and get over 400 Mountain Bluebird nests each year and have banded 1,600 to 2,800 Mountain Bluebirds each year. This year I will band my 30,000<sup>th</sup> bluebird.

I have been seeing Turkey Vultures on my Bluebird Trail for about 8 years now and have been working with Dr. Wayne Nelson helping to find Vulture nests in our area and helping Wayne in the wing tagging of the young for the last four years.

In 2006 I attended a Nature

Canada convention in Red Deer and that was the first time I had heard anything about Eurasian Collared-Doves. We were told that there were about a dozen of them in Red Deer at that time. They seem to be spreading throughout the province."

If you know or see Pres, shake his hand and thank him for being such a great naturalist role model.

## MURMURATIONS

In the "nature is utterly amazing" category, European Starling murmurations are definitely near the top of the list. These massive groups of starlings whirling in tight and undulating formations are breathtaking...and seemingly unreal. YouTube has numerous videos of this natural phenomena (eg, [www.youtube.com/embed/88UVJpQG88](http://www.youtube.com/embed/88UVJpQG88)). Would you like to be amazed? You will be!

And if you read about the science behind

murmurations, you'll find it equally fascinating.

Most of the videos are from Europe, the British Isles or places where starlings congregate during the winter in the tens of thousands to hundreds of thousands, and even a million or more. Smaller murmurations, however, have been witnessed here in Alberta.

Anne Elliott, on the photo-sharing website Flickr, posted a report by Andrew Hart leading a group of birders which "on a day trip SE of Calgary on 15 March 2014... noticed a black cloud swirling around in and above the field in the corner of Township 184 and RR281." It was a European Starling murmuration! Counting such numbers is almost impossible, but estimates ranged from over 5,000 to "10,000 is a very conservative number."

A MURMURATION IN THE UNITED KINGDOM.

WALTER BAXTER/CREATIVE COMMONS



EDITOR'S PAGE cont'd...

European Starlings are much disliked in North America, where they were purposefully (and foolishly) introduced in 1890-91. Those original 100 birds released in New York's Central Park have grown to over 200 million – one of our most abundant songbirds – in just 124 years! But even though disliked, they are none-the-less an intriguing species for a variety of reasons: as superb vocal mimics; devourer of invertebrate pests (admittedly, along with beneficial arthropods and crops); attractively iridescent breeding plumage; and, of course, their murmurations. Never miss the chance you might have to see one - though as one observer noted, never get caught standing under a murmuration!

## On the Covers:



### FRONT COVER

John Marriott is one of Canada's premiere nature photographers. Just go to his website and blog to find out for yourself: John E. Marriott Canadian Wildlife and Nature Photography ([www.wildernessprints.com](http://www.wildernessprints.com)). His photos of wolves, as you will see, are stunning. As John says on his website: "My primary hope with this site is that it will give you a taste for my style of photography and for what the wilds of Canada are like, creating in you a longing to visit or re-visit magical areas like the Canadian Rockies and see them like you've never seen them before."

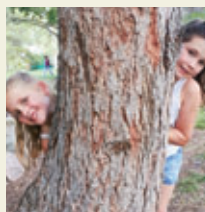


### INSIDE FRONT COVER

It was a great discovery in Banff National Park: the White-flowered Alpine Poppy. The flower is rare in Alberta and has generated much interest and research with botanists. The nice thing about rare flowers is that they don't run or fly away, so one can get excellent photographs, as William J. Leach did for the article on page 20.



It is extremely rare that we highlight photos from outside of Alberta, but Susan Sly's image of Western Bluebirds at Sedona AZ was too good to pass up. This bluebird is a rare but confirmed breeder in Alberta in a few scattered locations. Like the other two Alberta species of bluebirds, it will use nestboxes.



### INSIDE BACK COVER

Nothing is more uplifting than to watch kids having outdoors fun! Amanda Merriman's images catch the feeling and outdoor atmosphere. Amanda, from

Beaumont AB, took the photos with a telephone camera (a Samsung Galaxy S III).



### BACK COVER

Heather Simonds is a steward at Glenbow Ranch Provincial Park, west of Calgary, where she took these photos. Said Heather: "All were taken with a 105mm macro lens, some handheld – i.e., hold your breath, take 25+ images and pray you have one! I can't chase bugs with a tripod!!!!" Bees, butterflies, Prairie Clover and a Police Car Moth: It's Spring!

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## ALBERTA ISSUES IN BRIEF

## Spray Lakes Sawmills receives FSC Certification

BY SLS STAFF & WEBSITE, EDITED BY SANDRA FOSS

In the fall of 2013, Spray Lakes Sawmills (SLS) received Forest Stewardship Council (FSC) certification for its Forest Management Agreement area and northern timber quota, an area consisting of 328,367 hectares. The certificate has been issued by an FSC accredited certifier, Rainforest Alliance, who assessed the company's responsible forest management system against the rigorous FSC Canada's National Boreal Standard. (SLS does not operate in the boreal forest, but this standard is the closest.)

FSC certification (<https://ca.fsc.org>) involves meeting stringent social, economic, and environmental criteria that are more far reaching than other

certification programs. FSC-certified wood products are favoured by some commercial builders and developers choosing to attain Leadership in Energy and Environmental Design (LEED) status from the Canadian Green Building Council. In addition, discerning consumers of paper products prefer products sourced from FSC certified forests.

The move to the international FSC certification program demonstrates Spray Lake Sawmills continued commitment to forest certification and sustainable forest management. From 1996 through 2009, Spray Lake Sawmills was certified under the Alberta ForestCare certification program. The FSC

certification compliments Spray Lake Sawmills seventy-year commitment to quality, its belief that people are the foundation of its success and that the forest is our future.

The FSC certification program is ongoing and requires continual improvement on the part of all certified companies. Instead of one major audit every five years, the FSC auditors return annually to review a different selected part of the company's operations.

**LATE FALL (NOV 16TH) PHOTO OF A LOGGED AREA. SPRAY LAKES SAWMILL**



**SLS CUT BLOCK IN WINTER, LOOKING ACROSS TO GALATEA MOUNTAIN. JOHN MCFAUL**



**STRUCTURAL RETENTION ON A LOGGED AREA.**  
SPRAY LAKES SAWMILL

The company will continue to work with a wide variety of stakeholders including forestry contractors, ranchers, trappers and committee members, and to educate and learn from them as to legislative requirements and best practices in a variety of areas, from road building to watershed protection.

Sandra Foss has participated on a variety of public advisory committees while working with SLS over the last seventeen years. Two others, representing local Nature Alberta clubs, also sit on SLS public advisory committees and have for many years. A choice was made to work with this company to have their forest practices the best they can be, and over the years, this company has worked hard to meet the highest standards. Unlike other forestry companies in the province, SLS operates in an

area close to a major urban centre, where many folks wish to use the Forest Management Area (FMA) for recreational activities; this presents unique challenges.

SLS is an ethical company, and forestry is a sustainable business. SLS has proved very responsive to comments and suggestions offered by all committee members, including the decision to seek FSC certification. Nature Alberta/FAN members can be assured their interests and comments have always been passed along. However, anyone can contact the company, and now with a variety of social media, it is even easier to do. If anyone has concerns about what is happening, the best route is to talk to the company directly. Frequently, the concerns or complaints I hear are not about SLS practices at all, but what others are doing.

Nature Alberta wishes to commend SLS on achieving FSC certification, and will continue to work with SLS in continuing to set high conservation value forest areas aside for protection while fostering best practices.

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SLS is a manufacturer of dimensional lumber, treated wood products, agricultural fence posts, wood chips, and landscaping and erosion control products. SLS is the largest private sector employer in Cochrane, employing 200 full time staff and 75 seasonal contractors.

## It's Back!!

It now appears almost certain that the Alberta Government will be initiating a Sandhill Crane hunt in 2015. An April 25th report on the Global Lethbridge website ("Alberta considering 2015 sandhill crane hunt," by John Cotter, *The Canadian Press*) states that Alberta Environment "says there are now enough of the tall, heavy, long-legged wading birds to withstand hunting" and that "experts estimate about 580,000 of the migratory birds nest or fly over Alberta."

This comes after years of lobbying by Alberta Fish and Game Association (AFGA) and hunters. The stated reasons they desire the hunt are fairly simple:

it's one more species they could hunt; some other provinces and states do it; "hunters," according to AFGA president Gord Poirier in the article, "are also curious about how the big birds taste"; and of course, the ever-popular stand-by reason, to "help keep the population at a healthy level."

AB Environment claims that the population of Lesser Sandhill Crane (*Grus canadensis canadensis*) could withstand a hunt. That is likely true, but the main problem that many scientists and naturalists (including Nature Alberta) have raised is the taking of the rare Greater Sandhill Crane (*Grus canadensis rowanii*) – a larger, northern subspecies of the

Sandhill Crane, about which very little is known – and Whooping Crane (*Grus americana*), which is so very different from the Sandhill Crane yet has been shot in other jurisdictions through misidentification.

Nevertheless, the federal government, according to Gord Poirier, "has given the Alberta Sandhill Crane hunt its blessing." The comments in the article from the AB Environment spokeswoman seem to ensure that this time they will approve the hunt once they get official federal approval and after AB Environment amends provincial legislation to designate the Sandhill Crane as a game bird.

For a good overview of the issue from Tom Sadler, see "Letters" in the Winter 2013 *Nature Alberta* (Vol 42, #4), pg 4.



## Maligning Maligne Lake?

Jasper National Park's Maligne Lake is one of the world's most photographed landscapes, its pristine, natural beauty attracting visitors from around the globe. Now, Maligne Tours (the commercial operator that runs daytime operations at the lake) has proposed a 66 suite hotel plus 15 tent cabins along the lake's north shore.

There has been much opposition to the proposal, including from three former Parks Canada managers, who are urging the federal environment minister to turn it down. Nikita Lopoukhine, a former director general, Stephen Woodley, a former chief ecosystem scientist, and Kevin Van Tighem, a former superintendent of Banff National Park, say the lodge would endanger the natural elements of the lake, jeopardize wildlife, is in violation of Parks Canada's policies designed to limit development and is contrary to the National Parks Act.

There is also the very real possibility that approval of this development will open the proverbial floodgates. As Kevin Van Tighem told CBC News: "It basically says to anybody else who has had a 'no' in the past, well we can talk about 'yes' now, because we just changed all the rules." It would also mean the privatization of a chunk of the lake's shoreline. "Why would we privatize one of the most beautiful public destinations in the park?" said Van Tighem in the CBC News interview.

Nevertheless, the proposal has its supporters, including, it appears, Parks Canada itself. Maligne Tours says that the new hotel would not require any new land to be developed and that it must be done in order to

upgrade and modernize its lake facilities. Others have suggested that not only is the development relatively small, but that critics are exaggerating the negative effects. It has also been pointed out that Maligne Lake isn't as pristine as it's made out to be.

Regardless, like the controversial Glacier Skywalk at Jasper's Icefields Parkway, the proposal will almost certainly be approved (and may already have been, by the time you read this), given the federal government's focus on commercialization and revenue generating in national parks. In reality, the rules have been changed. The Glacier Skywalk at the former Tangle Ridge viewpoint opened on May 1st (\$24.95 for adults, \$12.50 for children).





# Nature Alberta NEWS



## Nominations, Elections and the Annual General Meeting

Nature Alberta's Executive, Board of Directors and staff gathered to start off the Annual General Meeting weekend events on April 11, 2014. The State of Bird Conservation in Alberta Workshop, AGM Meeting and Awards Dinner all took place on April 12. Thanks to a grant from Devon Canada, Nature Alberta was able to hold an issues management workshop on the final day of the AGM weekend (April 13). The Conservation Issues Workshop attendees heard some great presentations and participated in some excellent discussions on how to build a stronger and connected nature network in Alberta.

The slate of appointed directors was presented and approved: Ted Hindmarch, Christine Brown, Geoff Holroyd, Joseph Hnatiuk, Linda Howitt-Taylor. Elected to Executive positions were: Ted Hindmarch (President); Linda Howitt-Taylor (Vice-President); Christine Brown (Treasurer); and Claudia Lipski (Secretary). Claudia replaces Margot Hervieux, who after two years as Secretary decided not to run for that position, though she will remain as a Director for Peace Parkland Naturalists.

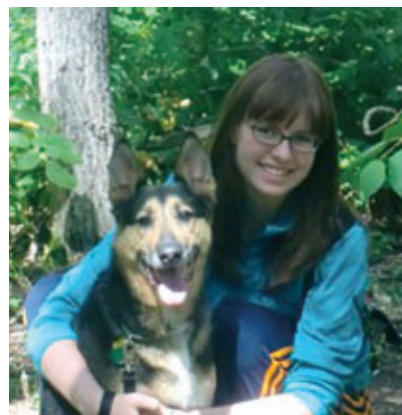
Best wishes to Kelsie Sharun, our vibrant and creative Young Naturalists Club Program Coordinator, who has moved on to a position at the University of Alberta. Congratulations to Candace Farrar, who has been promoted to YNC Program Coordinator.

Nature Alberta's Prairie Conservation Forum representative, Don Stiles, is stepping down; however, there will be great continuity, as he is being replaced by his son, Andrew, who is well known in Alberta's naturalist community. As well,

Scott Jubinville is stepping down as Nature Alberta's representative on the Endangered Species Conservation Committee. Joseph Hnatiuk has volunteered to take Scott's place; Lu Carbyn will remain as alternate. Definitely a big thank you and much gratitude to Don and Scott for their dedication to the volunteer positions they took part in. Both have splendidly represented Nature Alberta.



**CANDACE FARRAR, SEEN HERE WITH MURPHY, IS THE NEW YNC PROGRAM COORDINATOR.**



**ISSUES MANAGEMENT PARTICIPANTS GATHERED FOR A GROUP PHOTO. CHEYENNE KEAN LEMERY**

FROM LEFT TO RIGHT: JOSEPH HNATIUK, LETHBRIDGE NATURALISTS SOCIETY; LU CARBYN, EDMONTON NATURE CLUB; PETRA ROWELL, EXECUTIVE DIRECTOR, NATURE ALBERTA; LLOYD BENNETT, LETHBRIDGE NATURALISTS SOCIETY; LINDA HOWITT-TAYLOR, VICE-PRESIDENT, NATURE ALBERTA; TONY BLAKE, RED DEER RIVER NATURALISTS; SARAH NEVILLE (SEATED), WEASELHEAD/GLENMORE PRESERVATION SOCIETY; LINDA STEWART, NATURE CALGARY; VIC ROMANYSHYN, ALBERTA LEPIDOPTERISTS GUILD; CLAUDIA LIPSKI, BUFFALO LAKE NATURALISTS; MARTIN OSIS, ALBERTA MYCOLOGICAL SOCIETY; JOHN STEWART, NATURE CALGARY; TED HINDMARCH, PRESIDENT, NATURE ALBERTA; BRIAN LAVER, NATURE ALBERTA; BOB SCHREIBER, BUFFALO LAKE NATURALISTS. MISSING: GLEN SEMENCHUK, PAST EXECUTIVE DIRECTOR, NATURE ALBERTA.

## Awards

Nature Alberta recently recognized a number of outstanding individuals during the Annual General Meeting and banquet weekend.

### LORAN GOULDEN MEMORIAL AWARD:

Ray C. Cromie was presented with the 2014 Loran Goulden Memorial Award. This award is a Special NA Memorial Award recognizing outstanding contributions to natural history education in Alberta. Ray Cromie is a retired teacher, mentor and Master Bird Bander with over 25 years of experience. He has been recognized as a leader in promoting citizen science activities throughout the province and is well known for his infectious enthusiasm and dedication to wildlife conservation. Ray has worked diligently to provide nesting sites for cavity nesting species and owls in Alberta and has built, installed and maintained several hundred nesting boxes near Edmonton. He gives generously of his time and knowledge to promote public interest in protecting Alberta birds and continues to inspire generations of naturalists.

**NATURE ALBERTA PRESIDENT, TED HINDMARCH (LEFT) PRESENTS RAY CROMIE WITH THE LORAN J. GOULDEN MEMORIAL AWARD.** CHEYENNE KEAN LEMERY



### HONOURARY LIFE MEMBERSHIP AWARD

Sandra Foss was presented with an Honourary Life Membership Award. Sandra has been actively involved in a number of roles within Nature Alberta for the past 14 years. Sandra became involved with Nature Alberta (formerly the Federation of Alberta Naturalists) in 1999 as an alternate director for the Calgary Field Naturalists Society (CFNS). She became a CFNS primary director in 2000 and stayed on as an appointed director. She took on the Nature Alberta Vice-President's role in 2003, moving up to serve as President from 2005 to 2008, Past President through 2009 and then as Past President for another two years until leaving the board in 2012. She has sat on almost every Nature Alberta committee, including: Awards, Fundraising, Issues, Nominations, Personnel and Succession. Sandra has represented Nature Alberta on a number of outside committees; she is also one of the proofreaders for Nature Alberta magazine. Her dedication and commitment to Nature Alberta and its vision has been (and still is) exceptional. Unfortunately, Sandra was unable to attend the ceremony.



**LEFT TO RIGHT: KELSEY SHARUN, FORMER YOUNG NATURALIST CLUB PROGRAM MANAGER, JANA SNEEP, RECIPIENT OF THE 2014 VOLUNTEER OF THE YEAR AWARD, CANDACE FARRAR, CURRENT YOUNG NATURALISTS CLUB PROGRAM MANAGER.**

CHEYENNE KEAN LEMERY

### VOLUNTEER OF THE YEAR AWARD

Jana Sneep was presented with the Volunteer of the Year Award. Jana is a member of the Edmonton Nature Club and a Nature Alberta Family Member. She has taken photographs of most of the Explorer Days and Family Nature Night events in Edmonton since 2012, creating a valuable resource for Alberta's Young Naturalists Club (YNC). She is an active YNC member, who uses her passion for photography to capture moments of delight and inquiry in children. Participant families, project staff and volunteers have all recognized and appreciated Jana's time, effort and dedication.

## NEW AFFILIATE

Nature Alberta has a new Affiliate Club! Friends of Elk Island Society was incorporated in July 1984 and is a non-profit, charitable association that cooperates with Parks Canada to promote understanding, appreciation and respect for Elk Island National Park. The Society was approved for membership in Nature Alberta at the April Annual General Meeting. You can contact them at [info@elkisland.ca](mailto:info@elkisland.ca), or Box 70, 9920-63rd Ave, Edmonton AB T6E 0G9.



## Butterfly Big Year

The Alberta Lepidopterists Guild (ALG) held its first-ever Alberta Butterfly Big Year in 2013. A Butterfly Big Year is a friendly (and fun!) competition to see who documents the most butterfly species in Alberta – for 2013, between March 1 and Nov. 15.

The winner was Dave Lawrie, from Edmonton, who reported forty-three species; he was awarded an original commissioned work of butterfly art by Alberta artist Charity Dakin. Second place was Colleen Raymond, also from Edmonton, with forty-one species; she was awarded a beautiful print of Mexican Bluewing (*Myscelia ethusa*) - a Butterfly Life Cycle painting by Nan Wilson.

For information about ALG (which is a Nature Alberta Affiliate Club), check their website: [www.biology.ualberta.ca/uasm/alg/](http://www.biology.ualberta.ca/uasm/alg/).

Also of interest: ALG members have published an annotated list of the Lepidoptera of Alberta, listing 2,367 species reported to occur in the province. The pdf is at: ZooKeys 38 (2010) Special Issue. doi:10.3897/zookeys.38.383

## Thanks, Vid!

Nature Alberta's IT/Citizen Science Program Manager, Vid Bijelic, has left our organization to continue his studies in Ottawa, where he has been accepted into a Master's program. Vid has been a major fixture of Nature Alberta for the past 14 years. While we are sad to lose him, we are also excited for him as he undertakes this new and exciting direction in his career path.

## 2014 Hypothermic Half Marathon

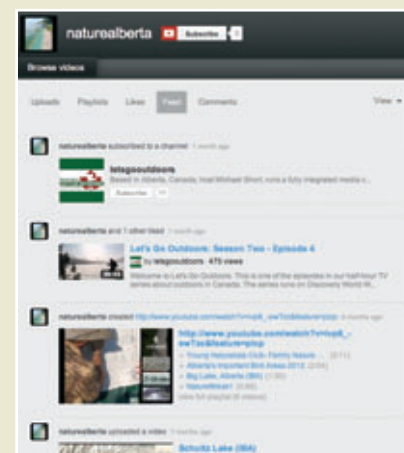
On behalf of all of us at Nature Alberta, we would like to thank the volunteers that participated in the February 2014 Hypothermic Half Marathon. We'd also like to thank the Running Room for this fundraising opportunity, we appreciate the ongoing support we have received.

Even in those temperatures – the morning of the February 23 runs was the second coldest of 2014! – we demonstrated that it is possible to get outside AND enjoy being active throughout winter! Proceeds raised from both Hypothermic Half Marathons go to support programming at Nature Alberta and to ensure nature in Alberta is widely enjoyed and deeply appreciated. Again, thank you, thank you, thank you!

## Nature Alberta & YouTube

Cheyenne Lemery, 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)



## YNC Summer Staff

Nature Alberta's Young Naturalists Club summer staff this year are Emily Dong and Alyssa Bohart.

Emily will be spear-heading Family Nature Nights this year and Alyssa will be working on outreach throughout the province. Both of them are a great addition to the Nature Alberta team, and Project Manager Candace Farrar looks forward to working with them this summer!

# Nature Diary: Red Crossbill

BY DEBBIE AND ALAN GODKIN

*In fourteen years, I'd never seen a Red Crossbill in our yard. I figured that if these nomadic birds were in the area, they probably had flown right on by, because we have so few conifer trees.*

So when Al took a front view picture of a bird in the apple tree that he didn't recognize and asked me to identify it, I stated with confidence that the fiery orange- and red-coloured bird was a male White-winged Crossbill (*Loxia leucoptera*), which I had seen here twice recently extracting seeds from spruce cones.

Immediately I went into the bird blind, not wanting to miss an opportunity to see a White-winged Crossbill again and hopefully photograph

one. Chilled by the wind, as the sun disappeared behind the advancing clouds, I focused my attention on the tree, and combed its branches for the reddish bird amongst the Black-capped Chickadees, American Goldfinches, and Pine Siskins. I kept my eyes glued on the tree for over five minutes, hoping it might return.

Suddenly I noticed some movement in the willow feeder, which was six feet straight ahead of the bird blind. There were three crossbills in the

feeder eating sunflower seeds. I was so focused on the apple tree that I hadn't once looked at the covered willow feeder, and almost missed seeing the crossbills, which were smack-dab in front of me.

Although the birds were partly obscured in the feeder, I took a few photos. When the female flew down onto the perch by the bird bath, I took two more before she hopped down for a drink. When she flew off, the other two followed, ending my short, thirty second look at the cone-heads.

Anxious to see the photos I'd taken of what I thought were White-winged Crossbills, I downloaded them onto my computer. The first thing I noticed was that none of the birds had white wing bars. Realizing then that they were Red Crossbills (*Loxia curvirostra*), I went online and looked at several photos of the adult birds. Then I clicked on a photo of an immature Red



**IMMATURE RED CROSSBILL.**

DEBBIE AND ALAN GODKIN



**MALE RED CROSSBILL.**

DEBBIE AND ALAN GODKIN

**FEMALE RED CROSSBILL.**

DEBBIE AND ALAN GODKIN

Crossbill and was surprised to see a heavily streaked brown bird. Minutes later, I opened my own folder on Pine Siskins, and had myself a good laugh, as I looked at a picture I'd taken six years ago, of a bird I'd labelled as a Pine Siskin. It turned out, my Pine Siskin wasn't a Pine Siskin at all, but an immature Red Crossbill.

Being an avid birder for several years, I thought I was fairly knowledgeable on the subject, and was proud when friends would send me a photo, asking: what kind of bird is this? Fortunately for me, no one had ever sent me a picture of an immature Red Crossbill to identify, leaving my reputation as a knowledgeable birder intact. Had they, I would have told them the exact words I'd captioned by my picture, "An odd Pine Siskin with an abnormally large body and a deformed bill."

I felt humbled by the experience and realized that I still have a lot to learn. Now, if I see a bird that I don't know like the back of my hand, I consult my bird books first, before offering any advice.

*Like many naturalists, Debbie and Alan Godkin, from Westlock AB, have numerous stories of their experiences with nature – stories they love to share with other naturalists in this "NATURE DIARY" series!*



## THE CROSSBILLS

In Alberta, the Red Crossbill is rarer than the more common and more widely distributed White-winged Crossbill. However, the two species share much in common. Conifers are their lifeblood, and their unusual "crossed bills" adaptation enables them to extract conifer seeds – their preferred food – by prying open the cones. They both breed in similar habitats, the timing of which is closely associated with the abundance or scarcity of cones. Thus, both Red and White-winged Crossbills are highly nomadic and, unusual as well for songbirds, crossbills can breed throughout most of the year.

- Information from Nature Alberta's *The Atlas of Breeding Birds of Alberta: A Second Look*.

# In Memoriam

## Al Oeming

April 9, 1926 – March 17, 2014

BY JOHN WARDEN

'Bring 'Em back Alive', was the title of the Classics Illustrated comic book about Frank Buck that I had read as a young boy growing up in Edmonton. Buck was an American hunter and collector of wild animals who became famous in the 1930's and 40's as a movie actor and writer in the United States. Little did I know then, that we had our own world famous collector of wild animals just next door in Strathcona County. Al Oeming, who passed away this past March was a zoologist, naturalist, award winning public voice for conservation, and owner and operator of the Alberta Game Farm.

In the early 1950's, Oeming, a zoology student at the University of Alberta, visited an area east of Sherwood Park to study snowshoe hares with his professor, William Rowan. He completed his master's thesis on Great Grey Owls in 1955 and in 1959, opened the Alberta Game Farm, a 1,400-acre facility at Highway 14 and Range Road 223. Over the years, it grew to house

hundreds of species of animals: white rhinoceros, silver back mountain gorillas, giraffe, caribou, Siberian tigers, snow leopards, lynx, deer, elk, kudu, eland, sable and wolves and cougars, just to name a few. By the early 1970s, the Alberta Game Farm was one of the largest private animal collections in the world.

Our family first visited the Game Farm in the early sixties and continued to visit a few more times over the years. One of the family stories we still tell centers around visiting the cougar enclosure. My brother Tim was maybe a year old or so and my mother was pushing him in a stroller. As she pushed him along the front of the tall chain link fence that housed the big cats, one of the cougars followed on inside, matching my mother's pace. Its eyes though were firmly fixed on Tim. We called my little brother 'Tim burger' for a few weeks after that, as it was pretty clear that's what was on the cougar's mind.



AL OEMING AND HIS CHEETAH, TAWANA.

TODD OEMING

Al Oeming was a tireless promoter of the Alberta Game Farm and participated in the production of a number of feature films: *Land of the Black Bear*, *Window on the Wilds*, *Galapagos*, *Wild Splendor*, the National Geographic special *Journey to the High Arctic*, the CBC television series *Al Oeming: Man of the North*, *The Wild Kingdom* and *The Alan Hamel show*.

My Dad took me to the Northern Alberta Jubilee Auditorium to watch one of those feature films, *Journey to the High Arctic*. It was great to have a special time with my Dad and the moose, wolves and musk ox that were featured were fascinating. I remember thinking, 'Wow, could anything be better than to live the life of Al Oeming'.

Very involved in public outreach and education, Oeming made presentations at classrooms and auditoriums across Canada and spent a lot of time presenting at towns and settlements in the north. On a couple of occasions, our Dad, a pilot, flew him into



one of those northern settlements and would come home to tell us stories around the dinner table of Al Oeming and his cheetah, Tawana. My fascination with sketching and drawing cheetahs resulted and I think it's fair to say that Al Oeming was responsible for inspiring thousands of young people in Canada with an appreciation for our Canadian wildlife and their environment.

In 1964, Oeming was awarded the Everly Medal for Excellence in Conservation by the United States Government. That same year, he toured China as a guest of the Chinese government, observing the breeding programs of the rare and exotic species of that country. His own efforts in establishing breeding programs in Canada resulted in his honorary doctorate of law from the University of Alberta in 1972.

The last time I visited the park was around 1980 or so when the Game Farm had been reduced in size and re-branded as the Polar Park. It was a brutally cold winter's day and there were no other guests at the park. My brother Al and I wanted to practice some cold weather wildlife photography and found ourselves down at the cage for the snow leopards. These are amazingly beautiful animals and in the cold, their hot breath was clouding the inside of their cage. I stepped over the knee-high railing that was meant to keep visitors back from the cages. Holding my camera right up against the wire mesh of the enclosure, I had just clicked the shutter release when one of the cats let out a terrifying growl. Shocked and scared, heart pounding, I jumped backwards, away from the cage, catching the railing with the back of my

knees. Of course, I tumbled over backwards and into the snow. Foolish, I know, but what a memory. It was a lesson on the first rule of nature photography - look, but don't disturb.

Polar Park closed in the late nineties and after that, Oeming remained active and busy clearing trails, looking after his horses and chickens and banding owls, right up until the time of his death.

It seems unlikely that I will ever see another snow leopard so close to home and the world unfortunately, will never see another Al Oeming. An adventurer, a champion and an educator – what a great life you had, Al. Thanks for inspiring me and all the other people, young and old, who heard you speak over the years about the beauty and wonder of nature and her wildlife.

*Parts of the above tribute were based on the obituary published in the Edmonton Journal on 29 March 2014.*

## Young Birder of the Year Winner

Winners of the American Birding Association's North American-wide "Young Birder of the Year" contest have been announced, and **Charlotte Wasylik** from Vermilion placed third in the Field Notebook 14-18 category. Charlotte operates the very interesting [prairiebirder.wordpress.com](http://prairiebirder.wordpress.com) blog, as well as Facebook and Twitter accounts. Congratulations, Charlotte!





JOHN WARDEN

## Close to Home: Nature Photography in Alberta

# Go!

BY JOHN WARDEN

While Mary Schaffer's photographs of the Alberta Rockies are evocative and historically significant, it was her writing that really grabbed my attention. While reading her book, *Old Indian Trails of the Canadian Rockies*, I realized that

Schaffer and her party weren't just on vacation, they were on a quest. Understanding the difference has added a powerful new dimension to how I think about photography.

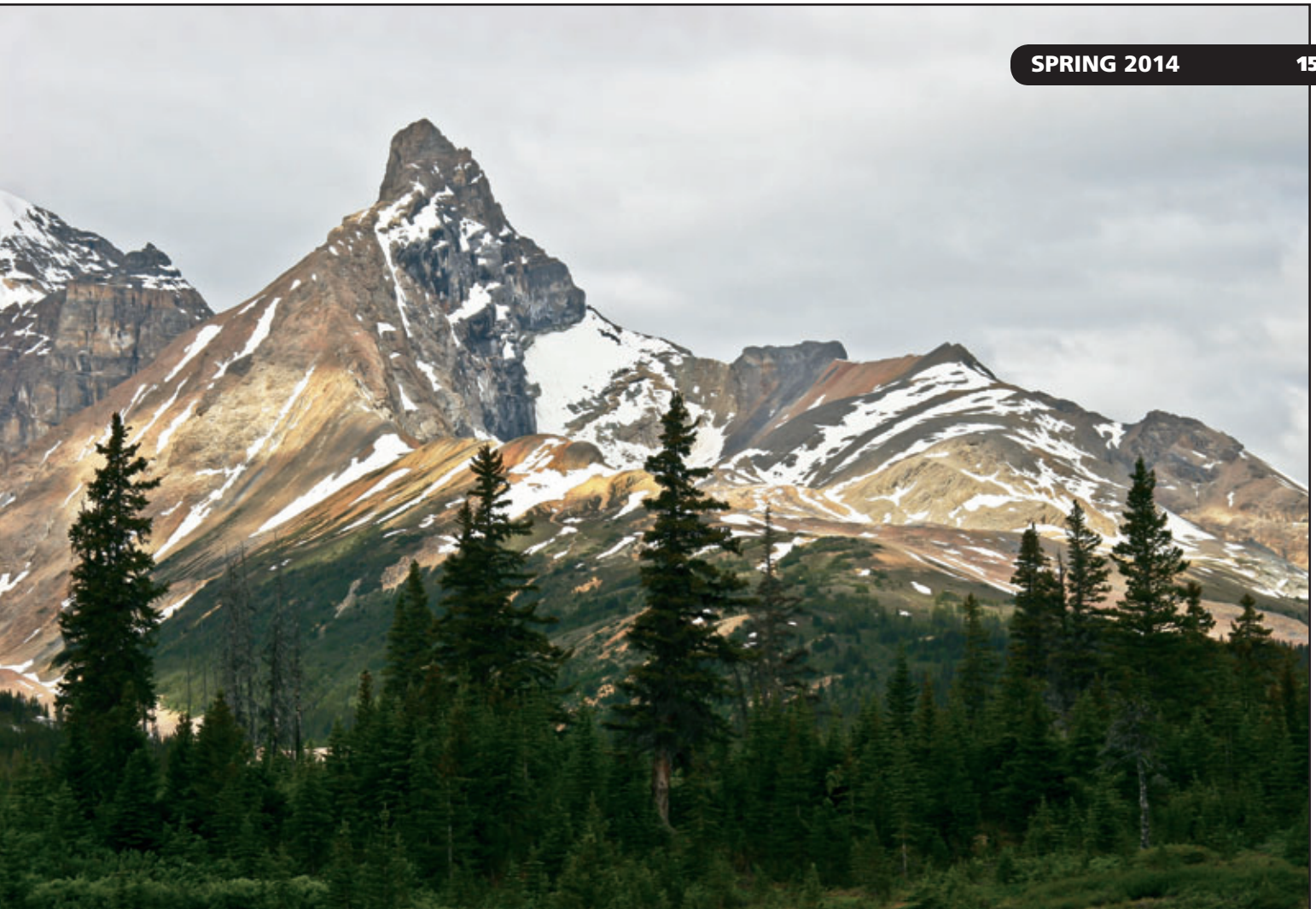
A quest is a personal journey in search of something important:

a treasure maybe, new lands or even esoteric things like truth, or spirituality. In 1907, Schaffer, who was originally from Pennsylvania, spoke openly that the objective of her particular quest was to find what was then considered the near mythical Chaba Imne, the lake we



GO!. JOHN WARDEN





PARKER RIDGE. JOHN WARDEN

know today as Maligne. In her book though, Schaffer confides that the real purpose of her quest was to “learn daily those secrets which dear Mother Nature is so willing to tell to those who seek”.

I too am such a secret seeker. What really struck me about her book though were the similarities between her journey of discovery and what author Joseph Campbell, in his book *The Hero with a Thousand Faces*, describes as a hero's quest.

According to Campbell, a heroic quest usually follows a framework where an ordinary person, living an ordinary life, receives a call

to venture into the unknown. Answering the call involves a journey in which the hero, usually accompanied by a helper or spiritual guide, is tested and challenged. Along this road of trials, the hero meets a feminine goddess figure who brings a fullness to the hero's character and helps him realize the spiritual significance of his quest. In completing the quest, the hero is enlightened and returns to his ordinary world with a new understanding which he uses to improve humanity.

Most of the stages of Campbell's hero's quest can be found in Schaffer's book. Three of them

though are particularly worth exploring within the space of this article: the road of trials, meeting with the goddess and the return to the ordinary world.

The road of trials stage of the heroic quest is meant to test the mettle of the hero. Think of *The Matrix*, *Star Wars* and *Lord of the Rings* as examples that epitomize this stage of the quest. Walk-a-bit, fight-a-bit and walk-a-bit captures the essence. Mary Schaffer's descriptions of her road of trials models the Campbell archetype. She and her travel companions were boiled and burned by the sun and then frozen by the perishing cold. They followed mountain trails through burned





SCHAFER'S DESCRIPTION OF BOW LAKE IS PERHAPS AS FINE AS ANY EVER WRITTEN. JOHN WARDEN

out forests that cracked and crackled like matchsticks, faced tempestuous river crossings, fallen timber and then were buffeted by wind storms, rain storms, thunder storms and snow storms. They faced mosquitoes and black flies, forest fires and tent fires. They built their campfires in mud, they ate in mud, slept in mud and tramped through mud. They were nearly drowned, their horses floundered in the muskeg and once, Mary succumbed to snow blindness. And most of those events occurred during the first year.

A good quest though, like a good novel or movie, should never be just about the road of trials. A good quest also tantalizes the hero through a meeting with the

goddess. As an example, think of Frodo meeting with Lady Galadriel in *The Lord of the Rings*. The goddess figure represents the heart of the quest. We know from reading Joseph Campbell and from watching quest movies that the goddess' job is to point the hero in the direction of his or her own heart. 'To thine own self be true', as was said in another, even more famous heroic quest.

In meeting the goddess, Mary Schaffer met Mother Nature. Fittingly, Schaffer's accounts of her positive experiences in nature read like luscious poetry and are elegant and artistic words of the heart. Alpine flowers are rimmed in frost needles. The moon's rays are filtered through spruce boughs. Emerald green

mountain lakes reflect snow covered rocky peaks, wildflowers and wild life abound. Mary's words transport us to a wondrous, almost imaginative, fairy tale world. Yet hers is a true story, an actual, made-in-Alberta, heroic quest with a real secret that Mary reveals to us herself:

Go! I hand you the key to one of the fairest of God's many gardens. Go! Peace and health are there, and happiness for [those] who will search (Schaffer, 1911).

The secret is the search itself.

We however, don't have to search for mythical lakes to see things that stir the feelings of our very soul. We do, though, have to search. Fortunately, in Alberta, that's not hard. Sunshine on cattails, a prairie sunrise, a rainbow, or misty mountain lakes are commonplace



wonders in our province and all we need do is open the door and go. Peace, happiness and wonder await our search.

In 1908, Mary Schaffer and her party of adventurers set out on the second season of their journey and completed their quest. They found the lake called Chaba Imne and “the finest view any of us had ever seen in the Rockies.”

A quest though, is never just about achieving the goal. The hero’s journey requires the long road home and, once back in the ordinary world, the sharing of the secret of the quest. And sharing was another of Mary Schaffer’s lasting legacies.

Photographs in those days were black and white. But, Mary who was

also an artist and a painter, hand-coloured the transparent slides of her images. The lantern slides as they were called, were used for presentations to lift the spirits of soldiers who were convalescing overseas after World War One and to attract tourists to the Canadian Rockies (Lang, 2011).

As in her quest, Schaffer elevated sharing from the ordinary to the extraordinary. When she set off on her quest in 1907, the lake she was searching for was part of the Jasper Park Forest Preserve. It was protected. But, by 1911, when she completed the first formal survey of the lake, the forest reserve had been reduced in size and Maligne Lake was no longer part of the

Preserve. So, she took action and lobbied for the re-inclusion of Maligne Lake within Jasper Park (Reichwein & MacDermott, 2009).

By sharing her photographs and her stories, and by passionately lobbying the governments of the day, the Preserve was eventually restored to its original boundaries. Maligne Lake was once again protected for all. Michale Lang, Executive Director and Chief Curator of the Whyte Museum of the Canadian Rockies in Banff, states that Schaffer’s contribution to the protection of Maligne Lake is a gift to all those who visit today.

Mary’s gift to me, though, was the understanding that I too am on a journey of discovery. I’m calling it a vision quest: to really see, with

**ALONG THE ICEFIELD PARKWAY.** JOHN WARDEN







**THEY FOLLOWED MOUNTAIN TRAILS THROUGH BURNED OUT FORESTS THAT CRACKED AND CRACKLED LIKE MATCHSTICKS. JOHN WARDEN**

heightened awareness, the awesome beauty of the natural world around me. And the cornerstone of my vision quest is Mary Schaffer's secret.

Go! Majesty, solitude and wonder are there for those who search.

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#### Works Cited

- Campbell, J. (2008). *The Hero with a Thousand Faces*. Novato, California: New World Library.
- Lang, M. (2011). *An Adventurous Woman Abroad: The Selected Lantern Slides of Mary T.S. Schaffer*. Rocky Mountain Books.
- Reichwein, P., & MacDermott, L. (2009). Opening the Secret Garden. In *Culturing Wilderness in Jasper National Park: Studies in Two Centuries of Human History in the Upper Athabasca River Watershed*; edited by I.S. MacLaren. University of Alberta Press.
- Schaffer, M. T. (1911). *Old Indian Trails, Incidents of Camp and Trail Life, Covering Two Years' Exploration through the Rocky Mountains of Canada*. London: G. P. Putnam's Sons.



**A PRAIRIE SUNRISE. JOHN WARDEN**



Check out John Warden's updated website: [www.jwardenphotography.com](http://www.jwardenphotography.com), with a new look and many photographs. Plus, also on the site are his past *Nature Alberta* articles.

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





# Eyes on IBAs

## eBird: A Great New Tool!

BY ERIN CAMPBELL

*With spring (hopefully) here to stay, I know that birders everywhere are starting to get out and visit Important Bird Areas (IBAs). Many species have already returned and annual birding events all over the province are gearing up! But what to do with all those bird counts?*

eBird is a great tool for logging the data collected after an afternoon out birding or even just incidental sightings, and it's really easy to use. After setting up an account and selecting your location, you can start logging your identifications. It will guide you through the process, asking questions such as where you were, how many people were with you, and the type of birding you were doing (ie: were you doing point counts or just casually walking through a natural area?). Once you fill in that information, you can start listing the number of species that you saw, along with any notes about your sightings that are of interest. You can also use eBird to see what others have spotted in recent days, or to confirm an identification if you are unsure of whether or not a species is usually present in your area during a certain time.

Logging data this way

allows it to be accessible to the public, but also researchers, and as such can aid conservation work in your area. Organizations like Bird Studies Canada use eBird to track trends in distribution and population size occurring over several years, and you can even upload old bird counts into eBird as "historical data" if you have it. This way, you can be sure that your birding data is being put to good use.

In addition to the benefit of this tool to researchers, eBird is also a community. Birders can be alerted to sightings of rare species in their area and try to get out and spot them before they leave. eBird also ranks the top birders in each area according to the number of species identified as well as the number of eBird entries. We all know that a little friendly competition never hurt anyone, so keep eBird in mind while out birding this summer. It's a direct way of contributing

both to a community of like-minded people, and to a larger community of citizen scientists and conservationists across North America.

eBird can be found at [www.ebird.org](http://www.ebird.org). Additionally, if you would like some data sheets for bird counts in Alberta's IBAs, please email [birds@naturealberta.ca](mailto:birds@naturealberta.ca), and our bird conservation staff will email you an electronic template that you can print and take out with you into the field.



**ON AUG 8, 2012, TWELVE YEAR OLD LIRON GERTSMAN, OF VANCOUVER, SUBMITTED THE 100 MILLIONTH OBSERVATION TO EBIRD. [EBIRD.ORG](http://EBIRD.ORG)**



*Erin is Nature Alberta's Bird Conservation Program Coordinator.*

# White-flowered Alpine Poppy

## (*Papaver kluanense*) D. Löve in Banff National Park

GEORGE W. SCOTTER<sup>1</sup>, HAROLD AND VELMA MARTIN<sup>2</sup>, WILLIAM J. LEACH<sup>3</sup>

*While hiking in the Lake Louise area on 5 August 2011, Harold and Velma Martin observed and photographed white-flowered poppies below the north and south summits of Lipalian Mountain (maximum elevation of about 2715 m).*

Travelling down slope about one km to the east to what is locally known as the Purple Mound, because of its distinctively-coloured rock, they found more white-flowered poppies growing immediately below the summit at approximately 2640 m, 51° 25' 58"N and 116° 05' 06"W.

They visited the same sites on 14 July and 21 September 2012. By the time of their September visit the seed capsules were fully developed and the seeds mostly dispersed. Based on their photographs, Scotter tentatively identified the plants as white-flowered morphs of Arctic Poppy (*Papaver radicum* spp. *kluanensis*) (D. Löve) D. F. Murray, which is considered rare in Alberta (Kershaw *et al.* 2001).

The Martins mentioned the poppies to Bill Leach. He and Arnold Westberg visited the sites on 17 July 2012 and took photographs of the poppies. On 15 July 2013 Leach led a field trip to the sites for members of the Alberta Native Plant Council. Photographs were taken but specimens were not collected.

Since poppies with white flowers have never been reported within the alpine zone of Alberta, Scotter requested and was granted a research and collecting permit by Parks Canada. Scotter, Leach, and Harold Martin explored both sites together on 27 July 2013. Samples for morphological and molecular studies were collected at the Purple Mound site by Scotter (Collection No. BNP001).

The poppies collected were short perennials with the scapes from 8-15 cm high, covered with soft, spreading hairs. The leaves were all basal and deeply divided into 3-5 lobes while the blades were pale green and densely hairy on both sides. Flowers were solitary at the end of the scapes with white petals (Fig 1, inside front cover). Sepals of the calyx were densely dark-hirsute. Oblong capsules, twice as long as broad, were about 1 cm long with stiff, black hairs. Disc rays ranged from 5-7 and stamen numbers from 12 to 31.

Scotter used several keys and references in identifying the collected material including Porsild

and Cody (1980), Moss (1983), Kiger and Murray (1997), Douglas *et al.* (1999), Cody (2000), Solstad (2007, 2008) and Solstad *et al.* (nd). Based on detailed work by Solstad and her colleagues, the plant was identified as Alpine Poppy (*Papaver kluanense* D. Löve). They used amplified fragment length polymorphisms (AFLP) to find genetical groups, and studied 90 morphological characters for species delimitations. DNA ploidy was also investigated. This study confirms that *P. radicum* is restricted to northern Europe, consequently this will require changes to the treatment of North American species since several have been assigned under this name. *Papaver kluanense* was included in a tree group with other Beringian North American species of *Papaver*, such as *P. hultenii* and *P. uintaense*. The Banff National Park specimens show morphological differences from those indicated in the keys but perhaps not enough to merit species rank. For example, we counted from 12 to 31 stamens contrasted with 16 or 20-30 for *P. kluanense* and 24 to 32 for *P. uintaense* reported by Solstad *et al.* (nd). In addition, capsules had 5 - 7 disc rays rather than 6 - 7 for *P. kluanense* and 4 or 5 - 6 for *P. uintaense* as indicated by Solstad *et al.* (nd). The Banff material has scape hairs that are dense, long and spreading, and dark in colour.

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*Papaver kluanense* was first described from what is now Kluane National Park, southwestern Yukon Territory, by Löve and Freedman (1956). Its distribution was mapped by Löve (1969) and Kiger and Murray (1997), as *P. radicum* subsp. *kluanense*. The range is in three parts. The first part is in northern British Columbia, the southern western Yukon and southeastern Alaska (*P. kluanense* s. str.). The second part is in southwestern Alberta and adjacent southeastern British Columbia, where Fedde (1909) reported *P. nudicaule* var. *columbianum*. Research by Loehr *et al.* (2006) suggests there may have been small ice-free refugia between the Cordilleran and Laurentide Ice Shields during the last glaciation in the southern Canadian Rockies. Work by Golden and Bain (2000) suggests some plants in the *Packera* genus may have survived in such glacial refugia or in nunatak isolation in southwestern Alberta. *Papaver* species may have survived in a similar manner. The third part is in Colorado, Idaho, New Mexico, Utah, and Wyoming, which is south of the Pleistocene glaciation, where Fedde (1909) reported *P. nudicaule* var. *coloradense*. Welsh *et al.* (2003) gave the name of *P. uintaense* to the southern group. *Papaver kluanense* and *P. uintaense* are closely related, and distinctly different in AFLP markers, but only showing clear differences in three out of 27 morphological characters (Solstad *et al.*, nd). Solstad *et al.* (nd) did not include material for southwestern Alberta and southeastern British Columbia in the molecular analyses; it was limited to the study of herbarium specimens. Future AFLP analyses



and morphology studies of *Papaver* from that area are required to determine if there are more than one species in what is now considered to be *P. kluanense*.

The Purple Mound site contained about 100 individual or clumps of poppies. Their distribution was largely limited to immediately below the Purple Mound summit. Estimated number of poppies below the summit of Lipalian Mountain was similar to that of the Purple Mound site but the plants were more scattered. The plants were found on northern, northeastern and northwestern exposures and on shallow slopes. Judging from the photographs taken and the field observations, the flowering period in 2013 extended from about 10 July until early August.

The wind-swept alpine slopes where the poppies occur are sparsely vegetated. Associated species included Woolly Fleabane (*Erigeron lanatus*), Dwarf Alpine Hawksbeard (*Crepis nana*), Whitlow-grass (*Draba* spp.) Bering Chickweed (*Cerastium*

*beeringianum*), Alpine Springbeauty (*Claytonia megarhiza*), Wedgeleaf Saxifrage (*Saxifraga adscendens*), One-headed Pussytoes (*Antennaria monocephala*), Pallas' Wallflower (*Erysimum pallasii*), Silky Phacelia (*Phacelia sericea*) and a few bryophytes and lichens. These plants appear to benefit from the winter snow accumulation, which provides snowmelt water until early summer.

According to the geological map of the area, the rock unit is the Hector Formation of the Miette Group (Price *et al.* 1980). Hector rock is mostly gray slate (Gadd 1995); the eastern slopes of Lipalian Mountain consist primarily of weathered, splintery slate. The unit does contain pyrite (iron sulphide, FeS<sub>2</sub>). With weathering, the iron oxidizes and colours the exposed layers, such as the Purple Mound, bright red and purplish from the iron-oxide mineral hematite (Ben Gadd, pers. com.).

Although not studied genetically, a single recessive gene mutant probably causes the white-flowered morphs of the Alpine Poppy. Flower colour is therefore probably not taxonomically meaningful in *Papaver* sect.



*Meconella*. Griffiths and Ganders (1983) reported that white-flower mutants are relatively common in flowers with anthocyanin pigments, but rare in yellow flowers. Scotter has noted wide variation in the flower colour in *Papaver kluanense* within the Canadian Rockies. Plants above the tramway near Jasper town site and in the Bald Hills near Maligne Lake in Jasper National Park tend to be sulphur-yellow (Scotter and Flygare 2007, see photo on page 124), those in Mount Assiniboine Provincial Park tend to be pale yellow (Scotter 2000), to white near Lake Louise as reported in this note.

Herbarium vouchers are deposited at the University of Oslo Herbarium, the University of Alberta Herbarium, and the University of British Columbia Herbarium.

Extreme wind limited the time spent in the field on July 27. It appears that the population of poppies at the two sites is extremely small. Additional collecting should be restricted until the distribution and size of the populations are better determined.

We thank Dr. Heidi Solstad for studying our specimens and for useful comments on this note. Dr. Derek Johnson provided comments on the note as well.

#### Literature Cited

- Cody, W. J. 2000. Flora of the Yukon Territory. Second edition. NRC Research Press, Ottawa, Ontario. 669 p.
- Douglas, G. W., D. Meidinger and J. Pojar. 1999. Illustrated Flora of British Columbia. Vol. 4. Ministry of Environment, Lands and Parks and Ministry of Forests, Victoria, British Columbia. 427 p.
- Fedde, F. 1909. Vier neue Formen von *Papaver nudicaule* aus dem pazifischen Gebiete. Repertorium Specierum Novarum Regni Vegetabilis 7:255-257.
- Gadd, B. 1995. Handbook of the Canadian Rockies. Second edition, Corax Press. Jasper, Alberta. 829 p.
- Golden, J. L. and J. F. Bain. 2000. Phylogeographic patterns and high levels of chloroplast DNA diversity in four *Packera* (Asteraceae) species in southwestern Alberta. Evolution 54:1566-1579.
- Griffiths, A. J. F. and F. R. Ganders. 1983. Wildflower Genetics: a field guide for British Columbia and the Pacific Northwest. Flight Press. Vancouver, British Columbia. 215 p.
- Kiger, R. W. and D. F. Murray. 1997. *Papaver* Linnaeus. In: Flora of North America Editorial Committee. Flora of North America North of Mexico. Volume 3 Magnoliophyta: *Magnoliidae* and *Hamamelidae*. Oxford University Press, New York. Pp. 323-333.
- Kershaw, L., J. Gould, D. Johnson and J. Lancaster (eds.) 2001. Rare vascular plants of Alberta. University of Alberta Press, Edmonton, Alberta. 484 p.
- Loehr, J., K. Worley, A. Grapputo, J. Carey, A. Veitch and D. W. Coltman. 2006. Evidence for cryptic glacial refugia from North American mountain sheep mitochondrial DNA. Journal of Evolutionary Biology 19:419-430.
- Löve, Á. 1969. *Papaver* at high altitudes in the Rocky Mountains. Brittonia 21:1-10.
- Löve, D. and N. J. Freedman. 1956. A plant collection from SW Yukon. Botaniska Notiser 109:153-211.
- Moss, E. H. 1983. Flora of Alberta. Second edition. University of Toronto Press. Toronto, Ontario. 687 p.
- Porsild, A. E. and W. J. Cody. 1980. Vascular Plants of Continental Northwest Territories, Canada. National Museums of Canada. Ottawa, Ontario. 667 p.
- Price, R. A., D. G. Cook, J. D. Aitken and E. W. Mountjoy. 1980. Geology, Lake Louise (East Half), Alberta and British Columbia. Geological Survey of Canada Map 1482A (1:50,000-scale geological map and structure sections).
- Scotter, G. W. and H. Flygare. 2007. Wildflowers of the Rocky Mountains. Whitecap, Vancouver. 255 p.
- Scotter, G. W. 2000. Report of the vascular plants seen at Mount Assiniboine Provincial Park. In: Coope, M. (ed.) VNHS summer 2000 camp at Mount Assiniboine Provincial Park. Pp. 28-31.
- Solstad, H. 2007. *Papaveraceae*. In: Aiken, S. G. (ed.), M. J. Dallwitz, L. L. Consaul, C. L. McJannet, R. L. Boles, G. W. Argus, J. M. Gillett, P. J. Scott, R. Elven, M. C. LeBlanc, L. J. Gillespie, A. K. Brysting, H. Solstad and J. G. Harris. 2007. Flora of the Canadian Arctic Archipelago. CD-ROM, NRC Research Press, Ottawa.
- Solstad, H. 2008. Taxonomy and evolution of diploid and polyploidy *Papaver* sect. *Meconella* (Papaveraceae). Ph. D. thesis, National Centre for Biosystematics, National History Museum, University of Oslo, Norway. 245 pp.
- Solstad, H., D. Ehrlich, L. G. Kvernstuen, P. Trávnicek and R. Elven. nd. Taxonomic variation in a complex polyploidy plant group – *Papaver* sect. *Meconella* (Papaveraceae) – inferred by amplified fragment length polymorphisms, morphology and DNA ploidy. In: Solstad, H. 2008. Taxonomy and evolution of diploid and polyploidy *Papaver* sect. *Meconella* (Papaveraceae). Ph. D. thesis, National Centre for Biosystematics, National History Museum, University of Oslo, Norway. 245 pp.
- Welsh, S. L., N. D. Atwood, S. Goodrich, and L. Higgins. 2003. A Utah Flora. Third edition. Monte L. Bean Science Museum, Brigham Young University, Provo, Utah. 912 pp.



# 2013 May Species Count for Birds

BY JUDY BOYD

The number of species went up this year: 275 this year from 272 last year. However, the number of individual birds went down: 209,381 this year from 257,605 last year. In 2012, the most numerous species was Franklin's Gull with 38,894. Second was Cliff Swallow with 15,953 and third was Canada Goose with 10,752. This year, the most numerous species was again Franklin's Gull with 15,441, second was Canada Goose with 10,685 and third was Red-winged Blackbird with 10,083.

This year, 30 species were found in only one location around the province: Virginia Rail was seen at Beauvais Lake Provincial Park; Gray-crowned Rosy-Finch was seen at BowKanBirders; Eurasian Wigeon, Red Knot, Dunlin, Burrowing Owl, Long-eared Owl were each seen at Brooks; Red-throated Loon, American Golden-Plover, Western Sandpiper, Arctic Tern, Eastern Bluebird, Western Bluebird, and Sage Thrasher were each seen at Calgary; Northern Saw-whet Owl was seen at Central

Alberta; Indigo Bunting was seen at Claresholm; Greater White-fronted Goose, Ross' Goose, Sabine's Gull, Sedge Wren, Blackburnian Warbler were each seen at Cold Lake; Dusky Grouse, Black-chinned Hummingbird were each seen at Crowsnest Pass; Black-backed Woodpecker, Mourning Warbler were each seen at Fort McMurray; Bohemian Waxwing, Nelson's Sparrow were each seen at Lac La Biche; Common Redpoll was seen at Medicine Hat; Spruce Grouse and Stellar's Jay were each seen at Waterton.

16 species were found in 2 locations around the province: Harlequin Duck, Yellow Rail, at BowKanBirders and Cold Lake; Red-breasted Merganser at Claresholm and Cold Lake; Hudsonian Godwit at Cold Lake and Calgary; Pectoral Sandpiper and Great Gray Owl at Central Alberta and Calgary; Short-billed Dowitcher at Central Alberta and Brooks; Northern Pygmy Owl at Calgary and Crowsnest Pass; Short-eared Owl at Milk River/Writing-on-

Stone and Taber-Vauxhall; Chestnut-sided Warbler at Cold Lake and Lac La Biche; Black-throated Green Warbler, Palm Warbler, Connecticut Warbler, and Canada Warbler each seen at Cold Lake and Fort McMurray; Harris's Sparrow at Brooks and Medicine Hat; McCown's Longspur at Brooks and Milk River/Writing-on-Stone.

Last year we had only one species in all areas. This year we had five species in all areas: Canada Goose, Mallard, Blue-winged Teal, Wilson's Snipe and Tree Swallow. Last year eight species were found in all but one area, and six species were found in all but two areas. This year seven species were found in all but one area: Bufflehead, Sora, Black-billed Magpie, American Robin, Chipping Sparrow, Clay-coloured Sparrow and Red-winged Blackbird. This year eleven species were found in all but two areas: American Wigeon, Green-winged Teal, Red-tailed Hawk, Spotted Sandpiper, Downy Woodpecker, Northern Flicker, American Crow, Common Raven, Yellow Warbler, Savannah Sparrow and Brown-headed Cowbird.

## CAMROSE Purple Martin Festival JUNE 22, 2014

Be sure to mark your calendars for the Camrose Purple Martin Festival on Sunday, June 22, 9:30 am to 3:00 pm.

The Festival will be at the Stoney Creek Centre (5320 - 40 Ave., Camrose). The day will feature sessions for aspiring Purple Martin landlords to those who are and want to learn more. The day will also include a field trip as well as a walking tour to see firsthand active Purple Martin houses. Children's activities and a key note speaker will be in attendance to round out the day. Invite your friends and bring the family!

Registration forms can be found at: [www.tourismcamrose.com/events/index/](http://www.tourismcamrose.com/events/index/)

## FEATURE ARTICLE

# WOLVES in ALBERTA: A Perspective

BY DENNIS BARESCO

*There seems to be no end to the argument surrounding wolves in Canada... “the wolf wars” as it’s been called. The issue is broad, complex and emotional – from the common sense perspective to the wildly irrational – and has been since the first European settlers saw their first Canadian wolf.*

Scientists and ecologists want science and facts to guide management of wolves. Ranchers want to protect their livestock. Many hunters don’t like what they see as the competition. Trappers would like to harvest wolves, certainly rather than see them poisoned or gunned down from helicopters – though ironically some local trapping clubs have offered bounties. Some industries (and their political pawns) use them as scapegoats rather than slow their habitat destruction. Select groups of animal lovers argue against almost any human interference. Many people decry the often inhumane extermination methods, like snares and strychnine. Some would gleefully like to slaughter all predators by any means available, but especially wolves. Some governments seem to wish they could wash their hands from being involved in such a controversy-generating issue, but others jump on the slaughter bandwagon.

Most of the aforementioned have legitimate or at least partially legitimate reasons for their stands (which can’t be said for the rabid slaughter crowd, but that’s best left to be addressed by psychiatric professionals!).

This series of articles looks at one aspect, from several perspectives,

of the huge and complicated wolf issue, mostly having to do with controlling the population. The point is to provide at least some understanding and/or provoke some thought about wolves and their situation in Alberta. If there’s one thing every intelligent person who cares about the environment can agree on, it’s the indisputable fact that wolves are a vital part of ecosystems.



**AN ALPHA FEMALE OF A BANFF WOLF PACK.**

JOHN MARRIOTT



## Half a century ago searching for wolves in western Alberta was frustrating until routine poison controls were halted

BY DICK DEKKER (THIS ARTICLE – © DICK DEKKER – ORIGINALLY PRINTED IN *THE PARKLAND NATURALIST*, MAY-AUGUST 2013)

The first wolf tracks I ever found date back to the summer of 1960. It was a memorable occasion, for at that time wolves had been practically poisoned into extinction in all of western Alberta, including the national parks. The location of my find was the upper Baker Creek valley of Banff National Park. However, once I got back home after the day's hike and checked the animal track diagrams in a hand book, I wasn't sure anymore of what exactly I had seen. The foot prints of cougar and wolverine looked quite similar to those of a wolf. So, the next weekend I again hiked up the steep Baker Creek trail and carefully measured the tracks, until I was confident that these indeed were made by a wolf.

Finding a second set of wolf tracks had to wait until March 1961, when a naturalist friend and I ventured into the remote forests northwest of Rocky Mountain House. Checking the margins of a snow-covered bush road for tracks, we were elated to locate fresh sign of a pack of eight. It was an important discovery. On the way in, we had stopped by the office of the regional wildlife officer to inquire about wolves. He had not seen a track in years, but during the 1950s he had personally poisoned 78 wolves in the area. Perhaps to please us, he added that he had nothing against the wolf. "In fact, I like them better than people."

Before driving back home to Calgary, my companion suggested that we report our find to the wildlife officer. It turned out to be a grave mistake. Two weeks later, back at the same location, I was saddened to find a wooden sign nailed to a roadside tree: "Attention! Poison Baits." Staked on the ice of a nearby lake lay the head and neck of a horse. The meat had been treated with *ten-eighty*, a lethal pesticide commonly used in carnivore control in Alberta.

Later that year, I embarked on a summer of exploration to the Yukon and Alaska. Finding wolves was paramount on my list of things to see, and in that regard the trip was a success. However, my wilderness adventure ended abruptly in a canoe accident that could easily have cost me my life.

*Dick Dekker is an old pro in the wolf wars; he was executive director of the Canadian Wolf Defenders (CWD) from 1980 to 1993, and 10-year editor of WolfNews, published by CWD and sponsored by World Wildlife Fund. In February 1990, he organized the biggest ever public meeting in the Alberta Provincial Museum under the headline "Wolf Management in Alberta"; to read a summary of these proceedings, see <[www.wolfmatters.org/articles/Wolf Issues Never Go Away!](http://www.wolfmatters.org/articles/Wolf%20Issues%20Never%20Go%20Away!)> Dick has also written several Nature Alberta articles on wolves, including two Feature Stories: Wolf Wars (Fall 2006, Vol 36, # 3); and Wolves Grey and Black (Summer 2009, Vol 39, # 2).*

The long-held dream of closely observing wolves in the wild was eventually realized in Jasper National Park. But the first time Irma and I hiked into the park's remote Willow Creek district, in June of 1965, we were shocked to find out what was still happening to the region's wolves.

Upon our arrival at the backcountry station, Warden Norman Woody, who lived all year in his log cabin, said that he had seen eight wolves on Rock Lake last winter as he set out on snowshoes to walk the nine miles back to his cabin. But the next day, he got a phone call from the district forest ranger who reported that seven of the wolves had died on a poison bait.

Sometime after our trip, I met with the Rock Lake ranger. Apart from the wolves poisoned on the lake in the winter of 1964-65, he said that a trapper, who had been hired by the Alberta Forestry Department to set out wolf baits, had been shocked by the number of animals poisoned near Eagle's

Nest Pass in adjacent Wilmore Wilderness Park. Due to deep snow, he had been unable to collect and remove the lethal carrion until well into spring. And when he finally got there, the number of dead wolves was a surprise. "We did not know there were so many," said the ranger. In addition, the ground was littered with the carcasses of other carnivores and scavengers, including wolverines, grizzly bears, and eagles.

This was the way wolf control was handled in the poison years. However, things improved after 1966, due to widespread public protests against the wolf kills, coupled with a change in thinking among wildlife managers. Routine poison controls were all but stopped, and the wolves reacted with a vengeance, so to speak, by becoming more common than ever.

Unfortunately, in recent years, the pendulum has swung back again to control, particularly in western forests where caribou have been in decline, mainly as a consequence of ever-widening habitat destruction. Wolves became an expendable scapegoat. In my view, the sad thing is that there has been very little opposition to the use of poison baits, not even from provincial naturalist organisations.



Photo by Brian Genereux

## Finding wolves in central Alberta is rare, and their foot prints can be difficult to tell from those of a large dog

BY DICK DEKKER (THIS ARTICLE – © DICK DEKKER – ORIGINALLY PRINTED IN *THE PARKLAND NATURALIST*, MAY-AUGUST 2013)

Partly because of my long and often frustrating quest for wolves, as related on these pages, coming across their sign is always a thrill. Like other naturalists, I used to think of the wolf as a symbol of unspoiled wilderness, a place where indigenous animal and plant associations were still intact and had not yet been disrupted by human activities, an increasingly scarce environment in today's world. However, if given the chance, wolves are ever ready to expand their range into settled regions, including farm lands and towns.

After the termination of routine poisoning, the wolves of western Canada have greatly increased in number, and yearlings are known to disperse over long distances. So, it should not be surprising that some roam far south and east of their usual breeding range. This is indeed the case, but to recognize them as wolves can be difficult since they come in a variety of pelage colours and might resemble a coyote or domestic dog, and size is an unreliable criterion in field sightings.

Personally I have yet to see an animal that looked like a wolf in the Edmonton area, but others have. On April 22 of 2005, the Edmonton Journal carried a detailed letter from Paige Hacking, who lives on an acreage just north of Devon, not far from the North Saskatchewan River valley. Under the title "Trust me, there are wolves out there," her story gives a very plausible account of a close encounter with two wolves.

More recently, a wolf-like canid was photographed at Big Lake, and there are a number of current reports from Elk Island National Park and the adjacent Blackfoot grazing

reserve. In 2012, according to information supplied by the wildlife officer stationed at Vegreville, a pack of seven or eight was active in a grazing lease near Two Hills, about 100 km east of Edmonton. Eventually, three wolves were trapped and two others shot near the carcass of a calf they had killed. Wolf control measures have also been taken in the Buck Lake grazing lease near Wetaskiwin in central Alberta.

My records of wolves in central Alberta are limited to finding their tracks, which resemble those of their domestic cousin. However, the front foot of a large male wolf leaves a bigger print than any dog. Oval in shape, it can spread to 9-10 cm wide by 11-13 cm long. Tracks of that size can be attributed with certainty to a wolf, particularly if they are not associated with the presence of people.

I have found the odd track of maximum size near Wabamun and on the southeast shore of Cooking Lake. And some years ago, wolf-like tracks of a smaller format were common on the banks of the North Saskatchewan River between Edmonton and Fort Saskatchewan. One day I met the local coyote trapper and asked whether he had ever found wolf sign. The answer was positive. He had actually seen one. In reply to my question what the animal's colour was, black or grey? He replied: "Both! There are actually two wolves around here."

Although I have continued to walk the same river bank trail, I have not come across any more wolf sign for a while. But I keep on looking.

For more details on Dick Dekker's wolf observations, see his books:

1985. *Wild Hunters*. CWD publication, Edmonton, AB. ISBN 0-919091-16-4

1997. *Wolves of the Rocky Mountains* -- From Jasper to Yellowstone. Hancock House Publishers, Surrey, BC. ISBN 0-88839-416-0

2002. *Wildlife Adventures in the Canadian West*. Rocky Mountain Books, Calgary, AB. ISBN 1-894765-36-2



Photo by Keith Lengle

Along the highway west of Jasper.

### WOLFNEWS 1990

Time does not change everything! In 1990, Dick Dekker wrote a three-page article for WolfNews (Vol 8, # 1, March 1990) entitled "CWD Organizes Forum on Wolf Management in Alberta." The same issues are just as topical in 2014. Read the article on Nature Alberta's webpage: [www.naturealberta.ca](http://www.naturealberta.ca), under "Nature Issues."



# Wolves Matter!

BY WWW.WOLFMATTERS.ORG

The excellent and information-packed website, [www.wolfmatters.org](http://www.wolfmatters.org), is dedicated to raising awareness about issues relating to wolves in Alberta. It is being developed to support the efforts of individuals and organizations who are raising concerns about how wolves are managed and treated in the province.

Wolf Matters is a local group made up of concerned citizens; it has no official affiliation. Its Mission is:

*The wolf has been eradicated in much of the world, and has faced alarming hostility in the U.S. since losing federal protection in August, 2012. We as Albertans are very fortunate to have them still in our midst, but they are in need of our help.*

Wolves, and Wolf Matters, face a number of challenges, including:

- The government's use of strychnine to poison wolves. Strychnine is not only an agonizing way to die, it is also carried into the food chain

resulting in the deaths of other animals such as owls, eagles, foxes, etc.

- The ongoing proliferation of bounties/incentive programs targeting wolves by municipalities.
- The cruel and outdated methods by which wolves may be killed.
- The use of culling as a management tool. Culling is ineffective and leaves the remaining population of this highly intelligent animal in a distressed, fragmented and unstable state.

Among the actions Wolf Matters advocate for are:

- The Government of Alberta regain control of wolf management in

the province, based on sound scientific knowledge and public support.

- Banning the use of strychnine and other poisons that are cruel and can affect non-target species.
- Banning the use of snares, which are torture devices.
- The humane treatment of wolves (At present they have very little, if any protection, compared with other species, making them a vulnerable scapegoat.)

Wolf Matters is not trying to save all wolves. It is asking that they be managed based on biology, not bigotry, and that they be treated humanely. Visit the website to keep yourself up-to-date on the wolf issue.



**CURIOUS WOLF PUPS!** JOHN MARRIOTT

**"\$250-\$1000 for killing a wolf?** Are ethical hunters going to step up and speak out about this and condemn it, or will it just be silence and business as usual?" JOHN MARRIOTT

# The Truth about Wolf Bounties

BY DWIGHT RODTKA (WITH THANKS TO MYRNA PEARMAN FOR HER INSTRUMENTAL ASSISTANCE WITH THE ARTICLE)

Wolf bounties are one of the most longstanding, crude and ineffective schemes to encourage the indiscriminate killing of wolves. In Alberta, wolf bounties are once again being widely used despite the long-standing, science-based proof that they do not work.

To the uninformed, bounties seem to offer a quick fix and thus are popular with politicians and many special interest groups. It is easy to make wolves the scapegoats for all kinds of issues – from putting ranchers out of business to causing the decline (and in the Smoky River caribou situation, the extirpation) of wild ungulates.

Scapegoating wolves and implementing bounties is seen by many as the "quick fix." The real issues which are fundamental to solving the problems (e.g., land use planning and wildlife management) are rarely, if ever, considered.

Whatever the real causes of

these problems might be, killing wolves is often singled out as the solution. What could be easier than slapping a bounty on them!? In Alberta, several municipal governments and the Wyoming-based, Alberta Wild Sheep Foundation – supported by local Alberta Fish and Game Association and some trapping clubs – offer bounties. The bounty payout varies, but \$250.00 - \$500.00 per wolf is common. Hundreds of thousands of dollars have been paid out in bounties and, because of these bounties, thousands of wolves have been randomly and needlessly killed. Private bounties – e.g., from the likes of the Wild Sheep Foundation – are dispensed in a cloak of secrecy; the public is not privy to any information about the details of these transactions.

Not only does the Alberta government (we, the taxpayer) pay full compensation for all wolf-caused livestock loss, Alberta Fish and Wildlife conducts

control work on wolves (often using strychnine which not only causes painful deaths but also kills everything that consumes it) and

Counties and Municipal Districts pay out tens of thousands of dollars in wolf bounties. Why should a handful of self-serving, misinformed producers and politicians be able to inflict such a colossal waste of time, money and public wildlife resources?

Alberta ESRD is well aware of these bounty initiatives and ignores their own biologists who have strongly recommended against bounties (see list of quotes at end of this article). Why do they continue to support a practice that the International Union for the Conservation of Nature (IUCN) has condemned?

Pat Long, former president of the Alberta Wild Sheep Foundation (and current Chair of Alberta Conservation Association), apparently takes pride in having introduced wolf bounties into Alberta. The Alberta Fish and Game are now asking for province-wide wolf bounties to be paid for by taxpayers, and the Alberta Trappers Association believe they need some "incentive" to offset the costs associated with snaring and trapping wolves.

One of the tragic side effects of the bounty system is that it has dramatically increased the amount of snaring. Not only are snares barbaric devices which can cause tortuously slow deaths, the non-target catch in snares is likely to be staggering. But the non-target/by-catch issue is also kept secret.



CAROL PATTERSON





**WILD WOLVES IN WINTER.** JOHN MARRIOTT

The evidence is clear. The Alberta government is allowing wolf bounties as a matter of political expediency. They would rather have thousands of wolves needlessly killed than to accept the responsibility of managing our wildlife in a responsible and effective manner. Livestock producers, hunters and the public should be outraged.

Through FOIP requests (Access Request 2011-G0046), we have obtained the following quotes from Alberta Fish and Wildlife biologists, who state that bounties are not an effective management tool.

ROB LAMONT [Field Services, referring to bounties] *"will likely create some enforcement issues including such things as illegal poisoning and illegal trapping"*

MARK HECKBERT [Fish and Wildlife Manager] *"public bounties effectiveness at reducing wolf*

*populations is doubtful despite many thousands of wolves killed in North America in the 20th Century"* – *"where large tracts of land function as reservoirs for wolf populations, bounties can be expected to be ineffective"* – *"The wolf population and associated depredation on livestock may actually increase under a public bounty"*

DAVE MOYLES (Senior Wildlife Biologist) "Bounties are not an effective form of controlling wolf numbers" "...the potential for abuse is great."

NATHAN WEBB [Carnivore Specialist with Alberta Fish and Wildlife] *"Studies in Alberta and Alaska have indicated that public harvests of wolves are not effective in reducing wolf populations enough to allow increases in wild ungulates"* *"I do not believe a bounty program will be effective..."*

STEVAN CROSS [Manager Field Services] *"Scientific study has shown that a bounty has no effect on a predator population"* *"The wolf population and associated depredation on livestock may actually increase under a public bounty."*

B MAILE [Wildlife Biologist] *"...bounty programs across North America historically not successful at reducing wolf/coyote populations."*

#### **NATURE ALBERTA AND STRYCHNINE**

Nature Alberta's 2008 Pesticide Policy states that our organization "supports the complete ban of the chemical pesticide, strychnine." The main reason we included a ban on strychnine in the policy was the indiscriminate and widespread effects on other wildlife, but also coupled with generally careless use/misuse and limited on-the-ground concerns about poisoned carcasses (eg., Wolves, Coyotes, Richardson's Ground Squirrels) being scavenged.

*Dwight Rodka started work in 1973 as a Predator Control Specialist with the Provincial Government, working with livestock producers and their predation problems which were mainly coyotes and wolves. He was responsible for documentation of livestock kills, training and licensing producers and government personnel in the use of toxicants and other control and management techniques. Late in his career, licensing and inspection of game farms and aquaculture were added to his responsibilities. He officially retired in 2012. He has always believed there are many ways we can improve on the management of predators, especially wolves.*

## VIDEO: How Wolves Change Rivers

“How Wolves Change Rivers” is fascinating to watch. It shows how dramatic environmental changes will occur once apex predators – in this case, wolves in Yellowstone – are allowed to resume a natural course of existence rather than trying to kill them or relocate them.

The four minute-plus video has gone viral recently. It may be both exaggerating and oversimplifying the situation (it’s hard to tell such a complex story in only 4.3 minutes); though the video has been criticized by some, it has mostly been praised for its content. Regardless, it is definitely worth viewing to get a perspective on how seemingly unrelated events can become intricately related in nature. The wolves have affected the surrounding living ecosystems, but also the physical geography of the land itself. Check it out on YouTube.



## Drop Archaic Wolf Bounties: IUCN

International scientists and the International Union for the Conservation of Nature (IUCN) have called on the Alberta government to eliminate its archaic wolf bounties and modernize its wolf management. “The Canid Specialist Group of the IUCN respectfully encourages the Government of Alberta to

show leadership to eliminate indiscriminate wolf bounties and modernize wolf management,” states Dr. Lu Carbyn, Canadian representative of the IUCN’s Canid Specialist Group. “We have offered advice and technical assistance on this issue as needed.”

IUCN stated that “the province of Alberta is one of the very few jurisdictions left, worldwide, that still uses the bounty system to kill wolves and coyotes.” The IUCN also said:

“To the best of our knowledge it appears that there are at least six wolf bounty programs

that are funded by municipal district governments with the goal of reducing wolf predation on livestock. These programs are not based on scientific management principles. Instead, they encourage random killing of wolves and include methods such as snaring that do not discriminate by species. Three other wolf bounty programs in Alberta are sponsored by two Alberta based user groups and partly funded by the Wyoming Wild Sheep Foundation; their goal is to reduce wolf predation pressures on ungulate populations along Alberta’s foothills.

“It is well known that wolves have high reproductive rates. Random, low level killing of wolves is not, therefore, likely to significantly increase ungulate numbers.





The most effective methods to facilitate increased ungulate populations are to conduct intensive wolf culling, targeting entire packs within a large zone. Such programs involve either aerial gunning, or poison. The latter methods have been proven to be politically and publically unacceptable. The former method is difficult to carry out in wooded areas, such as those present along the foothills of Alberta. Instead of the bounty payments that are currently in place in Alberta, we suggest that the Alberta government adhere to sound wildlife management practices according to North American and International standards. The activities currently in place are in direct violation of the IUCN manifesto on wolf management and wildlife conservation."

IUCN is the world's oldest and largest global environmental organization with the central mission of conserving biodiversity. The IUCN Species Survival Commission (SSC) is a science-based network of more than 8,500 volunteer experts from almost every country of the world, and includes the Canid Specialist Group, with a watch on all members of the Canidae, including wolves.

The Alberta Environment and Sustainable Resource Development response to the IUCN, from Minister Robin Campbell, was certainly less than satisfying, in effect limited to suggesting that the IUCN should "contact the individual municipalities with your concerns."

IUCN response expressed their disappointment that the Government "failed to acknowledge the inadequacy of this kind of wildlife management, and further with the advice that IUCN redirect its concerns to Alberta municipalities; we understand that in Canada, jurisdictional responsibility over most wildlife rests with provincial governments." Having said that, IUCN was at least encouraged by the Government of Alberta recognizing "that wolves are an important part of a healthy ecosystem. We are also encouraged to know from Minister Campbell that 'Government staff have met with several of the municipalities offering wolf bounties and provided them with information indicating these types





of programs are not effective in reducing wolf depredation.’ We note this recognition by the Alberta government that bounties are ineffective in reducing wolf depredation on livestock, which was the local communities’ goal. ...Again, we wish to respectfully encourage the Government of Alberta to demonstrate inspirational leadership by leading its municipalities and private groups to modernize wolf management, by taking the necessary steps to eliminate the archaic and out-dated methods of wolf bounty payments.”

Bounties rarely solve the problems for which they were intended. Bounty-based killing is most often conducted at random, is not always targeted specifically to problem areas, and can be open to abuse and fraud. In fact, there has been no case study to date that has shown that bounty payments on wolves in North America have ever been effective in achieving the desired results. Hence, the use of bounties simply has disappeared as a management tool all across North America. Having said that, there are still a number of jurisdictions in Canada and the western United States that are pressing mightily for bounties, though that seldom has anything to do with a desire to manage wolves.



# Charley's Nature Note: Snowshoe Hare

BY CHARLEY BIRD

*We have experienced a longer than normal winter. I am sure that you, like myself, were anxiously awaiting the arrival of spring. By the end of the first week of April, the ice still hadn't gone from Erskine Lake. Spring has arrived, however, as we can observe by a number of events in nature's calendar.*

Here, in and around Erskine, Alberta, by now (April 7) we have seen the return of Canada Geese, European Starlings, Crows, the odd Robin, and Ring-billed Gulls. Great-horned Owls have been observed nesting and coyotes are pairing up. This "nature note" is about another spring event, the shedding of their winter hair by Snowshoe Hares (*Lepus americanus*), often called "bush rabbits", and its replacement by summer brown.

My accompanying photograph was taken in early morning in our own backyard in Erskine on April

5. The hare was nibbling at green grass recently exposed as the snow melted. It and another one are mainly active during the night and are in, or near, trees and shrubbery on the north side of our house and in the neighbour's yard.

In Alberta we have two true "hares": the present one and the White-tailed Prairie Hare (*Lepus townsendii*), which is also called

a "Jackrabbit" (even though it's not a rabbit); and one native rabbit, the Cottontail (*Sylvilagus nuttallii*). Hares have their coat change from white to brown on the arrival of spring, while true rabbits do not change their coat colour. This change obviously provides camouflage protection from predators such as Great-horned Owls, Coyotes and Lynx.

Native people, early settlers

**SNOWSHOE HARE IN CHARLEY'S YARD.** CHARLEY BIRD



*Dr. Charles "Charley" Bird is a university professor, publisher of 300+ scholarly articles, long-time advocate for Alberta conservation issues, active with Federation of Alberta Naturalists (Nature Alberta) and in particular with his local group, Buffalo Lake Naturalists Society (a Nature Alberta Corporate Club). In 1978, he received Nature Alberta's Loran Goulden Award. Charley's interests and expertise are broad indeed, but especially butterflies and moths; he was the lead author for Alberta Butterflies, published in 1995.*



and trappers relied heavily on Snowshoe Hare meat, catching animals with snares or by shooting.

Hares and rabbits are Lagomorphs, not rodents, as they have four upper incisors, rather than two, and because they rarely eat anything but vegetable matter. In the winter, Snowshoe Hares feed extensively on twigs and branches; when the snow goes, they eat grass and many other kinds of plant material.

Snowshoe Hares are smaller, weigh a little less than half the weight of, and have shorter legs and ears than Prairie Hares.

In Alberta, Snowshoe Hares are found in forested areas north of the Prairies (but also in the Cypress Hills), whereas White-tailed Prairie Hares are found in open areas, especially in the Prairies. As land in the Aspen Parkland was broken for grain crops and cleared for cattle grazing by settlers in the last 100 or so years, the habitat loss resulted in a reduction in numbers of Snowshoe Hares in that region. Cottontail Rabbits are found

primarily in coulee areas in the southern part of the province.

Snowshoe Hare population numbers across northern North America fluctuate markedly, roughly over an eight to eleven year cycle. The reasons for this are complex and still poorly known, due to factors such as predation, food availability, disease, and a build-up of parasites. You can read more about this interesting animal online at [http://en.wikipedia.org/wiki/Lepus\\_americanus](http://en.wikipedia.org/wiki/Lepus_americanus). Yet

another member of our amazing natural world. Two excellent source books are the following:

Naughton, Donna. 2012. *The Natural History of Canadian Mammals*. Canadian Museum of Nature and University of Toronto Press, Toronto, Buffalo, London. 784 pp.

Soper, J. Dewey. 1964. *The Mammals of Alberta*. The Hambley Press, Edmonton, AB. 402 pp. + index.



A WHITE-TAILED JACKRABBIT IN EDMONTON. ADAM LOWE/WIKIPEDIA COMMONS

# Buffalo Jump Butterfly Count 2014

**Mark your calendars!** Don't forget - the 2014 Dry Island Buffalo Jump Butterfly Count will be held on Sunday, July 6th. Meet, as usual, at the upper Parking Lot/Viewpoint before 10 AM. Bring a butterfly net if you have one, a viewing bottle, a camera, lunch and hiking attire. Be prepared to see lots of interesting butterflies and a wonderful show of wild flowers. The scenery is spectacular.

## Sunday, July 6, 2014

# First Hand: Coydog or Coyote?

BY DENNIS BARESCO



*Jim Brohman's black Coyote article and photos in the previous Nature Alberta ("First Hand: Black Coyote Encounter." Winter 2014) was also highlighted on Nature Alberta's Facebook page. This led to a comment by Christopher Lee, who stated: "Nice grab of one of the coydogs!"*

**JIM'S BLACK COYOTE.**

JIM BROHMAN

Your Editor responded on Facebook with: "In the article, Jim points out that it 'seems more likely that this is a melanistic coyote . . . (as seen in black-coloured wolves and jaguars)', not a coydog. While 'black Coyotes are extremely rare,' black-furred wolves are common in Alberta."

Christopher replied: "It's a coydog. I have photos of its family members (parents/grandparents) and the park [Elk Island National Park] has confirmed to me in 2011 that they are dog-coyote hybrids."

Following up, I checked with Elk Island about how they determined coydogs were present. Martha Allen, Ecologist Team Leader at Elk Island, responded with:

"I'm the new(ish) ecologist at the Park, intrigued by your question and found the black coyote article interesting. Unfortunately, I am unaware of any research that has been done on black coyotes or coydogs in EINP and we have no plans at this time to follow-up with a genetic study. Jim might be correct with his suggestion that the animal in the photograph is a melanistic coyote, but further study would be required to conclusively determine the genetics of an individual animal."

Comparing the two clearly shows that they are not the same animal; thus, both Christopher and Jim may be correct. An interesting subject, certainly!

**CHRISTOPHER'S BLACK COYDOG.** CHRISTOPHER LEE



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.



# 2012 Species Count for Plants in Bloom: May 25-31

SUMMARY REPORT BY SUZANNE VISSER

## THE TEMPERATURE FACTOR

According to the Environment Canada Climate Trends and Variations Bulletin, spring 2012 in the prairie climate region of Canada, which includes southern Alberta, was the fifth warmest on record with the temperature being 2.3°C above normal (National Climate Data and Information Archive, Environment Canada, 2012). However, this was not the case for the northwestern forest climate region, which encompasses parts of central and all of northern Alberta. Here, spring was the fourteenth warmest on record with the temperature being only 1.7°C above normal.

This difference in spring weather between southern Alberta and central/northern Alberta was evident also when spring temperatures for 2011 and 2012 were compared. Relative to 2011, when temperatures in March, April and May in the Taber, Calgary and Red Deer areas were well below the thirty-year Canadian Climate Normals, temperatures in 2012 during March and April exceeded the Normals (Environment Canada, 2011, 2012) by 0.4 to 4.5°C.

In contrast, Edmonton area temperatures in April were below the Climate Normals in both 2011 and 2012 and 0.5°C below normal in May, 2012. An examination

of mean temperatures in March and April revealed also that the Waterton, Taber, Calgary and Kananaskis areas were much warmer in 2012 than in 2011, while temperature differences between 2011 and 2012 for March and April were not as great in Edmonton and Ft. McMurray. Mean temperatures across the Province in May were similar in 2011 and 2012.

As was the case in 2011, precipitation in March, April and May were well above the Climate Normals in both Calgary and Edmonton. Therefore, spring in southern Alberta was much warmer in 2012 than in 2011, but not so in central and northern Alberta.

## THE WEATHER EFFECT

The discrepancy in spring weather between northern and southern Alberta was apparent in the comments submitted by May Count participants (Table 3). In southern Alberta, Peter Achuff, Teresa Dolman, Patricia Greenlee and Ryan Heavy Head all remarked on the much warmer weather and earlier spring observed in their Count areas (Waterton, Beauvais Lake, Lethbridge) relative to that experienced in 2011. At Beauvais Lake, Teresa reported species in bloom that were indicative

of an early spring, including pale comandra (*Comandra umbellata*), western bistort (*Polygonum bistortoides*), sticky purple geranium (*Geranium viscosissimum*), heart-leaved arnica (*Arnica cordifolia*) and coralroot orchid (*Corallorhiza trifida*). In Lethbridge, Patricia and Ryan found that species such as saskatoon (*Amelanchier alnifolia*), early yellow locoweed (*Oxytropis sericea*), golden bean (*Thermopsis rhombifolia*) and dandelions (*Taraxacum officinale*), which were in full bloom in 2011, were mostly in seed in 2012.

Observations from Calgary were contradictory, with Heide Blakely, Val Scholefield, Wayne Brideaux and Ann Brebner commenting on the cool spring, and Don Stiles, Des Allen and Suzanne Visser thinking that spring was more normal or even advanced compared with the previous year. In the BowKan area, Cliff Hansen noted that "blooming plant development was close to schedule".

In contrast to southern Alberta, there were no comments about a warmer, earlier spring from participants surveying central and northern Alberta locations. In Red Deer, Eileen Ford remarked that pin cherry (*Prunus pensylvanica*), bunchberry (*Cornus canadensis*), red-osier dogwood (*C. stolonifera*), and low-bush cranberry (*Viburnum edule*) were a bit later than usual,

while Gail Hughes commented on the cold north wind and well below normal temperatures at the Lacombe Trails/Elizabeth Lake area. At Crimson Lake, near Rocky Mountain House, Elaine Gordon stated “that all the usual species were there, but not very many were in flower.” Also, there was no indication of an earlier, warmer spring from Edmonton participants. Indeed, Derek Johnson thought that “the season was pretty close to average or maybe a day or two advanced”, which he attributed partially to the heat island created by the City. However, at Hoople Lake, which is located 100 km west of Edmonton, Derek’s conclusions about the spring were quite different. Here he had difficulty finding golden saxifrage (*Chrysosplenium iowense*) in flower (“the second time in 34 years that this occurred”) while leatherleaf (*Chamaedaphne calyculata*), a species that has usually finished blooming by May Count, was still in flower. Both of these observations were indicative of a late spring. Whether or not spring was early or late in Ft. McMurray, the most northerly location in the Count, is unclear.

### NUMBER OF SPECIES

The warmer spring translated into a 26% increase in the number of species observed in bloom in 2012 relative to 2011. The total number of species reported by 129 participants who surveyed twenty areas across the Province was 481. The increase in species between 2011 and 2012 was primarily a result of significant increases in the number of

species observed in bloom in the southern Alberta locations where temperature differences between the years were also the greatest, as discussed above. Differences in species numbers between the years in the central and northern locations were not as apparent.

Thus, Waterton, the most southerly location in the Count, reported the highest number of species in bloom in the Province. At 196 species, this was more than double the number reported in 2011 (93). High counts were reported also from Calgary (169 species, up from 119 in 2011) and the Taber area (167 species, up from 107 in 2011). Participants in other southern Alberta locations (Beauvais Lake, Lethbridge, Yamnuska) also noted a significant increase in species in bloom in 2012 compared with 2011. At Beauvais Lake, species that hadn’t been seen in five years were found in bloom as mentioned previously, while in Calgary wild chives (*Allium schoenoprasum*), chamaerhodos (*Chamaerhodos erecta*), sticky purple geranium (*Geranium viscosissimum*), silverberry (*Elaeagnus commutata*) and northern bedstraw (*Galium boreale*) were all found in flower by the end of May 2012, while other species such as Hooker’s Townsendia (*Townsendia hookeri*) and trembling aspen (*Populus tremuloides*), which are indicative of a late spring and were still blooming during the 2011 Count, had finished flowering before the 2012 Count was initiated.

In contrast, the number of species in flower in central and northern

Alberta locations (e.g. Red Deer, Crimson Lake, Edmonton, Hoople Lake, Ft. McMurray), where spring temperature differences between 2011 and 2012 were not as great as in southern Alberta, were comparable between the two years. Edmonton participants observed the highest number of species in flower in this region – a total of 114 species, which was slightly lower than the number reported in 2011 (122). Interestingly, Edmonton had the highest Count in the Province in 2011, partly because May temperatures in that location were well above normal that year. At Hoople Lake, an area that Derek Johnson has been surveying for 34 years, spring was late as discussed above.

### RARE SPECIES

In accordance with the increase in total species in 2012, the number of rare species (i.e. those ranked as either S1 or S2 by the Alberta Conservation Information Management System (ACIMS) in May 2012) increased also, rising from 7 species in 2011 to 14 species in 2012. As usual, the rare plant hotspot was Waterton, where 64% of the rare species were found. Rare plants included: from Waterton, western wakerobin (*Trillium ovatum*), linear-leaved montia (*Montia linearis*), and blue Suksdorfia (*Suksdorfia violacea*); from the Taber area, sand verbena (*Tripterocalyx micranthus*); from the Whaleback and Calgary, Macoun’s cinquefoil (*Potentilla macounii*); and from Calgary, leafy Braya (*Braya humilis ssp. humilis*). A rare species new to the Count was creeping whitlow-grass (*Draba reptans*) (S1S2T), found by Lloyd



Bennett in the Taber area. In addition, eleven S3 species on the ACIMS watch list were seen in bloom. The number of species on the ACIMS track and watch list was twenty-five or approximately 5% of the total species reported on the Count. An unusual species observed on the Clyde Fen Count was two black bears; unfortunately, Derek Johnson was unable to determine their flowering stage!

### EXOTIC SPECIES

The total number of exotic species found in flower in 2012 did not differ much from that observed in previous years. Of the 481 species reported, 81 or 17% were exotic, which is comparable to the 15% seen in 2011. The most frequently observed exotic species were almost identical to those reported in 2011 including common dandelion (*Taraxacum officinale*), which occurred in all of the Count areas, followed by stinkweed (*Thlaspi arvense*), caragana (*Caragana arborescens*), shepherd's-purse (*Capsella bursa-pastoris*) and black medick (*Medicago lupulina*), which occurred at frequencies of 45%, 40%, 40% and 35%, respectively.

An exotic species not previously found on the May Count in Edmonton was blue mustard or crossflower (*Chorispora tenella*), a member of the mustard family, discovered blooming amongst the stinkweed in the Whitemud Creek area by Derek Johnson and Elizabeth Beaubien. This species was reported also from the Taber area by Lloyd Bennett. In addition, Lloyd Bennett found

five exotic species that were new to the Taber area – Iceland poppy (*Papaver nudicaule*), small alyssum (*Alyssum alyssoides*), Indian mustard (*Brassica juncea*), oxtongue (*Borago officinalis*) and yellow chamomile (*Anthemis tinctoria*). Ann Brebner was amazed by the number of two-headed dandelions she found in her count area of Bearspaw near Calgary.

### COMMON SPECIES

As in previous years, the most commonly reported species in the 20 locations surveyed were star-flowered Solomon's-seal (*Smilacina stellata*) (85%), northern gooseberry (*Ribes oxycanthoides*) (85%), saskatoon (*Amelanchier alnifolia*) (95%), and wild strawberry (*Fragaria virginiana*) (85%). Early blue violet (*Viola adunca*) was the most frequently observed native species, being reported from all locations surveyed across Alberta. Families with the greatest representation were the Brassicaceae with 48 species, Asteraceae and Cyperaceae with 43 species, Fabaceae with 39 species and Rosaceae with 34 species. The majority of Families (60%) were represented by only one or two species.

### SUMMARY

In summary, spring in southern Alberta was one of the warmest on record, but this was not the case in central and northern Alberta where much cooler temperatures prevailed. As a result, the number of species blooming in southern Alberta was much higher than that reported

the previous year, while the number of species found in bloom in central and northern Alberta was similar to that reported in 2011. Overall, a total of 481 species were observed in 2012, an increase of 26%, attributable mainly to the elevated Counts from Waterton, Beauvais Lake, Taber area, Lethbridge, Calgary and Yamnaska.


This Count is totally dependent on the participation of many volunteers across the Province. Many thanks to the 129 observers who contributed to the 2012 Count:

Peter Achuff, Joyce Algar, Des Allen, Barry Anderson, Judy Anderson, Heather Archibald, Mel Balsetti, Linda Balsetti, Duncan Bayne, Susan Beanland, Elizabeth Beaubien, Kristin Beechy, Jill Beleyne, Lloyd Bennett, Trisha Bichel, Heide Blakely, Jason Boutet, Ann Brebner, Michael Brebner, Sherwin Brebner, Wayne Brideaux, Lyse Carignan, Brian Catto, Dick Choy, Jenny Clark, Martha Clarke, Pat Clayton, Jean Cooper, Patsy Cotterill, Varina Crisfield, Eva Crisp, Phillip Crisp, Sandra Davis, Teresa Dolman, Doug Dolman, Mary Drut, Marilyn Dyck, Ian Dymock, Paula Evans, Mackenzie Fai, Gail Fennell, Waneeta Fisher, Donna Fleury, Eileen Ford, Stewart Ford, Kristen Foreman, Laura Frost, Corlaine Gardner, Rob Gardner, Sylvia Glass, Elaine Gordon, Don Gordon, Sean Gordon, Patricia Greenlee, Bernice Hafner, Laurie Hamilton, Cliff Hansen, Ryan Heavy Head, Robin Hitchon, Cedric Hitchon, Kathy Holly, Robert Holmberg, Jolana Holub, Annalora Horch, Gail Hughes, Derek Johnson, Barb Johnston, Jim Knelson, Heidi Kurtz,

Patrick Kyle, Jane Lancaster, Bev Lane, Brenda Lepitzki, Dwayne Lepitzki, Ed Letain, Doreen Letain, Cam Lockerbie, Debbie MacGarva, Pat Marlowe, Nina Marshall, Val Martins, Sandy McAndrews, Jane McCoy, John McFaul, Diane McIvor, Mike McIvor, Margit McNaughton, Drew McNaughton, Susan Moore, Laurie Morrison, Morris Nesdole, Sheryl Normandeau, Madeleine Oldershaw, David Parbery, Sarah Peterson, Rayma Peterson, Jamey Podlubny, Colton Prins, Marg Ramsay, Ing-Britt Renborg, Ken Richards, Eva Robertson, Dianne Rosetti, Christian Roy, Val Scholefield, Jill Seaton, Hanne Seidel, Michiko Shimizu, John Slater, Kate Snedeker, Reno Sommerhalder, Andrea Sommerhalder, Ena Spalding, Amber Stewart, Don Stiles, Donna Stroh, Joanne Susut, Cheryl Thorpe, Ashley Thorsen, Julie Tingley, Shirley Truscott, Gary Truscott, Suzanne Visser, Anita Walker, Ken Walker, Karen Whitlie, Jack Whitworth, Eva Zidek, Barb Zimmer.

#### References

- Environment Canada. 2011, 2012.  
Climate Summaries. National Climate Data and Information Archive. [www.climate.weatheroffice.gc.ca/prods\\_servs/cdn\\_climate\\_summary\\_e.html](http://www.climate.weatheroffice.gc.ca/prods_servs/cdn_climate_summary_e.html)
- Government of Alberta. Tourist, Parks and Recreation. Alberta Conservation Information Management System. List of all Species and Ecological Communities Within the ACIMS Database - May, 2012. <http://tpr.alberta.ca/parks/heritageinfocentre/datarequests/default.aspx>




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# Up Close Naturally: Horsetails and Ferns

BY MARGOT HERVIEUX

*In a world dominated by flowering plants, ferns and horsetails are often overlooked. Many of us associate these plants with tropical forests but they can also be found in damp places across the province.*

Unlike flowering plants, the ferns and horsetails spread by spores instead of seeds. Fern spores are produced in capsules that appear as brown spots on the underside of the fronds. Horsetails have a cone at the tip of the plant that releases the spores.

Our most common fern is the ostrich fern (*Matteuccia spp.*). Reaching over a metre in height, ostrich ferns thrive in a variety of wet places from stream banks and swamps to damp forest hollows. In the early spring the young sprouts or fiddleheads are a popular delicacy but be careful not to over harvest your favourite spot.

In moist mixed-wood forests, look for the more delicate shield and oak ferns. When conditions are right, triangle-shaped oak ferns, with their three equal fronds, often carpet the forest floor. These ferns

can often be found growing in the same places as their cousins the club-mosses or ground pines.

Like ferns, horsetails reproduce by spores but there the similarities end. Horsetails (*Equisetum spp.*) are easily recognized by their hollow, jointed stems. Some also have feathery side branches while others just have a single stalk. These days most horsetails rarely grow taller than a metre but during the age of dinosaurs the land was covered with forests of the tree-sized plants.

Horsetails are often called scouring rush because the stems are

toughened by silica. Campers still use them for scrubbing hands and pots, and the stems are also useful for fine sanding and polishing. Horsetails are most often found along stream banks and lakeshores but you can also find them in moist woods.

At this time of year our forests are a mass of green and many individual plants go un-noticed. The next time you are walking in your favourite old forest or enjoying time by the water, keep your eyes peeled for those oldies but goodies - the horsetails and ferns.



**A HORSETAIL, EQUISETUM ARVENSE.**

F. LAMOT/WIKIPEDIA COMMONS



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

# Wildlife! Starring... The Giant Fairy Shrimp

BY DENNIS BARESCO, WITH INFORMATION FROM:  
A) HUGH CLIFFORD, IN BIO-DITRI.SUNSITE.UALBERTA.CA;  
B) AQUATIC INVERTEBRATES OF ALBERTA (1991), BY HUGH CLIFFORD;  
AND C) WIKIPEDIA.

*Anyone who has scooped water from a pond of some brackishness can testify to the huge amount of wildlife – both microscopic and macroscopic – to be had in a single bucket of water, especially if it includes some pondweed and mud. Pond life is as fascinating as it gets in the natural world.*

One easy-to-observe group of pond animals is the Crustacean, fairy shrimp. In Alberta, thirteen species of fairy shrimp in five genera are to be found. The largest is *Branchinecta gigas*: the Giant Fairy Shrimp, which grows up to 100 mm (4.0 in) long; males are smaller than females.

Several traits make Giant Fairy Shrimp atypical. While other fairy shrimp feed mainly on small organic particles, including detritus and algae, Giant Fairy Shrimp are predators which feed on a variety of invertebrates: mostly other species of fairy shrimp, but also copepods (crustaceans which are 1 to 2 millimetres (0.04 to 0.08 in) long), cladocerans (the crustaceans usually referred to as water fleas) and sometimes green algae.

Despite being the largest species, Giant Fairy Shrimp have the smallest eyes of any species in the family, and possibly in the whole fairy shrimp Order, Anostraca. The species lives in hyposaline waters which often have high turbidity (i.e. low visibility); thus, since they hunt by feel rather than sight, good eyes are not a necessity. Hyposaline refers to water which has a salinity significantly higher than most freshwater but lower than natural seawater. Water with a higher concentration of salt than seawater, like the Important Bird Area Chappice Lake in southeastern Alberta, are termed hypersaline.

Giant Fairy Shrimp adopt a “hunting posture with the body bent double” when feeding. As Wikipedia explains: “The animal swims dorsal side down, with the abdomen nearly parallel with the thorax, so that the sensitive antennae and caudal rami all extends forwards. (Caudal rami are appendage-like or spine-like protrusions at the rear of the animal, which are characteristic of primitive crustaceans). The thoracic limbs are held wide open, ready to close on any prey which enters.”



**A CHARACTERISTIC SPRINGTIME INHABITANT OF THE LARGE, SHALLOW, TURBID LAKES OF ALBERTA'S SOUTHEAST. THOUGH THIS PREDATORY SPECIES SUBSISTS MAINLY ON SMALLER SPECIES OF FAIRY SHRIMP, THE RED COLOURATION OF THIS SPECIMEN'S GUT CONTENTS SUGGESTS A GENEROUS CONSUMPTION OF THE HIGHLY PIGMENTED COPEPOD LEPTODIAPTOMUS SICILIS. THIS EGG-BEARING FEMALE MEASURED 71MM. THE IMAGE WAS TAKEN ON-SITE (SNAKE LAKE, NEAR SCOLLARD AB) USING A SMALL FIELD AQUARIUM. IAN GARDINER**

**A MUCH SMALLER FAIRY SHRIMP, THE READING FAIRY SHRIMP (BRANCHINECTA READINGI), IS A FAIRLY COMMON SPRINGTIME INHABITANT OF THE VERNAL POOLS IN CALGARY'S SOUTHEAST FRINGE. THESE POOLS ARE RAPIDLY VANISHING AS CALGARY'S EXPANSION PROCEEDS. MALE AT TOP IS 19MM, SHOWING THE LARGE SECOND ANTENNAE USED FOR CLASPING FEMALES. FEMALE AT BOTTOM IS 20MM, SHOWING BROOD POUCH WITH SHELLED, FERTILIZED (BLUE) AND UNSHELLED, UNFERTILIZED (ORANGE) EGGS.**

IAN GARDINER





COURTNEY NEAL



# Alberta Bull Trout:

## A Native Fish Species on the Hook

BY COURTNEY NEAL

*It's seven-thirty on a rosy Tuesday morning in July and my feet are wet. It's early in the season for terrestrial fly patterns, but I optimistically tie on a Fat Albert and fling the foamy grasshopper onto the water with a flick of my fly rod. It lands on a riffle upstream of a deep, jewel-green pool.*

I'm standing in the Livingstone River, part of the Oldman watershed in Alberta, and I have just hooked a fish. The take is so quick that I almost miss it. It's not a big splash, but instead an inconspicuous sucking vortex that swallows my fly as it sweeps into the pool. This stream is a popular angling destination for Westslope Cutthroat Trout, but that's not what I've hooked. The fish turns as we do battle and I see the white leading edges of its pelvic fins. "Bull Trout", I think to myself.

It's unusual to catch one on a fly rod. I kneel in the stream and wet my hands, then grasp the fish's tail under the water. This specimen's slender body is a slick gunmetal grey. I check for black markings on the dorsal fin, a key distinguishing feature between Bull Trout (*Salvelinus confluentus*) and their introduced char relatives, the Brook Trout (*Salvelinus fontinalis*). There are none. This is the first Bull Trout I have ever caught. How lucky I am to have this moment.

Alberta's official fish emblem has seen better days. Alberta Sustainable Resource Development

published a status report on the Bull Trout in 2009, showing that human interference has caused their numbers to rapidly decline along the Eastern slopes of the Rockies over the past 100 years (1-8). Angling practices, the introduction of competitive species and alteration of habitat have irreversibly threatened the health and sustainability of Bull Trout populations in Alberta. (20-24).

Naturally, catching a Bull Trout when their situation is so dire seems in bad taste. However, I will not be eating this fish. The Livingstone River has a zero bag limit on trout, meaning that during open season from July 16th to October 31st, it is always catch-and-release (ASRD 26). This fish will be gently released without ever having left the water. S.J. Casselman demonstrates in his 2005 review on catch-and-release for the Ontario Ministry of Natural Resources that this technique can be an effective conservation measure if properly performed (1). Limiting the time spent on the hook, minimizing the handling of

the fish and avoiding exposing the fish to air can all reduce mortality and improve recovery time once released (Casselman 10).

Throughout the last century, Bull Trout have been greatly mistreated by anglers. In the 1920s, they were culled when caught. During the great depression, they were exploited as sustenance. Since the 1960s, increased access to habitat has intensified angling pressure in areas like the Livingstone range that were previously inaccessible. Only in the last two decades have attitudes shifted in favor of conservation. Alberta's current bait ban, the barbless hook legislation of 2004 and the zero-harvest limit for Bull Trout imposed in 1995 are all programs designed to mitigate further damage to the fish population. Intentional poaching and misidentification are factors that remain as yet to be eliminated (ASRD 22-23). Undeniably, what I have caught cannot be misidentified as a brook trout. Alas, there are still anglers out there who cannot tell the difference.

*Courtney Neal is a full-time gardener, anthropology student, and part-time angler with an interest in preserving and protecting Southern Alberta's wild spaces.*



THE LIVINGSTONE RIVER. COURTNEY NEAL

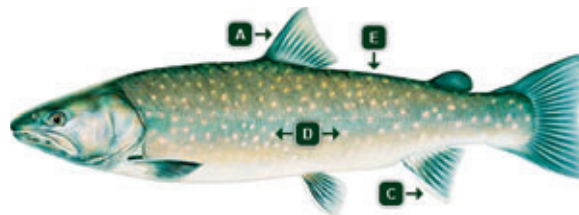
Brook Trout, while similar in use of habitat and appearance to Bull Trout, are not native to Alberta. Their introduction has created a competitive environment between these fluvial apex predators. Will Warnock and Joseph Rasmussen, in a 2013 study published in the *Canadian Journal of Fisheries and Aquatic Sciences*, highlight the factors associated with the insidious effect of Brook Trout on Bull Trout streams. They were originally introduced in Alberta to increase the catchable fish population. Since their introduction, they have competed and hybridized with Bull Trout populations in many watersheds to a point of dominance over or elimination of the native species. Warnock and Rasmussen discovered that near or total dominance one way or the other exists, with Brook Trout dominance taking precedence.

Temperature is a primary factor against coexistence. Pure Bull Trout populations seem confined to the higher, cooler elevations,

while Brook Trout populations tend to occupy lower areas and even extend downstream of stocking locations (Warnock and Rasmussen 906-911). Brook Trout also grow faster and spawn at a younger age, giving them a temporal advantage over Bull Trout (ASRD 23). Most importantly, it was discovered that human alterations to Eastern slope ecosystems favor Brook Trout. Warnock and Rasmussen postulate that because of the human impact on Bull Trout habitat in Alberta, “brook trout may have simply replaced or been greatly aided in the competitive displacement of a declining bull trout population” (912).

Sadly, the human impact is all too visible in the Livingstone range. On highway 40, from Highwood House to Coleman, hundreds of acres of mechanized logging are visible from the road. That’s only a small sample of what’s been happening in the area since the 1960s. “Take a Google Earth tour of the Upper Oldman region,” recommends Lorne Fitch, a retired fish biologist with over thirty years experience studying Southern Alberta watersheds. “You’ll really get a feel for the impact.”

Nowhere is this more shocking than in the area of Hidden Creek, the go-to spawning ground for more than three-quarters of the Bull Trout population



**BULL TROUT IDENTIFICATION IMAGE FROM THE ALBERTA FISHING GUIDE: A » NO BLACK SPOT ON DORSAL FIN; B » LARGE HEAD/MOUTH; C » FINS HAVE WHITE LEADING EDGES; D » PALE YELLOW OR CREAM COLOURED SPOTS; E. DARK/OLIVE GREEN BACK. ALBERTAFISHINGGUIDE.COM**



in the Oldman watershed. The fish in my hands was probably born in Hidden Creek, a couple of seasons before logging concluded there in 2013. Fitch describes Hidden Creek as having the perfect combination of groundwater upwelling and rocky substrate ideal for the survival of Bull Trout embryos. It's also an important spawning ground for the Westslope Cutthroat Trout, another species with sensitive status that has been disregarded in the Hidden Creek logging project. The removal of trees and an increase in road density contribute to an undesirable situation. The movement of water from the ground's surface into streams has both increased the amount of silt delivered into the water and the speed at which the water runs off. Potential for flooding is now increased, which increases potential erosion.

This will continue until a critical mass of silt exists in the spawning habitat to the extent that Bull Trout embryos are unable to oxygenate and mortality is unavoidable. According to Fitch, the Alberta Government did not adequately assess the risks to Hidden Creek before approving the logging. This disregard for alternative forest resources "speaks to Alberta and our ideology of growth and development" in a way that does not account for the knowledge that our native fish are threatened species (Fitch).

Unfortunately, extensive flooding in Alberta in 2013 hindered reclamation efforts, and the impact of the Hidden Creek logging operation may not be measurable for many years. In the meantime, more roads will bring more people and more development to the area, exacerbating an already crumbling situation. "People miss that native fish are an indicator of our ability to monitor our impact," says Fitch. "Everything we do in or on a watershed runs by a fish."

The evidence is stacked. Improper angling practices, introduced species, and human alteration of habitats are destroying this beautiful resource (ASRD 20-24). Someday, our provincial fish might be reduced to nothing but fossils and folklore. By catching this bull trout, I hold the life of this single fish in my hands, but what I've really grasped is the future of this species. I let it

go. As the fish becomes part of the Livingstone once more, I feel bereft, knowing that I might never see one again.

#### Works Cited

- Alberta Sustainable Resource Development and Alberta Conservation Association. Status of the Bull Trout (*Salvelinus confluentus*) in Alberta: Update 2009. Wildlife Status Report No. 39 (Update 2009). Edmonton, Alberta: Alberta Sustainable Resource Development. 2009. Web. 23. February 2014.
- Casselmann, S.J. Fisheries Section. Fish and Wildlife Branch. Catch-and-Release angling: a review with guidelines for proper fish handling practices. Peterborough, Ontario: Ontario Ministry of Natural Resources. 2005. Web. 23 February 2014.
- Fitch, Lorne. Telephone interview. 27 February 2014.
- Warnock, Will G., and Rasmussen, Joseph B. "Abiotic and biotic factors associated with brook trout invasiveness into bull trout streams of the Canadian Rockies." *Canadian Journal of Fisheries and Aquatic Sciences* 70.6 (2013): 905-914. Web. 22 January 2014.



**BULL TROUT.** FISHERIES AND OCEANS CANADA

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## CELESTIAL HAPPENINGS

# Starry Nights

## Summer (June to August)

BY JOHN MCFaul

### FEATURED CONSTELLATIONS: LACERTA AND LEO MINOR

Lacerta and Leo Minor are two of the least prominent constellations of the 88 that are officially recognized by the International Astronomical Union. Claudius Ptolemy catalogued 48 of these constellations during the 2nd century AD. More were added with voyages of discovery to the southern hemisphere. Others were added to fill in spaces between those constellations described by Ptolemy. This was the case with Lacerta and Leo Minor.

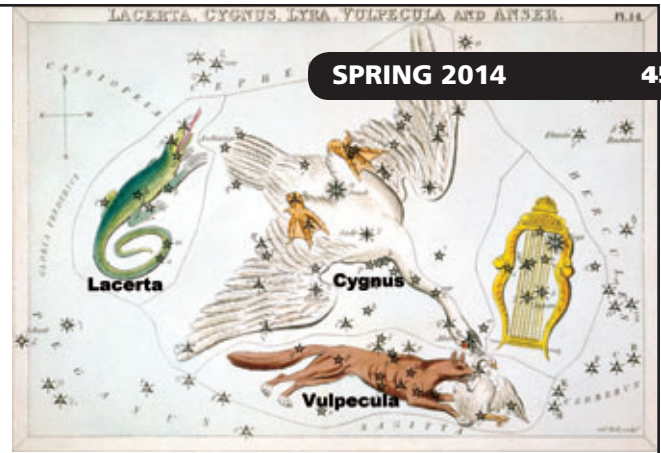
In 1687 the Polish astronomer Johannes Hevelius created 10 constellations, seven of which became officially recognized. Two of these are Lacerta and Leo Minor.

Lacerta (The Lizard) is a zig-zag line of dim to moderately bright stars located between Cygnus and Andromeda. It lies just on the edge of the Milky Way. As it is a relatively new constellation, it does not have any ancient mythology associated with it. It does however have one noteworthy object within its boundaries.

This object is known as BL Lacerta. The BL designation was given to it because it was first thought to be a variable star whose brightness was seen to vary. It was later found that this object was a strong source of radio waves and was in fact very

far away: at least 900 million light years or 9000 times the diameter of our Milky Way galaxy. It turns out that BL Lacerta represents the core of a giant elliptical galaxy which is spewing out a jet of particles in our direction. It is now referred to as a Blazar.

Leo Minor (the lesser lion) is another faint constellation that hovers above the much more prominent constellation Leo. Two stars within the boundary of this constellation are known to have planetary systems. To date there are about 1800 confirmed planets orbiting stars other than our own. We are not alone.



### 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 (21:30 MDT)  
Summer Solstice: June 21st 4:51 AM, MDT

**Moon:** Full – June 12, July 12 (super full moon), August 10  
New – June 27, July 26, August 25  
Note: A super full moon occurs when it is closer than 360,000 km.

**Planets:** **Mercury** may be seen very low in the WNW sky shortly after sunset during the first few days of June. Afterwards it will be hidden by the glare of the sun.  
**Venus** shines brightly above the ENE horizon a little before sunrise throughout this time period. On the morning of August 18th it will be very close to Jupiter. The waning crescent Moon will be nearby on June 24th and July 24th.  
**Mars** will continue to shine fairly brightly in the SW evening sky through the summer months. As time progresses it will descend closer and closer to the western horizon until mid-August when it will be too close to the sun to be seen.  
**Jupiter** will be too close to the sun to see until early August when it will appear as a morning star low above the eastern horizon. It will enjoy a close conjunction with beautiful Venus on the morning of August 18th. On August 23rd the moon will make a nice grouping with the two planets.  
**Saturn** is to be found in Libra as it trails behind Mars in the southern, evening sky. Throughout June, July and early August these two planets will draw closer together until they are only 5 degrees apart in early August low in the SW a little after sunset. The waxing moon will be nearby on July 7th and Aug 3rd.

**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.*



## BOOK REVIEW

# Birdfinding in British Columbia

REVIEW BY PETRA ROWELL

When first asked to review this book, I admit I hesitated, and then reluctantly threw it on my desk in the “get around to it someday” pile. Although the attractive cover caught my eye, and the listed authors, Russell Cannings (named by *Maclean's* in 2012 as Canada's top birder) and Richard Cannings (author of several books and known to many birders as a regional Christmas Bird Count compiler) are well-known for their collective birding wisdom, I haven't actually birded a lot of British Columbia. So what would I have to say about a book on this topic?

That being said, I do have relatives with a lake property in British Columbia (BC) where I have spent at least a few days every summer for most of my life. So when I did finally get around to opening up the book to the index, I was quite happy seeing that not only is the book organized by geographic area, but the area of northeastern BC I am most familiar with had its own section. This is impressive given that not a lot of people travel from the coast or inland BC “up north” to the working towns of Prince George, Chetwynd, Fort St. John and Dawson Creek. And even fewer people go exploring down the back roads in these areas, which can be challenging at best

given the weather and the number of oil and gas and logging trucks hurtling down them at any given time. But this is exactly what the authors did.

So the next time we took off to the family cabin near Chetwynd, I took my copy of *Birdfinding in British Columbia* with me, reading it along the way as my husband drove. Again, I was quite surprised at the level of detail the authors provide about this area.

It's like they have been going there every summer for the past several decades like I have! They named many places that I knew of and some that I didn't. I found myself nodding in agreement at some of the species they suggested a birder would find in a particular area. I also made a mental note of particular locations and species that I haven't seen but will now go looking for. The maps included throughout the book will also prove very useful for future birding excursions (even though this area of BC is rapidly changing with the resurgence in the coal and forestry industries and the ever-expanding oil and gas activities).

So, to wrap -up, although I can't vouch for other areas mentioned in the book, if the authors did as good a job as they did for the section on northeast BC, then this



## BIRDFINDING IN BRITISH COLUMBIA

RUSSELL CANNINGS & RICHARD CANNINGS

**By Russell Cannings & Richard Cannings.** Greystone Books, 2013.  
480 pages ISBN-10: 1771000031;  
ISBN-13: 978-1771000031

book is a gem and reasonably priced for a softcover of 480 pages at \$29.95. If you are a BC birder or you are planning a trip there, it is definitely worth it to consult this guide before you go.

For more information on Dick Cannings, his books, and all kinds of interesting Cannings' doings, check out his website: [dickcannings.com](http://dickcannings.com).

## CLUBS PAGE



# J.J. Collett Provincial Natural Area Foundation

*The J.J. Collett Natural Area Foundation (a Nature Alberta Affiliate Club) was established in 1985, as a provincial volunteer steward group to help preserve, maintain and provide environmental education for this ecologically diverse habitat.*



This becomes increasingly important because of J.J. Collett's proximity to Highway #2, one of the fastest growing corridors in Western Canada.

The J.J. Collett Provincial Natural Area, near the hamlet of Morningside, consists of 635 acres of Aspen Parkland underlain by ancient sand dunes. Over 18 km of maintained trails wind through a mosaic of shrub lands, aspen groves, stands of white spruce on moist shady hillsides, wetlands and grassy meadows typical of the area.

Local organizations, schools, post-secondary institutions, First Nations, and fitness groups are among those who use the area on a regular basis for studies, orienteering and field trips. The

Foundation has developed and provides yearly a Grade 6 Environment Education Program based on the Grade 6 Alberta Science Curriculum for over 450 students from schools in our area. Instructors provide an in-classroom session followed by a fieldtrip to the area where students are helped with tree identification and discuss Environmental issues.

The area is used year round with many people jogging, walking, exercising their canines, bird watching, snow-

shoeing, cross-country skiing and simply enjoying the area daily. We have approximately 10,000 to 11,000 visitors yearly. The Foundation holds guided walks in the spring and fall and when available a rehabilitated bird from the Medicine River Wildlife Center is released in the area. Guest speakers at our





annual meetings also provide educational opportunities for our members and the general public. We have established an endowment fund for future sustainability.

Yearly, the Foundation takes on a major enhancement project. In 2013 with \$32,000 acquired through donations from corporations, local business, grants, and major sweat equity of its board members, a 212 foot boardwalk was completed across a sensitive wetland on one of the trails, providing both public and maintenance access to the area while protecting the wetland environment.

Please come and pay us a visit. It is truly one of Alberta's natural area "Gems". Also recommended is the webpage (jjcollett.com) which is already

a great site and continuing to grow. You can support us by renewing or purchasing an annual membership (\$20). Donations – tax deductible – in addition to

your basic membership are always welcome and very much appreciated. If you have any questions please forward your questions to [contact@jjcollett.com](mailto:contact@jjcollett.com).



# Nature Alberta

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# Nature *gallery*



SEE "ON THE COVERS", PAGE 3. HEATHER SIMONDS



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