

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



A DOWNY WOODPECKER GETS A HELPING HAND! SEE THE FEATURE STORY, PAGE 24.
LEN PETTITT

feature article

Winter Images



THERE ARE HILLS. SEE "MY ANCESTORS WERE PRAIRIE PEOPLE" STORY PAGE 16. JOHN WARDEN



A SNOW BUNTING IN THE BEAVERHILL LAKE AREA. SEE THE STORY, "BIRDS ON A POST" PAGE 32. SUSAN AND TERRY SLY

*Nature Alberta:
Celebrating our natural heritage*

Contents

NATURE ALBERTA VOLUME 44, NUMBER 4, WINTER 2015

Editor's Page BY DENNIS BARESCO 2

Alberta Issues in Brief..... 4

“Quill” is No More 9

Nature Alberta News 10

Close to Home: Nature Photography in Alberta BY JOHN WARDEN 16

Eyes on IBAs: Birding in a Blanket of Snow BY BROOK SKAGEN..... 21

Stocked Ponds and Fisheries Conservation BY TODD ZIMMERLING 23

FEATURE ARTICLE: Winter Images..... 24

Nature Diary: Brown Creeper BY DEBBIE AND ALAN GODKIN..... 30

First Hand..... 31

Kevin Timoney's Award-winning Ecology Book BY BOB MENTZINGER 34

Spring 2014 Bird Count Results BY JUDY BOYD..... 35

Charley's Nature Note: The Coyote BY CHARLEY BIRD 36

Wildlife! Starring... Snowy Owls BY SHARIF GALAL 37

Who Speaks for Endangered Species? BY LORNE FITCH..... 39

Up Close Naturally: Tree Flowers: All Shapes and Sizes!
BY MARGOT HERVIEUX 41

Redpolls: Winter Visitors from the North BY JESSIE ZGURSKI..... 42

A Tale of a Black Wolf BY SHARIF GALAL 45

Celestial Happenings BY JOHN MCFAUL 47

Book Review: The Homeward Wolf 48

PUBLISHED QUARTERLY BY NATURE ALBERTA,
11759 GROAT ROAD, EDMONTON, AB T5M 3K6
PHONE.780.427.8124 FAX.780.422.2663
EMAIL.na@naturealberta.ca

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

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

MANY THANKS TO THIS ISSUE'S CONTRIBUTORS

**WANT TO SUBMIT ARTICLES
OR PHOTOS?**
GUIDELINES ARE AVAILABLE ON
THE NATURE ALBERTA WEBSITE:
WWW.NATUREALBERTA.CA

NATURE ALBERTA DEADLINES ARE:
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.

BOARD OF DIRECTORS

PRESIDENT: Ted Hindmarch
VICE PRESIDENT: Linda Howitt-Taylor
SECRETARY: Claudia Lipski
TREASURER: Christine Brown
PAST PRESIDENT: Chuck Priestley
APPOINTED DIRECTORS: Christine Brown, Ted Hindmarch, Joseph Hnatuk, Geoff Holroyd, Chuck Priestley, Linda Howitt-Taylor
ELECTED DIRECTORS: Claudia Lipski, (BLN); Wayne and Joan Walker (CFNS); Lu Carbyn, (ENC); Jennine Pedersen (ENPG); Elizabeth Watts (FEIS); Martha Munz-Gue, (GN); Jennifer Okrainec (LLBBS); Lloyd Bennett (LNS); Margot Hervieux (PPN); Tony Blake (RDRN); Chris Olsen (VRNS);
STAFF: TBA (Exec. Dir.)

CORPORATE MEMBER CLUBS

Buffalo Lake Naturalists, Box 1802, Stettler, AB T0C 2L0
Edmonton Native Plant Group, Box 52099, Garneau P.O. Edmonton, AB T6G 2T5
Edmonton Nature Club, Box 1111, Edmonton, AB T5J 2M1
Friends of Elk Island Society, Box 70, 9929 – 63 Ave, Edmonton AB, T6E 0G9
Grasslands Naturalists, Box 2491, Medicine Hat, AB T1A 8G8
Lac La Biche Birding Society, Box 1270, Lac La Biche, AB T0A 2C0
Lethbridge Naturalists Society, Box 1691, Lethbridge, AB T1J 4K4
Nature Calgary (CFNS), Box 981, Calgary, AB T2P 2K4
Peace Parkland Naturalists, Box 1451, Grande Prairie, AB T8V 4Z2
Red Deer River Naturalists, Box 785, Red Deer, AB T4N 5H2
Vermilion River Naturalists, 5707 - 47 Avenue, Vermilion, AB T9X 1K5

AFFILIATES:

Alberta Lake Management Society	Friends of Little Beaver Lake Society
Alberta Lepidopterists' Guild	Grant MacEwan Mountain Club
Alberta Mycological Society	Heritage Tree Foundation of Canada
Beaverhill Bird Observatory	J.J. Collett Natural Area Foundation
Beaver River Naturalist Club	Lesser Slave Lake Bird Observatory
Big Lake Environmental Support Society	Little Creeks and Rough Fescue
BowKan Birders	Appreciation Society
Calgary Bird Banding Society	Purple Martin Conservancy
Cochrane Environmental Action Committee	Riverlot 56 Natural Area Society
Crooked Creek Conservancy Society	Stewards of Alberta's Protected Areas Association
Crowsnest Conservation Society	The Wagner Natural Area Society
Edmonton Naturalization Group	Weaselhead/Glenmore Park Preservation Society
Ellis Bird Farm	Wizard Lake Watershed and Lake Stewardship Assoc.
Fort Saskatchewan Naturalist Society	
Friends of Blackfoot Society	
Friends of Elk Island Society	
Friends of Jasper National Park	

CELEBRATE NATURE ALBERTA
SERVING NATURE FOR OVER 45 YEARS!!!



EDITORIAL DISCLAIMER

The opinions expressed by the authors in this publication do not necessarily reflect those of the editor and the Federation of Alberta Naturalists. The editor reserves the right to edit, reject or withdraw articles submitted. While due care will be taken of all manuscripts, photos or artwork submitted, FAN cannot be held responsible for any loss or damage to such articles.

Editor's Page

BY DENNIS BARESCO

WHAT IS THAT MOUNTAIN?

A photo on page 17 in John Warden's column, "Freeborn's Lament," in the Fall 2014 edition of Nature Alberta resulted in a reader's question: What is the name of the mountain pictured?

John Warden isn't sure of its name, but he went through his photos to check. Said John:

"The 'Towering' photo was taken very near Crowfoot Glacier. I have an image of Crowfoot Glacier taken at 10:21 AM that morning, the 30th of August and 'towering' was taken just a minute later, so somewhere fairly close in the vicinity of Bow Lake and Num Ti Jah lodge."

If anyone knows the exact name, let your Editor know.

IN THE PRIME OF OUR LIFE

Nature Alberta is celebrating its 45th Anniversary in 2015. Our incorporation date was April 4th, 1970. To kick off the year, President Ted Hindmarch has written a great little article, "Nature Alberta was born into a changing Alberta" (page 10). A sidebar in that article lists the six original members of (what was originally called) the Federation of Alberta Naturalists. The names of those clubs have changed over the years.

Perhaps the most interesting is the Alberta Natural History Society. It

was formed in Innisfail in the spring of 1906, making it the oldest continuous naturalist group in Alberta. Within a few months, a branch was formed in Red Deer; additional branches were later formed at Erskine, Stettler, and Medicine Hat, with the Edmonton Natural History Club becoming an affiliate in 1910. In 1976, it was renamed the Red Deer River Naturalists, its present name. The branches, apparently, had struck out on their own.

The Edmonton Nature Club was formed in 2004 when the Edmonton Natural History Club (founded 1959) and the Edmonton Bird Club (founded 1949) merged to become The Edmonton Nature Club. The merging came only after a lengthy and lively discussion about the pros and cons of one club versus two.

In 1955, a handful of keen birders formed the Calgary Bird Club. During the 1960s, interest grew in other aspects of natural history and the Calgary Bird Club evolved to become the Calgary Field Naturalists' Society. As Calgary grew in the 1970s and 1980s the Society became involved in the preservation of city natural areas such as Inglewood Bird Sanctuary, Edworthy Park and Nose Hill. In 2004 the trade name Nature Calgary was adopted in line with a trend followed by nature



organizations – including Nature Alberta and Nature Canada – across Canada.

The Lethbridge Natural History Club eventually changed its name to what it is now the Lethbridge Naturalists Society. Only the Bow Valley Naturalists has retained its original name; ironically, it is the only group of the original six that is no longer a member of Nature Alberta.

GOT OLD BINOCULARS?

FROM WILDBIRD GENERAL STORE NEWS, JANUARY 15, 2015

We tend to take for granted having a pair or pairs of binoculars, which are simply part of the required equipment for naturalists at any level. But in developing countries, binoculars are rare at best, even though they are so important in encouraging nature appreciation and knowledge.

Do you have a pair of binoculars that you don't use anymore? Are they still in working condition? The Wildbird General Store is involved in a project that brings binoculars to the hands of aspiring naturalists in Kenya and Namibia. Any working pair of binoculars, no matter the age or style, would be an excellent help in the continuation of this project.

EDITOR'S PAGE cont'd...

For more information about this excellent project, contact the Wildbird General Store at:

Email: info@wildbirdgeneralstore.com;
Phone: 780-439-7333;
www.wildbirdgeneralstore.com
4712-99 Street NW, Edmonton AB,
T6E 5H5

IS IT RELEVANT TO ALBERTA?

You may wonder whether an article in the section "Alberta Issues in Brief: Canada First in the World" (page 7) is, in fact, relevant to Alberta. Indirectly, yes it is – as an example of the federal government's attitude towards endangered species generally and in Canada (and hence, Alberta) specifically.

An article in the Hill Times online ("Canada fumbles on fin whales, sits out on CITES, and stalls on SARA," originally published 12/08/2014) mentioned a study by Canadian scientists published in the prestigious journal *PLOS One*. Quote:

"[The study] found that our Species at Risk Act (SARA) is almost totally ineffective at protecting our endangered species. According to the study, 86 per cent of species assessed multiple times since 1977 either stayed at the same risk level or deteriorated over time. The authors found that the status of species at-risk in Canada rarely improved, with only 5.7 per cent of those assessed recovering to a "not at risk" status."

It went on from there, but you get the picture, as unattractive as it may be.

On the Covers:



FRONT COVER

It is quite thrilling if one can persuade a bird to come close up to get some seeds, and an even greater thrill if it lands on one's hand – chickadees, nuthatches and, in this case, a Downy Woodpecker. There are those who feel this type of activity shouldn't be encouraged. They may be right – but by the same token, it does instill a whole new affection for these common and friendly birds. See the Feature Story for more images, page 24.



INSIDE FRONT COVER

John Warden has a knack for photographically capturing the emotion of a scene, whether it is rock – as in the Fall edition of *Nature Alberta* – or prairie, the subject of his column in this edition (starting on page 16). Even a county trail undulating through the contrasting colours of agricultural fields tells a story of prairie.

Susan and Terry Sly have come up with a unique idea for bird photography: birds on a post. Their photos are wonderful, as you'll see in their story on page 32. Here, we have a Snow Bunting (*Plectrophenax nivalis*), a beautiful, softly coloured species that nests in the high Arctic but can be seen in Alberta during the winter months. Few winter sights are as thrilling as watching several hundred Snow Buntings rise up out of a snow-covered field where only seconds before they were invisible!



INSIDE BACK COVER

Sometimes, naturalists see the oddest things. That's definitely the case for Aynsley and Jim Stelfox as they witnessed Hungarian Partridges not only feeding on a deer carcass, but getting the best of Black-billed Magpies! Their story can be found on page 31.

Snowy Owls make great photographic subjects. Whether found on a post or pole or flying low with a snowy backdrop or a clear blue sky, each sighting is a thrill for anyone. Author and photographer Sharif Galal captured a number of images; this one shows the bright yellow eyes as a fine contrast to the white and blue. See Sharif's story, page 37.



BACK COVER

An important part of great photography is being in the right place at exactly the right time! That was definitely Owen Slater's luck when he came across three bull Moose carrying out a bit of a drama. Of course, being in the right place at the right time is more than just luck; it's a result of consistently being out in nature – any season – with your camera. See the bull Moose pictorial on page 33.

Want to Switch?

Switch your subscription from hard copy to the full COLOUR e-version and get even GREATER enjoyment of *Nature Alberta* while REDUCING paper use.

Phone today: (780) 427.8124; or

Email us: na@naturealberta.ca or wildhavn@memlane.com

ALBERTA ISSUES IN BRIEF

Site C Dam Update: First Nations Lawsuits

The Athabasca Chipewyan First Nation and Mikisew Cree First Nation have filed a lawsuit in Federal Court against the Site C Dam, which was given environmental approval by both the BC and federal governments. The bands state that the dam was approved without consideration of the impact on the Athabasca delta. Another lawsuit by four BC bands was also filed, arguing that the dam would damage their ability to exercise treaty rights.

First Nations rights are possibly the major problem for the B.C.

Government in the rush to build the Site C Dam, but it is also beset by many other problems, including rising costs (only a couple of months down the road, the cost has gone from \$7.9 billion to about \$10 billion and will likely go to at least \$15 billion or more) and, at best, a vaguely demonstrated need for the power. For the Alberta connection, see the Issues section of *Nature Alberta*, Fall 2014.



SITE C DAM ARTIST RENDERING. WWW.SITECPROJECT.COM

Alberta Peace River Dam Project Cancelled By TransAlta

ALBERTA WILDERNESS ASSOCIATION NEWS RELEASE, JANUARY 20TH, 2015

On January 16, TransAlta Corporation withdrew its application to the Alberta Utilities Commission (AUC) for a 9 year extension of the approved construction date of its Dunvegan Hydroelectric Project, citing substantial information requests from stakeholders, a potentially long and costly hearing process, and unfavourable project economics. Alberta Wilderness Association (AWA) welcomes the withdrawal of the 100 MW hydro power project as positive news for local residents and the Peace's aquatic and river valley ecosystem.

"The end of the Dunvegan Project in the nationally significant Peace River Valley ecosystem is great news for important fish and

wildlife populations that would be harmed by another instream flow barrier and associated infrastructure, adding to BC dams' considerable impacts," says Carolyn Campbell, AWA conservation specialist.

The 100 MW hydro project would have placed a spillway across the Peace River just upstream of Alberta's historic Dunvegan Bridge, to raise the River's level by 6.6 meters and create a headpond of 26 kilometers. TransAlta will now have to re-apply for project approval with fully updated studies if project economics improve.

Concerned Residents for Ongoing Service at Shaftesbury (CROSS),

a citizens group composed of local residents, was the only concerned stakeholder that qualified for standing to trigger a hearing, under Alberta's restrictive 'directly and adversely affected' rules for standing in an industrial development application. Like local citizens groups that are sometimes given standing, the crucial role played by 'genuine public interest' environmental groups such as AWA in development decisions should also be recognized by reforming standing rules to allow their concerns to trigger a hearing.

FOR MORE INFORMATION CONTACT:
CAROLYN CAMPBELL, ALBERTA WILDERNESS ASSOCIATION, (403) 283-2025.

Mikisew Cree First Nation Celebrates

Two years ago, the Harper government removed federal protection from about 99% of all water bodies in Canada by using omnibus bills (C-38 and C-45). This included most of the waterways in the northern Alberta Mikisew Cree traditional territory. The Mikisew Cree viewed this as having the potential to adversely affect their legal treaty rights, so they went to court.

On Dec 19th, 2014, the federal court ruled that the Harper government should have consulted with First Nations before introducing the omnibus bills C-38 and C-45 two years

ago. In his 64-page judgement, Justice Roger Hughes wrote, “A reasonable person would expect that a reduction in the number of waterways monitored carries with it the potential risk of harm.”

Mikisew Cree First Nation Chief Steve Courtoreille said: “Mikisew now expects the federal government and all other governments in Canada to consult with First Nations early on legislation that may adversely affect our rights. Those governments should not be afraid of us. We have valuable information and contributions to make on these important issues.”

It should be noted that the court decision does not affect the already passed legislation, so the waterways will remain open to exploitation from a federal perspective. For example, major pipelines and inter-provincial power lines now have the green light to cross over and under more than 31,000 lakes and 2.25 million rivers without federal scrutiny. But it will mean that governments must seek input from First Nations in the future.

The Harper government had until January 19, 2015 to file an appeal against Judge Hughes’ ruling.

New Provincial Park Announced

FROM AN ALBERTA GOV’T ANNOUNCEMENT: DEC 05, 2014

Three hundred and eighty hectares of undisturbed native grassland has been donated to Alberta’s provincial parks system. At the request of landowner and donor Gottlob Schmidt, who resides on the land near Hanna, the land will become Antelope Hill Provincial Park.

Antelope Hill has high ecological value because it has never been

cultivated. It features rare native grasslands, aspen groves and healthy wetlands in addition to being home to a variety of wildlife, including the thirteen-lined ground squirrel, deer and elk.

“I’m very happy to make this donation to the province and the people of Alberta,” said Mr. Schmidt. “I’ve lived on this land since 1933 and my wish is to preserve the land in its natural state for future generations to enjoy.”

Schmidt will continue to reside on the land for the immediate future and when he does leave his homestead, the province will open the park to public use and manage the land in accordance with his wishes.



ALBERTA.CA

The park will be managed for wildlife purposes and low-impact recreational uses such as hiking. Hunting, overnight camping and off-highway vehicle use will not be permitted within the park.

GOTTLLOB SCHMIDT. ALBERTA.CA



THE PARK INCLUDES WETLANDS INHABITED BY CINNAMON TEAL. ALBERTA.CA



Calling all Barn Swallow NestWatchers!

FROM BIRD STUDIES CANADA AND RED DEER RIVER NATURALIST NEWSLETTER (JANUARY 2015)

By monitoring Barn Swallow nests near you and submitting observations to Project NestWatch, you can contribute to a growing database of information that will help us understand Barn Swallow declines. With spring coming, it's a good time to consider monitoring this extremely interesting swallow.

Barn Swallows (*Hirundo rustica*) are aerial insectivores – birds that feed on flying insects. This group of birds (which includes swifts, swallows, flycatchers, and goatsuckers) is experiencing alarming population declines across Canada. Barn Swallows are the most widely distributed and abundant swallow in the world; in Alberta, they are found almost everywhere, though in declining numbers as well.

Although Barn Swallows are still common, the population in Canada declined by about 30% between 1999 and 2009, according to long term data from the North American Breeding Bird Survey (BBS). Barn Swallows are classified as Threatened in Ontario, and they have been recommended for protection under Canada's Species at Risk Act.

The reasons Barn Swallows are declining are not well understood, and may include changes on their breeding grounds, wintering grounds, and along migration routes. Potential threats on the breeding grounds include:

- Changes in food supply (e.g., availability of flying insects)



BARN SWALLOW.

- Loss of nesting and foraging habitat associated with changes in agricultural practices
- Competition for nesting sites from other species (e.g., House Sparrows)
- Reduced nesting success due to high loads of ectoparasites (e.g., mites and blowflies)

BARN SWALLOW NESTS

Barn Swallow nests are easier to find than many other species' nests. They nest in most rural areas and some suburban and urban areas, in and around human-made structures such as barns, sheds, and boathouses, as well as under bridges and in culverts. Some Barn Swallows nest singly, but many are found in small colonies (usually containing no more than 10 nests).

FACTS ABOUT BARN SWALLOWS

- Barn Swallows are the most widely distributed species of swallow in the world and breed throughout the Northern Hemisphere and winter in most areas of the Southern Hemisphere.
- Barn Swallows originally nested in caves and in crevices on cliff faces.
- A Barn Swallow's long forked tail makes them easy to identify, along with their steely-blue back, wings, and tail, and pale rufous to cinnamon underparts.



Nests are built of mud and grasses, and are often adhered to vertical surfaces near the ceiling, or under eaves on the outside of buildings. Barn Swallows sometimes build their nests on horizontal beams, or on top of ledges, light fixtures, or other structures that provide additional support for the nest. The nests are lined with grass, animal hair, and feathers.

MONITORING NESTS

You can help contribute to a growing database of information on Barn Swallows. For full instructions on monitoring and how to submit your data online, go to: www.birdscanada.org/volunteer/pnw. If you are interested in monitoring Barn Swallows using the BSC Project NestWatch protocol, please contact projectnestwatch@birdscanada.org to obtain a copy of the Canadian Wildlife Service Scientific Permit from Bird Studies Canada.

Canada First in the World!

FROM SUMOFUS.ORG, JANUARY 14, 2015

Canada just became the first nation in history to opt out of every proposed resolution protecting new endangered species from international trade. Documents just released from a 2013 Convention on International Trade in Endangered Species (CITES) show that Canada expressed “reservations” on extending protection to all 76 species – from soft-shelled turtles to tropical hardwoods – that were added to the charter. “Reservations” means that Canadian trade in those species will continue as normal.

Canada doesn’t even harvest or trade in most of the species listed – like manatees, manta rays or ebony. The government says its opposition is only “technical” – which doesn’t explain why it has not brought its regulations in line almost two years after the convention or how 180 other countries did not have

“technical” opposition. Canada has previously managed to produce regulations well within a 90-day grace period allowed under the treaty.

Canada’s 76 reservations, all filed in 2013, dwarf those of other nations. Over the entire 39-year history of the treaty, Iceland has filed 22 reservations; Japan 18 and the United Kingdom eight. The United States has filed none.

In a related issue, Huffington Post reported that last year the Conservative government was allowing meat from endangered whales to be shipped across Canada. Apparently, the federal government allowed an Icelandic company to transport meat from endangered fin whales across Canada on its way to market in Japan. Twelve shipping containers

of the meat arrived in Halifax and, according to Greenpeace, were transported by train to ports in British Columbia.

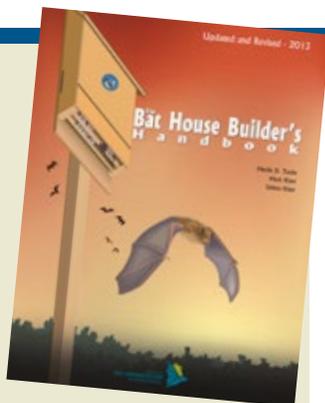
Environment Canada told the Toronto Sun that “CITES permit requirements do not apply to the transit or transshipment of specimens through or in the territory of a party while the shipments remain in Customs control.” That technicality has not stopped other countries, such as Germany and the Netherlands, from turning back shipments of Icelandic whale meat in the past. And it does nothing for Canada’s international reputation considering that fin whales have been given the highest level of protection under CITES, which Canada has signed. Atlantic Fin whales are also of “special concern” under Canada’s Species at Risk Act.

Why Bat House Design Matters

You may be thinking about setting up a bat house this spring. Installing a backyard bat house is a great way to demonstrate your commitment to nature. And your bat-tenants will pay you back with some wonderful benefits!

But if you want your bat house to be successful, design is key. Small, poorly made houses commonly sold in stores are likely to fail. For 12 years, BCI researched bat-house use across the U.S., Canada and the Caribbean. The results were enlightening. To read more:

<http://batcon.org/pdfs/BHBHResearch2013.pdf>



New BCI Website

Bat Conservation International (BCI) has launched its new website! Its fresh look and user-friendly navigation will make learning about bats and BCI a breeze.

The site was revamped after BCI’s new Strategic Plan, in the fall of 2013, signaled significant changes in the organization’s goals and priorities, most notably a re-dedication to its global mission to save the world’s bats. The new website is designed to better reflect BCI’s increasing attention to preventing bat species extinctions by focusing on global priority regions. BCI encourages you to explore the new site at

www.batcon.org.



The Problem of Alberta Caribou

The survival of certain herds of Caribou in Alberta comes down to loss of habitat due almost exclusively to industrial exploitation of that habitat. Notwithstanding government pronouncements about managing habitat in, for example, the Little Smoky caribou range, the continuing exploitation means that it is a strong likelihood that some herds will be extirpated in the fairly near future.

What has brought this problem to the forefront yet again, and with it lots of controversy and emotion, is the continued killing of wolves. In a January 9th 2015 web posting, Alberta Environment and Sustainable Resource Development (ESRD) attempted to outline its “Wolf population management protecting Little Smoky caribou” (<https://aesrd.wordpress.com/2015/01/09/wolf-population-management-protecting-little-smoky-caribou/>).

Said ESRD in the posting:

“Due to loss and fragmentation of habitat, increasing numbers of deer and moose are sharing caribou habitat. While

government continues working to minimize these impacts, the increased numbers of other animals in caribou habitat means an increase in predators – namely wolves.”

The controversy is from three distinct angles: 1) the act of killing wolves (regardless of the reason); 2) the methods – aerial gunning, snaring, but especially the use of strychnine (which always kills many individuals of a variety of non-targeted species); and arguably the most important angle, the long-term futility if the goal is protecting caribou but habitat destruction is allowed to continue.

The comments from the public on the website are interesting in that they are overwhelmingly against the wolf kill under the present circumstances. As Dr. Mark Boyce, University of Alberta professor and Alberta Conservation Association Chair in Fisheries and Wildlife, commented on January 9th:

“This is an outrageous industry-motivated approach that somehow gets the province off the hook for failing to manage caribou habitats. Wolf control is unacceptable. The



OWEN SLATER

caribou habitat is lost so we must let them fade away. Focus on the Caribou Mountains, Bistcho Lake, the Mountain herds, and other places where some habitat still remains. And protect that habitat!”

How this eventually plays out will be seen, though the survival of caribou is doubtful. However, wolf killing is unlikely to go away. In fact, it may be spreading: B.C. has announced a similar program in two areas for the same reasons as Alberta. One of the B.C. herds, the South Selkirk, consists of only eighteen caribou, down from forty-six in 2009. Decades of habitat destruction and human encroachment have left BC's mountain caribou on the edge of survival. Over 180 wolves are now being targeted for aerial killing this winter. However, killing every wolf in B.C. (and Alberta) won't bring the caribou back in the absence of habitat protection.

NOTE: A second, earlier ESRD web posting on May 22, 2014 on the issue is: <https://aesrd.wordpress.com/2014/05/22/caribou-range-planning-co-existing-on-the-land/>

ELSTON DZUS/ESRD WEBSITE



Photographer and author John Marriott has promised “a number of blog posts regarding wolf culls and predator killing contests” on his blog site. John's writings are always interesting and informative and worth reading; www.wildernessprints.com/.

“Quill” is No More

The well-known Grizzly Bear #128, better known as “Quill”, was struck and severely injured October 26th on the TransCanada Highway in Yoho National Park, west of Field, and had to be euthanized.

Quill – so named because he had been tranquilized in 2012 to remove porcupine quills from a paw – and his sibling Morant became famous as orphaned cubs after their mother was killed by a train while feeding on spilled grain on the CP rail tracks near Lake Louise.

Quill was hit by a car about 9:00 pm close to a small grain spill (approximately three metres by three metres by thirty centimeters deep) which he (and other bears) had been feeding on in the days previously. The spill had been cleaned up the day before Quill met his end. However, some wondered why it took so long

(apparently a week or so) to remove what was essentially bear bait on the TransCanada Highway. However, in an Oct 27th Calgary Herald interview, Parks Canada wildlife biologist Alan Dibb felt that the collision and the grain spill were not “directly linked”. Quill had apparently been spending a fair amount of time in the vicinity of the train/vehicle traffic corridor.



QUILL IN JUNE OF 2011. RICK PRICE

Photographer Rick Price was able to photograph Quill both in June 2011, shortly after he and his sibling were orphaned, and then again in June of 2012 the day after he had been tranquilized to remove porcupine quills from his paw (see the *Nature Alberta* article in the Summer 2012 edition). Said Rick: “I was so excited to see him making his way in the world after his mom was killed eating grain that was dropped from a freight train, but I was also concerned that although many visitors to Banff were seeing a grizzly for the first time with Quill, he was becoming habituated to people and vehicles...I’m sorry Quill that we have made your land so very dangerous for your kind.”

QUILL NURSING HIS SORE PAW IN JUNE OF 2012.

RICK PRICE





Nature Alberta NEWS

Nature Alberta was born into a changing Alberta

BY PRESIDENT TED HINDMARCH

45 years ago, in 1970, when Nature Alberta was established as the Federation of Alberta Naturalists by six naturalist clubs in the province, times were changing in the world of environmental science and technology and in environmental awareness.

Alberta had the majority of sour gas resources in the country and started exploiting that resource in the late 50's. The Government of Alberta under the Alberta Social Credit Party had started to put in place legislation and regulatory guidelines, quite advanced for their time, to promote safety, conservation and minimize pollution – but more was needed.

Science was finding disturbing evidence of pollution and its effects. Environmentalism was growing as a popular culture. With the passing of the Clean Air Act in the US in 1970, Albertans began to put additional pressure on the government for greater protection. James Henderson, Minister of Health under Social Credit Premier Harry Strom, responded. In 1970 he championed the passage of

the Environmental Conservation Act. A year later the first provincial environment ministry in Canada was created through the introduction of a Department of Environment Act. A Clean Air and Clean Water Act soon followed. 1971 also saw the National Clean Air Act passed in Canada.

In 1971, the Progressive Conservatives overturned the Social Credit era based on a campaign that attacked the previous government on their failure to diversify the provincial economy away from oil. The new government, under Premier Peter Lougheed and his minister of the Environment, W.J. Yurko, took up the environmental torch.

“We, the Alberta Government, recognize that there must be a balance between the desire to not upset the natural state of our land and water, and the job opportunities created by petroleum, timber, coal and other mineral and natural resource developers. If we are forced to lean in one direction or another, it would likely be toward conservation rather than development.”

– Peter Lougheed 1971.



NATURE
ALBERTA



1970 - 2015

**Nature Alberta
is 45 years old
in 2015!**

***Happy Birthday – and sincere
wishes for many more!***

The six naturalist groups that founded what was then known as Federation of Alberta Naturalists were:

- Alberta Natural History Society (Red Deer/ Penhold), founded 1906
- Bow Valley Naturalists (Banff), founded 1968
- Calgary Field Naturalists' Society (formerly Calgary Bird Club), founded 1956
- Edmonton Bird Club, founded 1955
- Edmonton Natural History Club, founded 1949
- Lethbridge Natural History Society, founded 1968

“We, the Alberta Government, will watch EPA [Environmental Protection Agency] action closely and always lead where possible. We wouldn’t under any circumstances sanction standards in Alberta less stringent than those set by the EPA for the United States or those set nationally in Canada”

– W.J. Yurko. Alberta Minister of the Environment, January 1973.

Read about the activities and issues the Federation of Alberta Naturalists was engaged in during these heady first years. See our on-line newsletter archives at <http://naturealberta.ca/publications/magazine-archive/>

Here we are in 2015, 45 years later. Policies have continued to result in growth of industry, agriculture and population spread which has found us in a new era of the concerns and

consequences of cumulative effects on the environment, the economy and the social fabric in Alberta. The Government of Alberta, through the Land Use Framework is once again heralding the importance of sustaining the environment and the first of the Biodiversity and Landscape Frameworks (for the Lower Athabasca Regional Plan) are in draft. These are our hope for the future – and Nature Alberta and many of its clubs across the region are taking part.

Unfortunately, our continued reliance on a petro-based economy and the latest major downturn in oil prices, may once again put the environment in the back seat. We can only hold out hope that by our 50th anniversary, we will have seen some movement towards a more sustainable environment.

Executive Director Resigns

Petra Rowell, Nature Alberta’s Executive Director for the past three years, tendered her resignation on December 1st to take effect January 1st, 2015. Petra’s other consultant work will be keeping her on the road more, plus she plans to spend more time at her cabin in northeastern BC this spring and summer. Petra has advised that she would continue to be available for much of the report and financial reporting work and to handle a transition through the Jan-Mar period.

On behalf of the board, President Ted Hindmarch extended our

great appreciation to Petra for the excellent work she has done for the organization to bring Nature Alberta forward to this point. In particular, she did a tremendous amount of administrative reviewing, updating and organizing for greater efficiency and effectiveness.

The process to replace the Executive Director began immediately and it is likely that by the time you read this, a new Executive Director will be in place.



New Corporate Club

The Nature Alberta Board of Directors has approved the Friends of Elk Island Society as a new corporate member of Nature Alberta. Elizabeth (Liz) Watts, their Event Coordinator, is our new corporate board member.

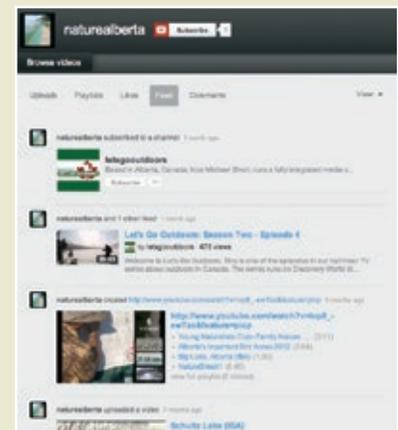
Liz balances a busy professional career as a clinical research consultant at University of Alberta with several naturalist causes. With her experience and time as Event Coordinator for Friends of Elk Island, she has already stepped up to chair a Nature Alberta committee for planning some events to celebrate our 45th anniversary year. In addition, she is also secretary of the Alberta Mycological Society (a Nature Alberta Affiliate club).

Friends of Elk Island Society was the feature club in the last (Fall 2014) edition of *Nature Alberta* (page 48).

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



Here are Two Interesting Offers

Do you enjoy *Nature Alberta* magazine? Do you think it must be interesting and exciting putting together and putting out these four editions per year? Well, you're right: it is interesting and exciting.

We are offering the opportunity for someone to be an assistant Editor, possibly with a view to become, at some point in the future, the main Editor. Time commitment would be about 25 to 40 hours per edition (at present, the Editor, working alone, takes 60 to 70 hrs per edition). This time includes planning, gathering enough material (which has never been a problem!) and putting it together, along with appropriate images – but not design and layout, which is done by Broken Arrow Solutions Inc.

Obviously, a good grasp on editing and writing of proper English is required. If you are interested, contact Dennis at na@naturealberta.ca for more information.

Also, if you live in Edmonton or area, we're looking for someone to volunteer to help the Circulation Manager, who mails out – either by Canada Post or email – each edition of *Nature Alberta*. In essence, it's just a few hours four times a year, but it will certainly assist Ted. Interested? Contact us at info@naturealberta.ca or na@naturealberta.ca.

Thanks for the Donation

Michael Butler and Martha Allen live out in the Elk Island area but are moving to Ontario; they made a donation of five boxes of natural history books which we will use, with additional donations, to have a “used and new book sale” in February. Thanks.



NATURE TOURS

DISCOVER OUR NATURAL WORLD

FEATURED TRIPS:

SOUTH AFRICA: THE BEST OF THE CAPE

August, 2015

HIGHLIGHTS OF SOUTHERN PERU

October, 2015

MADAGASCAR: EVOLUTION GONE WILD

October, 2015

INDIA: WILDLIFE SPECTACULAR

(With optional Gujarat extension)
November, 2015

SRI LANKA: THE LAND OF THE LEOPARD

February, 2016

For more information on these exciting trips call 1-800-387-1483 or e-mail travel@worldwidequest.com. Browse our full collection of tours online anytime at QuestNatureTours.com.



Red Protea, South Africa



**SHORELINE ADVISORS WITH SOME
COOPERATING RESIDENTS.**

Living by Water: Thirteen Years of Programming

BY GREG BOORMAN, PROGRAM MANAGER, NATURE ALBERTA'S LIVING BY WATER PROJECT

In 1997 Clive Callaway and Sarah Kipp, two coastal residents of British Columbia, came up with a program that helped property owners learn about the specific roles they play in maintaining healthy shorelines. They created reference material that outlined factors influencing environmental and recreational integrity of shoreline and aquatic ecosystems. This material along with their efforts in promoting environmentally responsible communities provided a foundation for The Living by Water Project.

Seventeen years later, The Living by Water Project provides resources and education to shoreline communities throughout Alberta. This article outlines the evolution of the project along with the successes and hurdles that it has encountered in its thirteen years of operation with Nature Alberta.

The project structure in its early years was based on the initial concept of volunteer residents assessing the health of their neighbor's properties. This proved to be less successful than expected as residents felt like they were criticizing, rather than educating, their neighbors. This led Nature Alberta to provide training for volunteer residents and had summer students accompany them while they assessed their neighbor's properties. However, this gave similar results and it was time to leave the assessing in the hands of non-residents.

The first year that Nature Alberta hired summer students to act as shoreline advisors was quite "interesting". The plan was to have

shoreline advisors reside in their target lake community throughout the summer. There, they would promote the project, organize appointments with residents and perform homesite evaluations. In theory, it was perfect. In practice, it was problematic. There were issues with the abilities and outgoingness of the shoreline advisors as well as false claims being made about the completion of homesite evaluations.

The problems encountered over the years led to the currently used



A GATHERING OF GULLS ON WABAMUN LAKE.



WORKING WITH RESIDENTS.

program structure in which local lake groups create community interest in the program and Nature Alberta focuses on presenting at community events and performing homesite evaluations. Residents request a homesite consultation and a shoreline advisor spends approximately an hour and half assessing their property. The assessment functions to let them know what they are doing well and how they can reduce their environmental impact on the ecosystems surrounding their property. After the assessment is

complete the resident receives a report detailing the assessment for future reference.

The increased number of consultations brought about by this restructuring created a need to measure the success of the program by way of a follow up consultation. Follow ups are intended to collect information on homeowner progress two years after their initial consultation. Follow ups were first introduced in 2007 to provide the program with feedback on how well it was working. So far, 112 follow

ups have been performed and the data has been compiled to show results from the past eight years. Changes in the use of fertilizers, pesticides, household

products and riparian vegetation are detailed below.

During consultations, homeowners were told that fertilizers contribute to increased nutrient loading into the lake which may increase the chances of algal blooms. The downsides of excessive algal growth such as fish kills, decreased lake usability and reduced property values were also explained to residents. Based on the follow ups completed, there was a 39% decrease in the number of properties that were using fertilizer.

The majority of the pesticides used were categorized as herbicides; however some residents were also using insecticides. Residents were told that pesticides have the potential to negatively affect non target native organisms on the shoreline and can also have negative impacts on aquatic organisms in



PERFECTLY CALM FALL DAY ON SYLVAN LAKE.

their lake. Our efforts, combined with a broad increase in pesticide awareness, contributed to a 47% reduction in the number of properties using pesticides.

In-home cleaning products can also negatively affect the health of aquatic ecosystems. Many of the residents that we visited had pump-out holding tanks for their wastewater. It was still a common belief among residents that when the wastewater was removed from their property, the environmental damage was averted. The program informed residents of where their wastewater ends up and the effects that some household cleaners have on the waste being produced. The presence of phosphates in household products can increase the freshwater contamination risks that wastewater poses while harsh chemicals can harm the organisms that help to break down the waste. After residents were made aware of the potential hazards, we saw a 25% increase in the number of households using phosphate-free soaps and cleaners. There

was also a slight decrease of 10% in the number of households that stopped using harsh chemicals such as bleach, drain cleaners and disinfectants. With the ease in which this switch can be made, we expected these numbers to be higher. With an increasing number of eco-friendly cleaning products available combined with increased awareness, this number will surely increase over time.

The program also stresses the importance of native riparian buffers. Property owners were educated on the impacts of clearing shoreline vegetation and the benefits of maintaining and restoring it. Wildlife habitat, runoff filtration and less yard work were all mentioned as benefits of increasing buffer sizes. The results show that there was a 17% decrease in the amount of grassed areas, a 13% increase in sparsely vegetated areas, a 24% increase in shorelines with clumped shrubs and trees and a 21% increase in the number of densely vegetated shorelines. These changes have also led to a 20% increase in the

number of hardened shoreline structures (retaining walls, rip rap, etc.) that have been softened by vegetation. This, along with personal communications with homeowners, suggests that the program's efforts are helping homeowners see the value of healthy riparian buffers and to make efforts to restore them. Although most of the data presented

show the program's ability to be successful, it should not be extrapolated to all 754 homesite consultations that have been completed.

The evolution and feedback received over the past thirteen years has enabled The Living by Water Project to stay successful in reaching its education and outreach goals. However, to remain effective in the future, the project will have to continue its growth and development in new ways. In Alberta, there is currently a push towards collaborative efforts among Environmental Non-Government Organizations to reduce overlap and create focus on crucial environmental needs. Next spring, a proposed collaboration with an Alberta WPAC (Watershed Planning and Advisory Council) will respond to the growing need for education and outreach to shoreline communities. This pilot project will pave the way for future collaborations, ensuring the continued success of The Living by Water Project along with the creation and maintenance of healthy shoreline ecosystems throughout Alberta.



NAME CHANGE

The Alberta Native Plant Council, a Corporate Club of Nature Alberta, has changed its name. The new name is **Edmonton Native Plant Group**.

Their website is now... www.edmontonnativeplantgroup.org, but the email address remains the same (engedmonton@gmail.com).



JOHN WARDEN

Close to Home: Nature Photography in Alberta

My Ancestors were Prairie People

BY JOHN WARDEN

Our milk cow fell into the well and had to be shot. The antelope ate our garden and we always had trouble with coyotes. A terrible wind blew up, lifted the barn and sat it down on the hen house, killing most of the chickens. There hadn't been any rain, so most of the crop was gone (Fleming, 1980).

No, these are not the lyrics of a popular country and western song. This was life on the prairies for my maternal grandmother, Irene Fleming, as written in her autobiography. It was the spring and summer months of 1913 and she was living then in a two room shack on a homestead, near Brooks. It was seven miles to the nearest neighbour and town was twelve miles away. Grandma was nineteen that year

and had just emigrated that spring, from Iowa. On horseback, she chased the coyotes away from the homestead and on one occasion, returning home from a picnic on the prairies, she got caught in the middle of a cattle stampede.

We were on foot and ran up and down ditches and across the prairie and into a ditch rider's cabin¹, just in time. The cattle tore the porch right off the cabin as they went by.

Life on the land was tough. That fall, she moved off the homestead and into Brooks. That winter she moved from Brooks to the village of Hanna.

The man who would eventually be her father-in-law had been a trainman with the C.P.R. in Thunder Bay. George Fleming had come west in 1912. He rode forty-two across-the-prairies miles on horseback from Munson to settle

¹ Ditch Riders were in charge of regulating the flow of water to individual farms from irrigation channels.

A PAINTING OF SOFT PASTELS. JOHN WARDEN





CHANGING CANVAS. JOHN WARDEN

at Hanna before it was even a town. I've seen photographs of the village of Hanna from 1913. There wasn't much there, maybe a dozen buildings or so. What they did have though, was an abundance of land and sky.

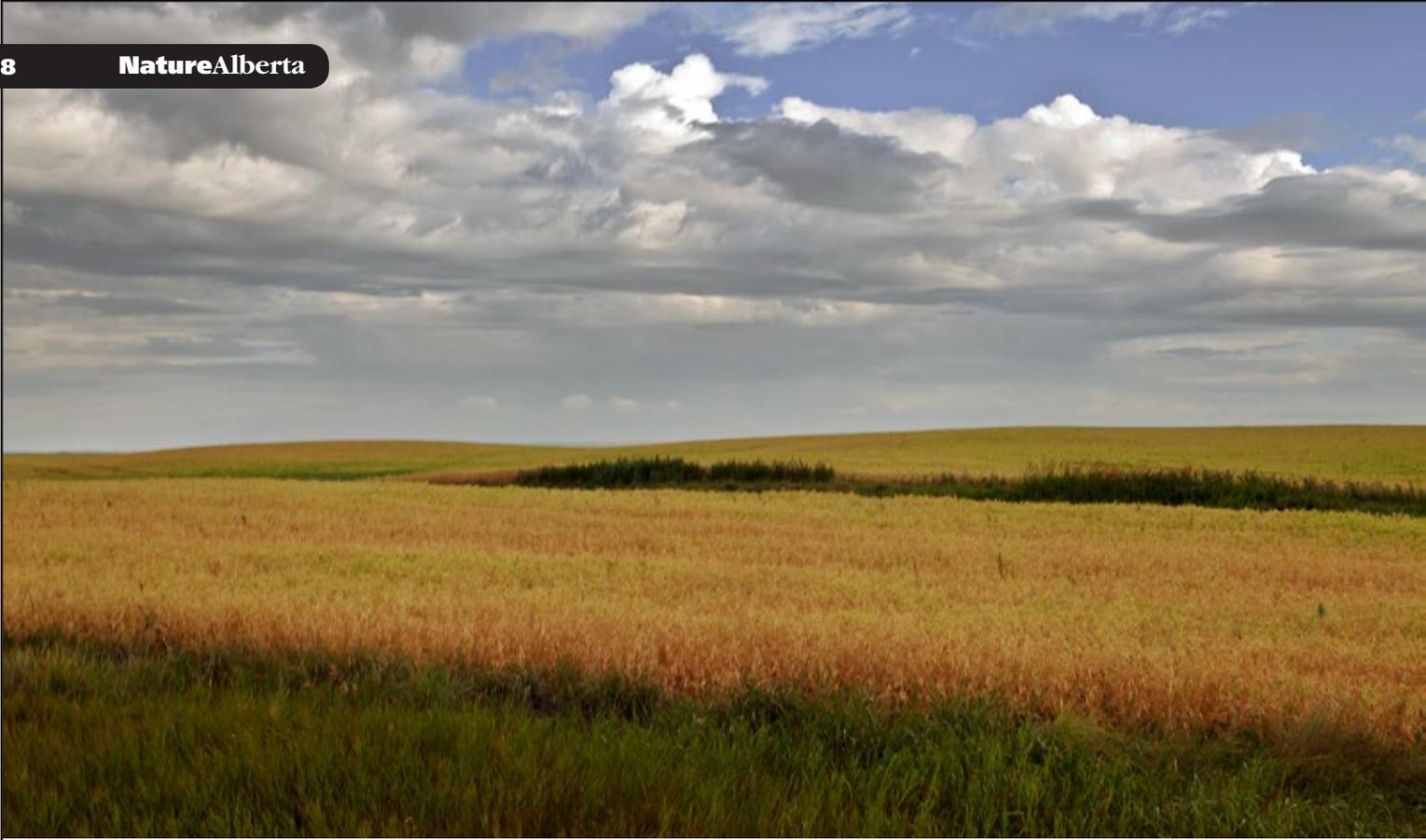
When we were kids, we'd visit my grandparents at Hanna. Coming from the west on Highway 9, the road drops down a long hill and you can see the prairies open up to the east. The sightlines seem to extend into forever and the landscape is just far enough away from the badlands to be pure prairie. It was a tradition that, after dinner, we would all pile into the family car and go for a drive, 'looking' as my grandfather would

say, 'for a cloud'. If you could spot a cloud that meant that there was hope for rain and with that rain, life and growth for the land and for the people. We watched for antelope and counted gophers on the road, commented on the dryness of the land and watched the sky, hoping for clouds.

The simplicity of land and sky...a century after my ancestors arrived on the prairies, I returned to Hanna.

Simplicity seems, well...simple. Land and sky. Two elements. That's the prairies. That's how nearly everyone describes the plains and grasslands. But when we look out to the edge of

the land, there's the horizon, a dividing line between earth and sky. Explicit or implied, the horizon creates space, defines shape and offers perspective. A high horizontal line provides us with a focus on the land. A low horizontal line opens up the sky. Simple, yet subtle, the artist's placement of the horizon is a powerful, compositional tool. From design theory, horizontal lines comfort and calm us with feelings of stability, balance and control. A horizontal line provides a place for us to stand and also presents us with a starting point from which we can explore the subtleties of both the land and sky.



THE FERTILITY OF THE LAND. JOHN WARDEN

'Subtle' is an interesting word meaning delicate, understated and difficult to understand or perceive. Yet, it is the subtleties of the prairies that leave their mark and tell its story: the always changing canvas of colour, the lines and shapes, layers and patterns. These are all of the elements of design and composition that apply to any other image, but we're looking for them in a simple, seemingly empty landscape. To find them will require patience, contemplation and a long slow look.

So, with an open heart and a suitcase full of memories, I pulled over to the side of the road, set up my tripod, and attached my camera. A tripod allows for the stability required for crystal clear sharpness and maximum depth of field. Also, I always use a cable

release and the mirror lock-up feature of my camera to further reduce camera vibration. With my tools ready, it was time for a long slow look, challenging my eyes and my spirit to find the art of the prairies.

Well, the Hanna landscape that morning was, at first glance, bold. An obvious, brilliant wash of color. Waves of yellow. Canola and mustard fields everywhere. But, what other riches might a long slow look reveal? I composed photographs, patiently working the horizon. What do I see? What do I feel? What does what I see, mean to me? What do I want the image that I create, to tell others?

Here is the land!

With a high horizon, I contemplated the prairies and found rolling hills, where the

contours of the land were revealed in subtle highlights. In the looking, I literally, saw the light and watched as it moved, dancing across the land, light chasing shadow. With a low horizon, I felt the power and vastness of the sky, the majesty and mass of clouds looking down upon me from their high view.

A few days later, I went cross country to Vulcan.

My grandfather, John Warden, came to this area in 1906 and worked at the Bartlett Ranch on Willow Creek, west of Stavely. He was a blacksmith, but he also hauled mail and supplies by wagon to the new post office and store at Reid Hill. It was a distance of about thirty miles across the wide open prairie and the winter of 1906 / 07 was one of the worst on record. Snow started falling on 3rd of November 1906 and fell for thirty-one hours straight, staying on the ground until 24th of May 1907. The official record

for snowfall that year was taken at Edmonton and was reported as 90.3 inches. Local stories tell of temperatures dropping down to 50 and 60 degrees below zero (Fahrenheit). Thousands of cattle and horses died that winter from the snow and cold. Many ranchers went bankrupt and those that survived turned to farming.

My grandfather took a homestead near Carmangay, only to find the summer of 1910, one of the driest seasons ever. He seeded in March and by fall the crop was only about ten inches high. He had a family to support though, so the following year the Warden family moved for better land to Reid Hill, nine miles east of the new town of Vulcan, on the Lomond Road. A succession of Warden families lived there for the next fifty years.

The Warden home place has changed in the intervening

years. The pump house and the old chicken coop next to the windbreak are the only original buildings still standing. The land and the sky though, remain.

How do I tell you of the sky at Vulcan? It's a sky that has a physical presence, a sky of piercing blue emptiness where a single cloud can appear and move across the land, growing larger and morphing into a prairie storm, all in a matter of minutes.

Beneath that vast sky, I stood in a farmer's field on a bit of a hill and contemplated the land stretching out to a 360 degree prairie horizon. Breathtaking, it is indeed. The farmers will tell you that it requires patience for the land to reveal its richness. Fortunately, I had the time for a long, slow look and discovered once again, an incredible splendour of lines,

layers, and colours. It's the colours that surprised me the most. On this morning, the prairie was a painting of soft pastels punctuated by farms, windbreaks and old granaries. The land has been cultivated and nurtured for generations now, and the fertility and history of the land was revealed in its soft colours.

In the early 1900's, when the homesteaders came to Alberta, eighty percent of the population was rural. Now, eighty percent of the population is urban. People have left the land for the cities. But the land, the sky and the horizon remain, simple, subtle and rich. My ancestors were prairie people. They lived and loved and at times, hated the land, but it's my grandmother's words that paint the picture.

A SPLENDOR OF LINES, LAYERS AND COLOURS. JOHN WARDEN





THE SKY AT VULCAN. JOHN WARDEN

I'll never forget the morning we arrived at Brooks. Ah, what a beautiful morning. Almost all you can see for miles and miles is prairie. There are hills, just little rolling ones though. I fell in love with Alberta that morning and have never gotten over it! Alberta's famous sunshine, air like wine, meadowlarks singing and the whole wonderful world ahead of me (Fleming, 1980).

The stories of my ancestors are a paragraph or two in a history of the prairies. The photographs I took to help tell their stories are

also now, part of yesterday. The land and the sky though, they are right now. Their richness is to be found in this moment, and patiently, they wait for us.

Bibliography

- Budd, V. (1995). *John and Grace Warden and Families History Book*. Vulcan, Alberta: Self Published.
- Fleming, I. (1980). *An Autobiography*. Hanna, Alberta: Self Published.
- Hunt, S. (2013, May 2002). *Mythical prairie dances to life*. Retrieved from Edmonton Journal: <http://www2.canada.com/edmontonjournal/news/whatson/story.html?id=a6f70192-4703-4c57-af89-d6b722f75400>

- Rainone, M. (2014, Feb). Reflections of Ponoka: We also had cold winters in the old days. *Ponoka News*.
- Stavely Historical Book Society. (1976). *Butte Stands Guard: Stavely and District*. Calgary: W. Friesen and Sons Ltd.
- The Carmangay and District Home and School Assoc. (1968). *Bridging the Years: Carmangay and District*. Lethbridge, Alberta: Southern Printing Company.
- Vulcan and District Historical Society. (1973). *Wheat Country: A History of Vulcan and District*. Calgary: D.W. Friesen & Sons Ltd.



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

www.jwardenphotography.com



Eyes on IBAs

Birding in a Blanket of Snow

BY BROOK SKAGEN, NATURE ALBERTA IBA INTERN

As an Important Bird Areas (IBAs) intern this past summer, I have had the rewarding opportunity to explore the prairies of my home region in greater detail, as well as expand my knowledge about the unique avian species that call it home.

Nature is full of immense transformations. From the colorful mosaics of blooming flowers, to the blanket of snow wrapping the golden prairies, Mother Nature's many seasons shape our world as if she was an expressive artist with a blank canvas. With winter comes change, and with change: inspiration.

With annual fall migrants long gone for the winter, spotting birds throughout the chilly season can prove challenging for even the most experienced of birders; the New Year was less than a week away, and I certainly didn't expect to check anything new off my annual list. The acquisition of a new spotting scope provided me with the motivation and inspiration needed to take a little road trip to one of my favorite Important Bird Areas for a

"spotting test": Scope Reservoir (I chose this location for a number of reasons, but I

admit the pun was one of them). Fairly new to the world of winter birding, I set off for my last IBA visit of the year.

Hays, or Scope, Reservoir is an IBA located near the hamlet of Hays and approximately halfway between the cities of Lethbridge and Medicine Hat; it provides nesting habitat for both grassland and waterbird species. During my summer assessment of the area as an IBA intern, American White Pelicans, Double-crested Cormorants, Western Grebes, and numerous species of waterfowl, gulls, and terns, were observed at the large man-made reservoir, while grassland swallows and sparrows dashed from shrub to shrub along the surrounding native grasses.

Easily accessible, the expansive water body and surrounding prairie landscape allows one to see for miles (the more influential reason for my visit). The crisp snow crunched beneath my feet as I approached the reservoir, eager to discover what birds awaited me with my trusty scope.

I couldn't see a single bird! Shocked at just how barren the reservoir appeared, I paused to listen for any songs or calls...there were none; the whistling of the cool winter wind carried off any sounds of morning chat. The visit seemed futile, but I hesitantly set up my scope in hopes of spotting a raptor in the distance; only the silhouettes of ice-fishers were visible in the blanket of white.

Disappointed in my lack of findings, I prepared to depart empty-handed, when suddenly a break in the wind revealed a beautiful melody to my ears: a calling Black-billed Magpie (I was happy to hear anything at all). The calls of the magpie were soon followed by the rhythm of chatty Black-capped Chickadees and the beat of a cawing Raven from the reservoir below. I stood and listened to the natural serenade of the winter wind and its avian orchestra; the warmth of the distant sounds sheltered me from the snow's chill. Suddenly, as if in harmony with winter's melody, the other listener appeared in



*Brook Skagen
Nature Alberta IBA intern*

clear view of my scope: a Snowy Owl.

Perched atop a telephone pole, her black-speckled plumage shimmered in the snow-reflected sun. It was during this moment that I realized just how lively the prairies were beneath the snow, frost, and ice. The reservoir was far from barren, for life carried on, hidden within the whistling winds and glimmering flakes of snow. I didn't need my scope to see the resilient hidden gems of nature; I only needed to change the way I looked. The majestic owl then vanished into the stretch of white prairie as quickly as she was discovered. Though the sighting was brief, I still carry the excitement and gratification that followed that moment with me into the New Year.

The magnitude of transformation undergone by the reservoir amazed me: rolling waves were now drifts of snow travelling across a foundation of ice, the grassland thickets were now bubbles of white protruding from the sheet of white snow, and the bustling calls of hundreds of nesting birds were replaced by

the sound of silence. The IBA was more beautiful than ever, and yet still exhibited life, despite the harshness of the

cold. Winter birding proved more gratifying than I ever imagined.

Sadly, winter data for Alberta's many IBAs are greatly lacking. In fact, my checklist was the only winter data for Hays Reservoir submitted to eBird in years. In order to better conserve the province's species, it is critical that data be collected during all seasons; only then can we truly understand just how crucial the Important Bird Areas (as well as other sites) are for avian life.

The winter wonderland I experienced at Hays Reservoir inspired me to appreciate the hidden details of our province more than I ever thought imaginable; visiting an IBA in the cold months was just



NATURE ALBERTA DIRECTOR LLOYD BENNETT AT HAYS RESERVOIR. NATURE ALBERTA

as rewarding as at the peak of migration. I strongly encourage any birders – novice or expert – to help contribute to Alberta's bird conservation, all the while gaining a deeper connection to the beautiful land that surrounds us. So pack your winter coat, beloved binoculars, and a hot beverage next snowfall: winter bird at an IBA!

I hope to see your tracks in the snow.

Nature Alberta Director Lloyd Bennett did a short video on Hays/Scope Reservoir for Nature Alberta; if you haven't seen it yet, it's on YouTube: www.youtube.com/watch?v=mRMu-9TfhVc. While the quality of the video is not great, nevertheless the subject is very interesting and may motivate you to visit this reservoir.

Advertising in *Nature Alberta*

Nature Alberta is now accepting a limited number of advertisements for future issues. Ad rates vary from \$35 (business card size) to \$249 (full page), X2 for colour.

Full details, including rates and sizes, are available at:

online: www.naturealberta.ca

email: na@naturealberta.ca

phone: (780) 427 – 8124

Stocked Ponds and Fisheries Conservation

BY TODD ZIMMERLING

Alberta Conservation Association (ACA) expends significant funds on a yearly basis, stocking approximately 120,000 rainbow trout into 60 waterbodies around the province.

We undertake this activity to achieve our mission to conserve, protect and enhance fish and wildlife populations and their habitats for Albertans to enjoy, value and use.

So the question arises, what does stocking a pond with rainbow trout do for conservation? The short answer is nothing!

The longer answer is everything! The act of stocking a pond does nothing directly for conservation, BUT, the activities that you promote around that pond can do wonders for conservation and can form the basis of societal shifts in attitudes towards native fisheries, clean water and outdoor activities in general. We are all aware of the various studies, reports and surveys indicating that in general, people today are much more removed from the natural environment than even one generation ago. This phenomenon is even more pronounced with young people, as video games, television and the ever present cell phone have taken the place of outdoor pursuits like tree climbing, bike riding and spending time at the local fishing hole.

ACA's stocking program concentrates on what are referred to as "put and take" fisheries. Our

desired goal is to "put" catchable-sized fish in a pond so that anglers can then "take" them home for a meal. Wherever possible we try and target families and we spend significant effort promoting the concept of taking a kid out fishing.

This is really where the long answer with respect to conservation comes in. People do not conserve things that they do not value. So the easiest way to ensure kids grow up valuing fish and fish habitat is to get them involved with fishing early. These kids don't have to become anglers as they grow up, they just have to value the experience of angling. The memory of spending time with Mom and Dad, or maybe catching that first fish with Grandpa: that is

all we need, a connection with the resource to create a sense of value, which results in action towards conservation. It's not a quick fix, but it is a potentially large solution.

While our stocked ponds are meant to provide fishing opportunities in general, ACA has been working with a variety of partners to provide specific family fishing opportunities. In 2014 the Kids Can Catch program saw over 2000 people participate in 8 events across the province. Of these participants, the vast majority were families with young children. Our goal with the program is to encourage parents to take their kids fishing; to remember the fun times they had as kids and to pass those experiences on.



**SOPHIE AND HER DAD AT THE FORT SASKATCHEWAN
"KIDS CAN CATCH" EVENT IN 2014.**

FEATURE ARTICLE

Winter Images

While summer is generally considered the optimal time for naturalists, with spring and fall excellent shoulder seasons, winter has a uniqueness all of its own.

It's a great time for sightings and photography of wildlife that gives every other season a run for its money.

The Feature Story in this edition of Nature Alberta is a pictorial illustrating the wonders of nature during an Alberta winter.

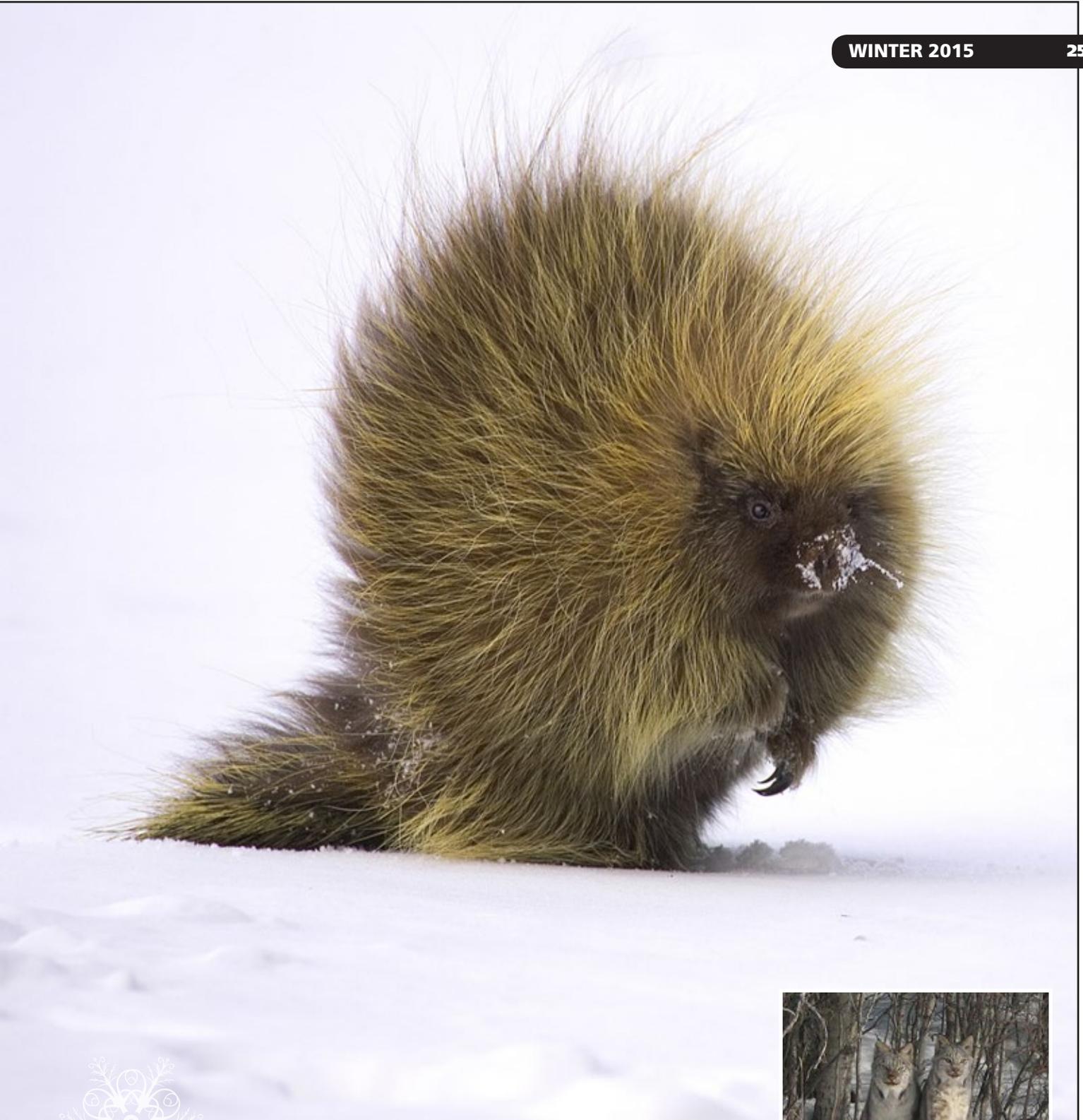
Some of the photos you may recognize from previous editions – quintessential winter images that are too good to use just once! This edition also has several other winter stories which readers should find fascinating, including about Snowy Owls, Grey Partridge

versus Black-billed Magpie, Moose and redpolls.

Enjoy the photos and head out into our winter landscape. As Brook Skagen says in her IBA article: "I hope to see your tracks in the snow."

TWO RED FOXES LOUNGE ABOUT ON A SNOW-COVERED ROCK PERCH, SOAKING UP SOME WARM FEBRUARY SUNSHINE AS THEY SURVEY THEIR TERRITORY. IAN FOSS





THIS PORCUPINE SEEMS TO BE JUST ONE BIG ROUND BALL OF HAIR. WITH ALL THEIR BODY FAT AND WOOLLY UNDERCOAT, PORCUPINES HAVE NO REAL PROBLEM SURVIVING THE WINTER. THIS PHOTO WAS ORIGINALLY IN THE WINTER 2013 EDITION OF *NATURE ALBERTA*. PAUL HORSLEY

TALK ABOUT AN EXCITING WINTER SIGHTING! HELMUT AMELANG CAME UPON TWO JUVENILE LYNX VERY CLOSE TO THE ROAD. THEY JUST SAT THERE AND POSED FOR THE PHOTOS, EVEN AFTER HELMUT GOT OUT OF HIS VEHICLE. HELMUT AMELANG





A SPLENDID PHOTO BY AUTHORS AND PHOTOGRAPHERS ROBIN AND MARIAN WHITE, WHICH WAS ORIGINALLY THE COVER OF THE WINTER 2008 EDITION. AT THAT TIME, THE SUBJECT WAS MISIDENTIFIED AS A SNOWSHOE HARE WHEN IN FACT, IT IS A JACKRABBIT (THOUGH STILL A HARE). THE WHITES PRODUCED AN AWARD-WINNING, STUNNINGLY BEAUTIFUL BOOK, *WILD ALBERTA AT THE CROSSROADS* IN 2007. IT IS WELL WORTH HAVING IN ONE'S LIBRARY.

ROBIN AND MARIAN WHITE

BISON ARE BUILT FOR WINTER BY THEIR SIZE, THICK COAT, STRENGTH AND ABILITY TO PAW THROUGH DEEP SNOW. WHEN BISON RULED THE PLAINS, THEY WERE VITAL TO PRONGHORN DURING WINTER. BISON ESSENTIALLY PLOUGHED FIELDS FREE OF SNOW WHILE FEEDING, UNCOVERING THE PLANTS UPON WHICH PRONGHORN, WHICH CANNOT PAW TOO SUCCESSFULLY, DEPENDED. RICK PRICE





PAUL PG POSTED THIS PHOTO ON NATURE ALBERTA'S FACEBOOK PAGE WITH THIS EXPLANATION: "I THOUGHT I'D SHARE MY DAUGHTER'S DELIGHT AT SEEING A DOWNY WOODPECKER UP CLOSE TODAY (DEC 14/14) AT FISH CREEK PROVINCIAL PARK. JESS LOVES ANIMALS, BIRDS AND NATURE LIKE MOST KIDS DO, I SUSPECT. SHE STILL TALKS ABOUT RESCUING A SPARROW THAT KNOCKED ITSELF OUT FLYING INTO A WINDOW A FEW YEARS AGO. WE PICKED IT UP TO MAKE SURE A CAT DIDN'T EAT IT BEFORE IT CAME TO, TWEETED AND FLEW OFF. THIS DAY WAS EVEN COOLER AND THIS WAS ONE OF MANY BIRDS EAGERLY COMING TO EAT OUT OF HER HAND. THEY DIDN'T NEED ANY PROMPTING AS MOST VISITORS TO THE PARK HAVE BEEN DOING THIS FOR YEARS IT WOULD APPEAR BUT AS YOU CAN SEE IT SPARKS A WALT DISNEY CARTOON LIKE WONDER IN HER FACE TO SEE SUCH BEAUTIFUL CREATURES UP CLOSE IN THEIR HABITAT." NATURE ALBERTA FACEBOOK

MANY PEOPLE ASSUME THAT ALL ROBINS HEAD FOR WARMER CLIMES COME FALL. HOWEVER, THERE ARE ALWAYS SOME THAT SPEND THE WINTER HERE IN ALBERTA. THIS PARTICULAR BIRD - ALL FLUFFED UP TO WARD OFF THE COLD - WAS PHOTOGRAPHED BY BONNIE MULLIN IN MID-APRIL, SO IT MIGHT ACTUALLY BE A RETURNED MIGRANT. BUT IT'S JUST AS LIKELY THAT IT STAYED THE WINTER MONTHS. AS LONG AS ROBINS HAVE PLENTY OF BERRIES TO EAT, THEY WILL DO FINE. BONNIE MULLIN





GREAT BLUE HERONS ALWAYS MIGRATE SOUTH, BUT SOMETIMES THEY MAY EITHER STAY A BIT TOO LONG OR COME BACK BEFORE WINTER ENDS. NEVERTHELESS, AS LONG AS THEY CAN FIND SOME OPEN WATER, THEY CAN GET BY – AS THIS PARTICULAR INDIVIDUAL WITH A FISH IN ITS BEAK HAS SHOWN. TREVOR CHURCHILL



IT'S NOT JUST ANIMALS THAT MAKE FOR GOOD WINTER PHOTOGRAPHY. SNOW-COVERED BERRIES PROVIDE A BEAUTIFUL CONTRAST OF WHITE AND RED. POSSIBLY AN ADDED BONUS WOULD BE IF A BOHEMIAN WAXWING FLEW IN TO FEED! BONNIE MULLIN

SOME PREDATORY BIRD SPECIES LIKE TO HANG AROUND WINTER FEEDERS IN THE HOPE OF GETTING AN EASY MEAL. MERLINS, COOPER'S HAWKS AND SHARP-SHINNED HAWKS (PICTURED HERE WITH AN UNLUCKY SONGBIRD) ARE NOT ALL THAT POPULAR WITH THOSE WHO SET UP BIRD FEEDERS, BUT THEY DO PROVIDE SOME EXCITING SIGHTINGS! SHIRLEE RIVEST



WHITE-BREASTED NUTHATCHES ARE ANOTHER WINTER FEEDER BIRD. THEY ARE NOT AS COMMON AS THEIR COUSINS, RED-BREASTED NUTHATCHES, BUT EQUALLY INTERESTING TO WATCH AS THEY GO HEADFIRST DOWN A TREE LOOKING FOR INSECTS OR EGGS, THEN FLITTING QUICKLY TO AND FRO FROM A FEEDER. SANDRA HAWKINS



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!

Nature Diary: Brown Creeper

BY DEBBIE AND ALAN GODKIN

A pair of Brown Creepers (Certhia americana) nested here back in 1999, which was a surprise, given their preference to forage on evergreens, of which we have very few.

They could be seen creeping upward in a spiral around a tree trunk as they probed the bark for insects, then fly down to the base of a nearby spruce and repeat the process.

Their persistent call alerted me to their presence in our yard, days before I ever saw them. They were hard to spot, as their small size and streaked brown and buff upper body blends in with the tree trunk. Photographing these

tiny songbirds proved difficult, because the moment they spotted me, they hastened their upward climb. We searched but couldn't find their nest.

Every fall since that first sighting, I've spotted one or two, as they passed through our yard, usually between September 12 and October 12. They don't linger long, two days at the most. Although I read in the *Field Guide*

to *Alberta Birds* that they can overwinter, I have yet to see one in the winter months.

EDITOR'S NOTE:

Like Chickadees and Nuthatches, Brown Creepers do overwinter in Alberta, but they are hard to find because of their inconspicuousness; they truly look like a piece of bark! Summer nests are also hard to find, as their nests are well hidden under the loose bark of a tree.

THE LONG, CURVED BEAK OF A BROWN CREEPER IS PERFECT FOR DIGGING UNDER LOOSE BARK FOR INSECTS AND EGGS. DEBBIE AND ALAN GODKIN

BROWN CREEPERS USE THEIR TAIL AS A SUPPORT, MUCH LIKE WOODPECKERS DO. DEBBIE AND ALAN GODKIN

GREAT CAMOUFLAGE! DEBBIE AND ALAN GODKIN



First Hand: Easy Pickings!

BY DENNIS BARESCO

Sharif Galal's Snowy Owl article (page 37) reminded me of an interesting predator-prey relationship – where the predator performed captures with military-like planning and precision.

Back in the 1960s-70s, my father worked as a Security Officer at the local fertilizer plant on the northwest side of Medicine Hat. In preparing to load bulk fertilizer, plant workers would

sweep out any leftover grain from the railcars. Nothing can attract pigeons like a ready supply of grain, and dozens of them would congregate at the tracks.

There was a workers' parking lot right beside the tracks. Almost daily during the winter, my father – who had a perfect view of the scene – watched a Snowy Owl that would come in fast, flying

low behind the vehicles. Then at the precisely correct location, when it was even with the pigeons, the owl would swoop up and over the cars, invariably grabbing one of the surprised birds as they rose up in panic. Very easy pickings! The pigeons apparently never learned.

First Hand: Hungry 'Huns'

BY JIM AND AYSLEY STELFOX

Each fall, we enjoy watching Black-billed Magpies (*Pica hudsonia*) feed on fat scraps that we put out after cutting up the deer. This year, however, we were treated to a very unusual sight.

Five Grey (Hungarian) Partridge (*Perdix perdix*) came into our back yard and soon converged on the pile of fat scraps, displacing the dozen Magpies that had been feeding on it. To our amazement, the partridge began picking up crumb-sized pieces of fat that had fallen on the snow when the Magpies were chiselling off bigger pieces. We assume that this opportunistic exploitation of such a high-energy food source was due to the cold (-20°C) conditions at the time.

Although the Magpies initially pulled back, or confined their feeding to the side not occupied

by the partridge, they soon became frustrated at being deprived of access to 'their' food source. Instead of fighting with each other for a feeding spot, some resorted to pulling partridge tails, which promptly resulted in the partridge spinning around and chasing the Magpie away. (Unfortunately, this hilarious action was so quick that we weren't able to capture it on camera.) Who would have thought that the dainty partridge could displace, or put the run on, the seemingly more aggressive Magpie.



GREY PARTRIDGE FEEDING ON FAT SCRAPS WHILE MAGPIES SQUABBLE. AYSLEY STELFOX

MAGPIES "SHARING" FAT SCRAPS WITH GREY PARTRIDGE. AYSLEY STELFOX



THE BIRD THAT STARTED IT ALL: A SHORT-EARED OWL ON
THE ROAD BETWEEN COOKING AND HASTINGS LAKES.

TERRY AND SUSAN SLY

First Hand: Birds on a Post

BY TERRY SLY

My wife Susan* and I have long loved hiking and exploring the wonders that nature has to offer. We like taking photos of flowers, mushrooms, insects, amphibians, mammals and birds.

In the last couple of years we have really enjoyed trying to photograph, identify and learn about the birds of Alberta and other locales we have visited. We have identified and photographed just over 200 bird species in Alberta. We have observed some of the unusual mating rituals, like Common Goldeneyes and Ruddy Ducks, with utter fascination and amazement.

The sighting that hooked us on birding was a Short-eared Owl standing on a fence post. As time passed and we covered the province on a couple of occasions, we noticed that a number of birds like to stand on fence posts. Some birds it

seems, if you are going to see them at all, it would be on a post – like Wilson's Snipe and Upland Sandpiper. To date we have pictures of 42 different birds standing on fence posts.

We recently just missed photographing a Loggerhead Shrike and a Turkey Vulture standing on a post, but with patience and perseverance, we know we can get them and a bunch more. The pictures we have included with this article are some of our favourites, which include a mix of what we think are unusual characters to be standing on a post and others that we just loved, like the Short-eared Owl that got us started.

* Susan contributed a lovely photo, "Western Bluebirds, All in a Row!" for the Spring 2014 *Nature Alberta*.



A BOBOLINK IN THE BEAVERHILL LAKE AREA.

TERRY AND SUSAN SLY



A SPRAGUE'S PIPIT, WHICH ARE RARELY SEEN ON THE GROUND, IN THE TYRRELL LAKE AREA.

TERRY AND SUSAN SLY



A NORTHERN SHRIKE IN THE BEAVERHILL LAKE AREA.

TERRY AND SUSAN SLY





YOU WOULD THINK IT WOULD NOT BE HARD TO FIND AN ANIMAL THAT WEIGHS AROUND 500KG AND STANDS ABOUT 2.5 METERS TALL AT THE SHOULDER, BUT THIS BULL WAS ONLY GIVEN AWAY BY HIS PROMINENT SET OF ANTLERS WHILE HE BEDDED DOWN DURING A SNOW STORM.

OWEN SLATER

First Hand: Rocky Mountain Moose

BY OWEN SLATER (OWENSLATERPHOTOGRAPHY.COM)

it's relatively rare to see Moose (*Alces alces*) in the Rockies. I see more wolves and bears than I see Moose, but late fall and early winter always seem to be good times to run into them.

TWO OTHER SIMILARLY CAMOUFLAGED BULLS WERE RESTING NEARBY, BUT WHEN THEY GOT UP AND STARTED MOVING TOWARDS THE LARGER BULL IT DIDN'T TAKE HIM LONG TO GET THEIR ATTENTION. HE QUICKLY STOOD UP, LOWERED HIS HEAD, FLATTENED HIS EARS AND STARTED A SLOW AND DELIBERATE STRUT TOWARDS THEM. OWEN SLATER



BULL MOOSE WILL POSTURE TO SHOW OFF THE SIZE OF THEIR ANTLERS BEFORE EVER ENGAGING IN ACTUAL SPARRING. WITH THE TWO SMALLER BULLS GETTING A CLOSE UP VIEW OF HIS LARGE ANTLERS, THEY QUICKLY REALIZED THEY HAD NO CHANCE, PUT THEIR HEADS DOWN AND HURRIEDLY STARTED WALKING AWAY FROM HIM. OWEN SLATER



THE LARGE BULL ESCORTED THE YOUNGER ONES THROUGH THE MEADOW AND MADE SURE THEY WERE HEADED TOWARDS THE FOREST BEFORE HE TURNED BACK AND HAD A LOOK AT ME. I HAD ALREADY PLANNED FOR A QUICK ESCAPE IF NEEDED, BUT I GUESS HE DIDN'T FEEL I WAS EVEN WORTH THE EXTRA EFFORT TO TRY TO SCARE OFF, SINCE HE JUST TURNED AROUND AND WENT BACK TO FEEDING ON WILLOW SHOOTS. I WAS JUST FINE WITH THAT! OWEN SLATER

VISIT OWEN!

When not working with wildlife during his day job, Owen spends much of his free time studying and photographing Alberta's wildlife. His veterinary background provides him with a unique perspective and insights on the animals he photographs. To see more of his many photos, you'll enjoy a visit to his website at www.owenslaterphotography.com.

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.

THE PEACE-ATHABASCA DELTA IS COMPOSED OF
MANY DELTAS, ONE OF WHICH IS THE CREE CREEK
DELTA, THE MOUTH OF WHICH IS PICTURED HERE
FROM JUNE 2014. KEVIN TIMONEY



Kevin Timoney's Award-winning Ecology Book

BY BOB MENTZINGER, FROM COLLEGE OF THE ATLANTIC NEWS, NOVEMBER 11, 2014



Dr. Kevin Timoney, A College of the Atlantic alumnus, has received one of Canada's top scientific writing awards for a book that examines a globally significant wetland in western Canada endangered by an uncertain future.

The book, "The Peace-Athabasca Delta: Portrait of a Dynamic Ecosystem," published in 2013 by the University of Alberta Press, had been favorably reviewed in several places, including the journal *Restoration Ecology*; and received several other prior awards.

"As Dr. Timoney makes perfectly clear in this beautifully written and illustrated book, the Peace-Athabasca Delta is a world treasure. The author has written a book based on scientific evidence, and he has done so with passion," said world-renowned ecologist John P. Smol, PhD, in the Department of Biology at Queen's University in Canada. "This is an important book that should be read by scientists, naturalists, and anyone concerned about the environmental degradation of our planet."

"The Peace-Athabasca Delta" is described a "synthesis of what is known about the delta, an environmental history, a reference book, and a field guide," intended for a wide audience "including natural scientists; those involved in

the management, health, and policy of natural systems; naturalists; engineers in government and non-governmental organizations; and students and teachers of ecological and environmental studies."

The delta in northern Alberta is a globally significant wetland within one of the largest unfragmented landscapes in North America. Arguably the world's largest boreal inland delta, it is renowned for biological productivity and is a central feature of a UNESCO World Heritage Site.

Yet the delta and its indigenous cultures lie downstream of Alberta's bitumen sands, whose exploitation comprises one of the largest industrial projects in the world. Timoney provides an authoritative synthesis of the science and history of the delta, describing its ecology, unraveling its millennia-long history, and addressing its uncertain future. Timoney writes: "In the delta, water is boss, change is the only constant, and creation and destruction exist side by side."

"The award is eminently deserved; both for Kevin's passion for his subject and his ability to distill 20 years of research into this important, accessible book," said Monika Igali of the University of Alberta Press. "We are very proud to have worked with him on this award-winning book."

"Like the delta, this book is a jewel," said Rob Alexander of Rocky Mountain Outlook. "Timoney has set a standard for books of this nature. It provides a blueprint in terms of the type of information we need and how to best present it to allow us to make better, informed decisions."

Timoney, who lives in Androssan, Alberta, said he has another book soon to be published, this one by Springer, that studies the effects of exploitation of bitumen sands — also known as tar sands — on the wetlands of northeastern Alberta: "Impaired Wetlands in a Damaged Landscape: The Legacy of Bitumen Exploitation in Canada".

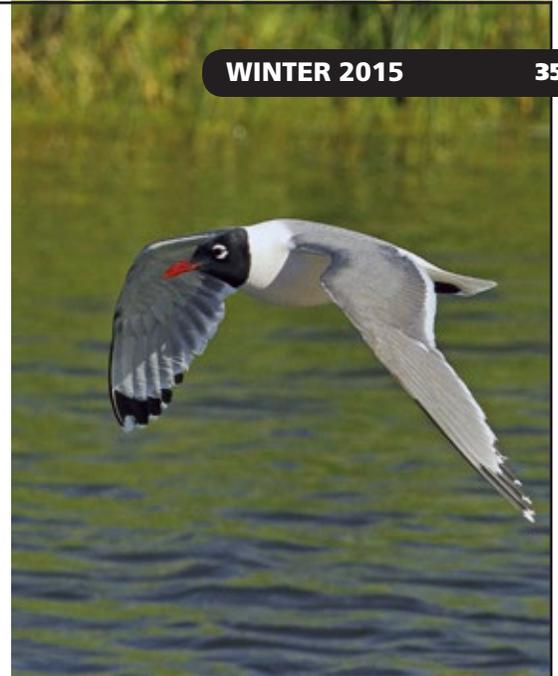
Timoney earned a master of science in plant ecology from the University of Wisconsin and a Ph.D. in plant ecology from the University of Alberta.

College of the Atlantic was founded in 1969 on the premise that education should go beyond understanding the world as it is, to enabling students to actively shape its future. For more, visit www.coa.edu.

Spring 2014 Bird Count Results

BY JUDY BOYD

The number of species went down this year: from 275 last year to 273 this year but the number of individual birds went up: 237, 010 this year from 209,381 last year.



In 2013, the most numerous species was the Franklin's Gull with 15,441. Second was the Canada Goose with 10,685 and third was the Red-winged Blackbird with 10,083. This year, the most numerous species was again the Franklin's Gull with 34,585. Second was the Red-winged Blackbird with 11,647 and third was the Canada Goose with 9908.

This year, 30 species were found in only one location around the province: Red Crossbill was seen at Banff; Northern Hawk-Owl, Golden-crowned Sparrow were seen at BowKanBirders; Surf Scoter, Clark's Grebe, Ruddy Turnstone, Sabine's Gull, Arctic Tern, Northern Pygmy-Owl, Barred Owl, Lewis' Woodpecker (count week (cw)), and Gray-crowned Rosy-Finch were each seen at Calgary; Black-chinned Hummingbird was seen at Cardston; Long-eared Owl, and Northern Saw-whet Owl were each seen at Central Alberta; Glaucous Gull, and Sedge Wren were each seen at Cold Lake; Wild Turkey and Western Bluebird

were each seen at Crowsnest Pass; Magnolia Warbler was seen at Fort McMurray; Tundra Swan was seen at Lac La Biche; Dunlin, Bohemian Waxwing were each seen at Lethbridge; Eurasian Wigeon, Northern Shrike and Common Redpoll were each seen at Medicine Hat; Western Sandpiper, Northern Mockingbird and Sage Thrasher were each seen at Milk River/Writing-on-Stone; Pine Grosbeak was seen at Waterton.

13 species were found in 2 locations around the province: Peregrine Falcon at Calgary and Milk River; Yellow Rail at Calgary and Cold Lake; Hudsonian Godwit at Brooks and Calgary; Common Nighthawk at Cold Lake and Crowsnest Pass; Black-backed Woodpecker at Cold Lake and Fort McMurray; Pacific-slope Flycatcher at Calgary and Waterton; Philadelphia Vireo at Central Alberta and Lac La Biche; American Dipper at Calgary and Crowsnest Pass; Gray-cheeked Thrush at Calgary and Medicine Hat; Nashville Warbler at Cold Lake and Crowsnest Pass; Connecticut Warbler at Cold

Lake and Lac La Biche; Mourning Warbler at BowKanBirders; McCown's Longspur at Brooks and Milk River/Writing-on-Stone.

Last year we had five species in all areas. This year we had 10 species in all areas: Canada Goose, Mallard, Sora, American Coot, Northern Flicker, Common Raven, Tree Swallow, American Robin, Chipping Sparrow, and Red-winged Blackbird.

Last year seven species were found in all but one area, and eleven species were found in all but two areas. This year fifteen species were found in all but one area: American Wigeon, Blue-winged Teal, Green-winged Teal, Bufflehead, Ruddy Duck, Red-tailed Hawk, Spotted Sandpiper, Downy Woodpecker, Black-billed Magpie, American Crow, Cliff Swallow, Barn Swallow, Clay-coloured Sparrow, Savannah Sparrow and Brown-headed Cowbird. This year eight species were found in all but two areas: Gadwall, Lesser Scaup, Killdeer, Wilson's Snipe, Swainson's Thrush, European Starling, Yellow-rumped Warbler, and Song Sparrow.

Highlights and details of each specific count can be found at www.naturealberta.ca.

PHOTOGRAPHED NOVEMBER 19, 2014,
NEAR ARROWWOOD, ALBERTA. CHARLEY BIRD



Charley's Nature Note: The Coyote

BY CHARLEY BIRD

This is my first "Nature Note" in quite a while. My apologies, I have been busy with a number of other activities, especially working up lists of the mushrooms of the J.J. Collett Natural Area (see jjcollett.com) and of our natural quarter NW of Winfield, AB.

The subject of today's note is the Coyote (*Canis latrans*).

Coyotes occur throughout Alberta and are found only in North America. They have persisted in spite of widespread shooting and trapping. They are grey-brown in color, have a bushy tail and a pointed nose. Adults are about as large as a medium-sized dog. Mating occurs in late winter and their pups are born in the spring in underground dens.

Coyotes will eat a wide range of food, but they primarily search out small rodents, such as voles and mice. They will also eat road-kill, bird's eggs, hares and they occasionally kill fawns or calves. In the fall, their droppings often have numerous chokecherry pits.

At night, Coyotes often vocalize with a yip-yip-yip-howl call that can be heard when the animals are a long way off. They often antagonize farm dogs.

In late winter, especially when food is scarce, some animals lose much of their hair due to a sarcoptic mange (scabies) infestation.

Coyotes are part of our natural world and they do a lot of good by helping to control rodent populations. Enjoy them.

The best source of information about the Coyote is Naughton, D., 2012. *The Natural History of Canadian Mammals*. Canadian Museum of Nature. 784 pp.



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.

PROCEEDINGS OF THE 10TH PCES CONFERENCE

The Alberta Prairie Conservation Forum and Alberta Society of Professional Biologists (ASPB) are pleased to announce that the proceedings of the 10th Prairie Conservation and Endangered Species Conference can be found on its website, www.pcesc.ca, for your review and use. The conference was held in Red Deer, Alberta in February 2013. About 400 people attended and over 140 presentations were made during the three day meeting. The abstracts and articles that presenters and authors submitted are presented in the 320 page proceedings. The website also contains the proceedings of all the previous conferences at <http://pcesc.ca/past-conferences.aspx>.

The 11th Prairie Conservation and Endangered Species Conference will be held in Saskatoon in early 2016 hosted by the Saskatchewan Prairie Conservation Action Plan committee and partners. Watch for more details on the websites www.pcap-sk.org/home and www.pcesc.ca.

ASPB's next conference, "Witness to Change: A Generation of Science, Regulation and Conservation" will take place in Canmore, Alberta, March 31 to April 1, 2015. Join us as the ASPB celebrates forty years of professional practice in biology in Alberta and the growing public demand for accountability in the management of our ecosystems. Full details are on the ASPB website: www.aspb.ab.ca/conference.

Wildlife! Starring... Snowy Owls

BY DR. SHARIF GALAL



Snowy Owls (Bubo scandiacus) are the second largest owl in Canada, the largest being the Great Gray Owl (Strix nebulosa).

In winter, Snowy Owls migrate to the wind swept prairies that resemble the wide open spaces of the arctic tundra. These beautiful birds can be photographed east and south of Calgary between November and the end of March.

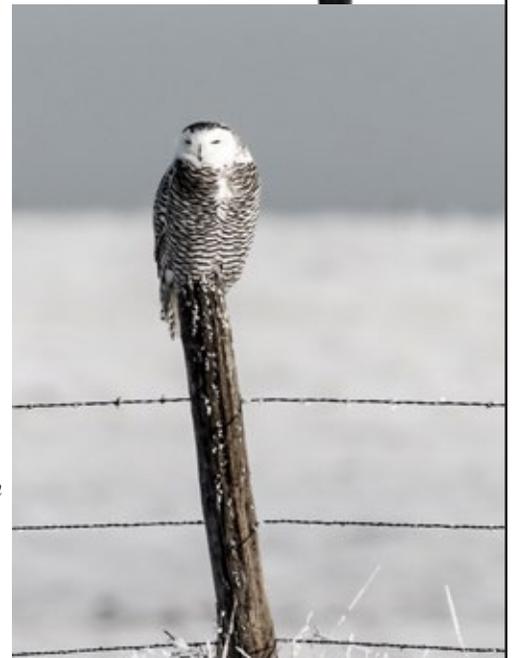
Snowy Owls have a maximum lifespan of about ten years in the wild and up to twenty-eight years in captivity. Their population is estimated to be between 10,000 and 30,000 breeding pairs in Canada. The Snowy Owl is the provincial bird of Quebec. It is thought to be one of the first bird species that can be identified in Prehistoric Art. Analysis of their mitochondrial DNA suggests Snowy Owls are closely related to Great Horned Owls which are often found in the same habitat during the winter months.

Snowy Owls have large yellow eyes which, as with all owls, cannot move, so the owls must

turn their heads to shift their gaze. With 14 neck vertebrae they can turn their head a full 270°. Females have dark barring on their feathers with white faces; males tend to be almost all white. Their feet have four talons and are thickly feathered to protect the birds when temperatures drop to below -30°C for weeks.

Telephone poles appear to be a favorite perch for Snowy Owls – males and females – where they can scan the fields for prey; they are also found frequently on fence posts and occasionally in trees. To spot Snowy Owls you need to stop and get out of your car and scan the fence and telephone poles with binoculars. If the owls are on snow-covered ground, they are so well camouflaged as to be almost impossible to sight until they take flight or move, or if you have seen them land.

TYPICAL PRAIRIE PERCHES FOR "SNOWIES". SHARIF GALAL



Dr. Sharif Galal is a medical doctor and a biotechnology researcher. He received his M.D. from Egypt and his specialty degree in diving medicine from Stellenbosch University- South Africa in addition to a Master's degree in biomedical sciences from University of Calgary. Apart from medicine and research, Dr. Galal is an amateur underwater photographer, scuba diving instructor and an enthusiastic wildlife and nature advocate. He currently resides in Calgary, Alberta and can be contacted at: Shah@ucalgary.ca; www.flickr.com/sharifgalal.



MALES ALMOST DISAPPEAR, EVEN IN FLIGHT. SHARIF GALAL

Once you find a bird you need to get close without scaring them away. When they are on telephone poles, I have found I am often able to drive almost right up to them and photograph them from my car window, as they seem to ignore cars; thus, you can use your vehicle as a blind from which to observe and photograph them. If they are on fence poles they seem to be more wary. Some owls seem to ignore me; others may take flight when I approach within 100 meters. Individual owls seem to vary in their wariness towards people.

These large owls breed on the Arctic tundra, where females lay a clutch of three to eleven eggs. Clutch size depends upon the availability of food, and in particularly lean times a usually monogamous pair of owls may not breed at all. Parents are territorial and will defend their nests against all comers – even wolves.

The owls, especially males, get whiter as they get older. Females are darker than males, with dusky spotting, and never become totally white. Some elderly males do become completely white, though many retain small flecks of dusky plumage.

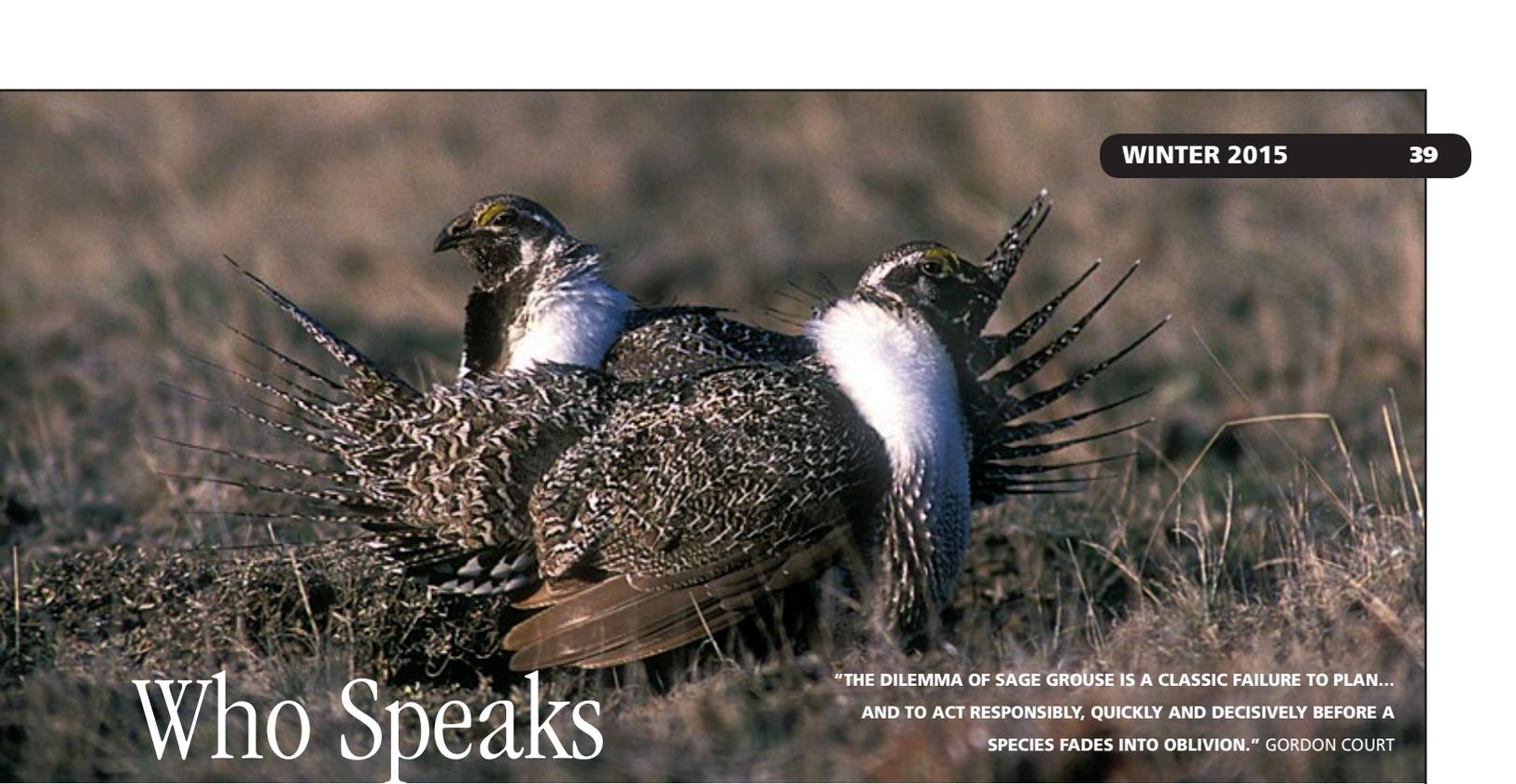
The Snowy Owl is a patient hunter. They hunt from the air by hovering, or they watch for prey from a perch, which is often a telephone or fence pole on the prairies, before soaring off in pursuit. Snowy Owls have keen eyesight and great hearing, which can help them find prey that is invisible under thick vegetation or snow cover. The owls deftly snatch their quarry with their large, sharp talons. When they capture a rabbit, they sink their talons into the back and backflip until the rabbit is exhausted. During the breeding season males will kill and display prey in caches to impress the females.

In the Arctic, Snowy Owls feed primarily on lemmings – many lemmings. An adult may eat more than 1,600 lemmings a year, or three to five every day. The birds supplement their diet with a wide variety of small rodents, rabbits, birds, and fish. They have also been known to attack cats and small dogs. The owls are diurnal though they may sometimes hunt at night.

These magnificent owls sometimes remain year-round in their northern breeding grounds, but they are frequent migrants to southern Canada, the northern United States, Europe, and Asia. Lemming availability may determine the extent of southern migration, when owls take up summer residence on open fields, marshes, and beaches.

Bibliography

- Dr Robert Berdan, article on snowy owls: www.canadiannaturephotographer.com/snowy_owls.html
- Wayne Lynch (2007). *Owls of the United States and Canada*. Johns Hopkins. ISBN 0-8018-9687-2



Who Speaks for Endangered Species?

"THE DILEMMA OF SAGE GROUSE IS A CLASSIC FAILURE TO PLAN...
AND TO ACT RESPONSIBLY, QUICKLY AND DECISIVELY BEFORE A
SPECIES FADES INTO OBLIVION." GORDON COURT

LORNE FITCH, P. BIOL.

There is a tendency on the part of some (notably industry, some landowners and remarkably our provincial government) to see protection of endangered species as a conspiracy to rob them of privileges and opportunities. It just isn't that simple.

If all of us would step back from the rhetoric and handwringing over entitlements, conspiracy theory, perceived economic loss, usurping of provincial rights by federal decree, perception of personal property rights infringement, and the mythical heavy hand of government we might see another perspective.

Wild species are going missing at a rate unparalleled since dinosaurs disappeared. The root cause of this, especially with grassland species, is we have used up the majority of the space for our purposes, in the form of cultivation,

urban development, petroleum extraction, transportation networks and a myriad of smaller but additive game-changing shifts of native habitat to a shadow of what was formerly available.

The intent of species at risk legislation is to rebalance the stakes in favor of imperiled species, giving them a life boat of sorts to reduce the risk of them winking out of existence.

Sage Grouse are caught in the controversy between those who see diminished population status as a failure to manage and protect habitat and those who see efforts to stem the tide of possible extirpation as a conflict with

exercising free and full economic opportunity.

When we reach the edge of a cliff, as we have with Sage Grouse, the alternatives disappear. Either we do something to arrest the downward trend in grouse numbers, or we step back and watch them disappear from Alberta after a residency that is approximately 10,000 years long. Species at risk legislation fortunately won't allow us to take the later easy route, no matter how comfortable and economically advantageous it might seem to be.

There is precious little wiggle room left after years of government foot-dragging amid the race to exploit natural resources. The tired old refrains



Lorne Fitch is a Professional Biologist, a retired Fish and Wildlife Biologist and a past Adjunct Professor with the University of Calgary.



AN ICONIC PRAIRIE SPECIES, PRONGHORN FINDS ITSELF IN AN INCREASINGLY FRAGMENTED AND DIMINISHED GRASSLAND WORLD. RICK PRICE

responsibly, quickly and decisively before a species fades into oblivion.

All of us, governments, industry, academia, conservationists, landowners and the public have a duty to ensure Sage Grouse (and others) are

allowed to survive and recover. The debate isn't about whether they should be saved but rather how to save them and how quickly we need to act. Two essentials for any wild species are place and space. In the case of Sage Grouse, they and their habitats are intertwined, interconnected and incapable of being separated.

Lyndon B. Johnson, America's 36th president and a campaigner for civil rights, social issues and the environment once declared:

"If future generations are to remember us with gratitude rather than contempt, then we must leave them with something more than the miracle of technology. We must leave them a glimpse of the world as it was in the beginning."

If we took the perspective we are building our province and our communities to last forever, instead of just to the next election, or to the next resource revenue cheque or next shopping trip, our take on endangered species

would be remarkably different I think. We need to face the hard question; are we stewards of the land and all of its resources or, are we trapped in a spiral of instant gratification and gluttony with no sense of responsibility to future generations?

If we can protect some places and spaces for Sage Grouse and allow recovery of populations to more robust levels, the intended effects will benefit other species. It may well be that our own species will need these places with natural expressions of biodiversity and ecosystem services.

It shouldn't be just the Canadian government speaking for endangered species; it should be all of us. As fellow travelers on a finite planet, it is our obligation to keep, as the ecologist Aldo Leopold admonished us, "all the pieces".

Dr. Seuss provides some essential advice in *The Lorax* that we might apply to endangered species:

"Unless someone like you cares a whole awful lot, nothing's going to get better. It's not."

Who speaks for endangered species? We all should!

of mitigation, more research and enhanced land use guidelines are an attempt to drag the debate on longer, without actually doing anything helpful for grouse recovery. Einstein's quote, "We can't solve problems by using the same kind of thinking we used when we created them" resonates strongly.

We can't, or don't bother to recall what the landscape looked like when the ecosystem was in balance. There is an expectation, based on no evidence, that Sage Grouse will persist on fragmented landscapes as we pile compromise upon compromise to "resolve" each new calamity.

It is an often repeated theme with many of Alberta's similarly imperiled wild species including Westslope Cutthroat Trout, Bull Trout, caribou and a longer list of species not yet imperiled but queuing up for that line. An example would be Pronghorn (Antelope), another species iconic of prairie Alberta that finds itself in an increasingly fragmented and diminished grassland world.

The dilemma of Sage Grouse is a classic failure to plan, the timidity of resource management, the inability to see and respond to critical thresholds and the intransigence of all of us to act

ALDO LEOPOLD (LEFT) AND OLAUS MURIE SITTING TOGETHER OUTDOORS AT THE ANNUAL MEETING OF THE WILDERNESS SOCIETY COUNCIL, OLD RAG, VIRGINIA, 1946. HOWARD ZAHNISER/NCTC ARCHIVES/MUSEUM



Up Close Naturally: Tree Flowers: All Shapes and Sizes!

BY MARGOT HERVIEUX

The first flowers will be blooming soon. I don't mean the odd crocus or tulip in a protected garden but the fuzzy flowers appearing on the aspen and willows.

Tree flowers come in all shapes and sizes. Some have separate male and female blooms while others combine the two sexes in one. The flower structure also varies depending on whether insects transport the pollen from plant to plant or if the pollen spreads on the wind.

The first trees to flower in the spring are the willows (*Salix spp.*). Willow bushes produce either male or female catkins, or pussy willows. As the male catkins mature you will notice that they become covered with yellow or red tipped hairs. These stamens produce pollen that will be carried by the wind or foraging insects. This early pollen is an important food source for insects, squirrels and even birds.

Aspen and Balsam Poplars (*Populus tremuloides* and *Populus balsamifera* respectively) also have separate male and female trees. Pollen rides the wind to fertilize the female catkins which then swell before releasing the seeds with their own parachutes of fluff.

Another unusual flower to look for in the early

Margot also writes a column for the Peace Country Sun, archived copies of which are available at www.peacecountrysun.com.



spring belongs to the hazelnut (*Corylus spp.*). The tiny, red female flowers look like miniature anemones growing beside the thin, dangling male catkins.

If you have ornamental Manitoba Maple (*Acer negundo*) in your yard, watch for their flowers just as the leaves are budding out. The flower clusters are reddish on the male trees and yellow on the female trees.

By early May the first of the more typical flowering trees should be coming into bloom. Our fruit trees all have flowers with both male and female parts. The hanging flower clusters of the currants should be in bloom by mid-May followed shortly thereafter by the cherries and roses.

Cone producing trees like spruce and pine won't flower until late May. The male trees produce masses of wind blown pollen that fertilizes the female cones. This pollen, as well as the pollen from birch and alder, is the cause of many springtime allergies. In contrast, fruit tree pollen is spread by insects, primarily bees and flies, and the larger pollen grains are unlikely to give allergy sufferers any problems.

I take real pleasure in watching the sun light up the catkins in an aspen forest or finding the minute flowers on a hazel bush. These unusual flowers add their own special colour to the spring woodland.



HAZELNUT (*CORYLUS* spp) IN BLOSSOM.

SCHNOBBY/WIKIPEDIA



MALE CATKINS OF *SALIX CINEREA*; NOTE THE POLLEN-COVERED BEE! BCB/WIKIPEDIA



MANITOBA MAPLE FLOWERS.

FUNGUS GUY/WIKIPEDIA



Redpolls: Winter Visitors from the North

BY JESSIE ZGURSKI

The bird diversity here in Alberta decreases quite dramatically during the fall and winter. Warblers, flycatchers, vireos, shorebirds, and most waterfowl head south for the winter

However, the birds that do stay behind include chickadees, creepers, woodpeckers, nuthatches, waxwings, many owls, and grouse, so the birdwatching is still worthwhile. Common Goldeneyes and Mallards will also tough out the winter in areas where there is open water, such as Goldbar Park in Edmonton, where treated sewage effluent keeps part of the North Saskatchewan River warmer than normal. A similar situation occurs in Medicine Hat, where warm water from the power plant keeps a channel in the South Saskatchewan River free of ice, attracting other waterfowl such as mergansers and a great many Canada Geese. A few Bald Eagles will stick around and hunt the waterfowl, and eagles can sometimes be seen right in Lethbridge, Calgary, Medicine Hat or Edmonton during winter.

There are also some species that show up in Alberta only in the winter and they make winter birdwatching quite interesting. These northern birds nest in the Arctic and often head south in winter in search of food. Such birds

include Snowy Owls, Rough-legged Hawks, Gyrfalcons, and redpolls.

Redpolls are members of the finch family (*Fringillidae*), and they are among my favorite birds to watch. Redpoll taxonomy can be a complex subject, but according to most sources, there are two species in North America: the Common Redpoll (*Acanthis flammea*) and the Hoary Redpoll (*Acanthis hornemanni*).

These two species look very similar. Both are tiny brown and white birds with small, orange beaks and red caps on their heads. Adult males of both species will also have a red tinge on their chests. The hoaries are paler overall than commons and typically have white (or very lightly streaked) rumps and undertail coverts. However, because 'pale' commons can look very much like 'dark' hoaries, many birders are only comfortable labelling the palest redpolls as hoaries.

Redpolls are birds of the north. Common Redpolls breed in Alaska, Nunavut, the Northwest Territories,



the Yukon, and northern Ontario, Quebec and Manitoba. In Nunavut, they breed on the mainland, southern Victoria Island and southern Baffin Island. They have been known to breed in Alberta, but this is an extremely rare occurrence. Hoary Redpolls nest even further north than Common Redpolls: in northern Alaska, Greenland, and the northern parts of Canada's three territories, including northern Baffin Island and Ellesmere Island (the northernmost of the Arctic islands). Common and Hoary Redpolls also occur in northern Europe and Asia.

Many redpolls do head south in winter, not necessarily to escape the cold but to search for food. Many redpolls spend the winter in central and southern Canada. However, some still overwinter as far north as central Alaska, the Yukon and the Northwest Territories. In years where there is a lack of small tree seeds (such as birch seeds) up north, they can show up as far south as the central United States. These influxes of redpolls into the south are referred to as "irruptions," and they generally seem to occur in two-year intervals.

When and where the redpolls show up varies from year to year. While many migratory birds will breed and overwinter in the same areas each year, redpolls are wanderers. A redpoll is capable of travelling thousands of kilometers in one year. As an example, a Common Redpoll banded in Fairbanks, Alaska during one winter was recaptured 5000 km away in Montreal, Quebec the next winter. Redpolls may also travel across continents, as one Common Redpoll banded in eastern Michigan was later recaptured in Siberia. Another redpoll banded in Belgium was later recaptured in China, 8350 km away. What an amazing journey for such a tiny bird, which would weigh no more than three or four quarters!

Despite their tiny size, redpolls are tough and can tolerate extremely low temperatures. After all, temperatures can dip to -40°C even in their 'southern' winter ranges. They also have to go twelve or more hours without eating during long northern nights. However, most small birds need to eat frequently because of their extremely high metabolic rates. So, how do redpolls withstand northern winters?

Redpolls have several adaptations that help them cope with the cold. For example, they have an extra pouch in their throats they can store seeds in. This pouch, called an esophageal diverticulum, is separate from the crop. The stored seeds can be used as a fuel source throughout long nights. A redpoll can store up to 2 g of seeds in its pouch, and considering that redpolls are only 10-20 g, that is a lot of food! During winter, redpolls often feed on birch, alder, or aspen seeds. During very cold



or windy days, redpolls may also quickly ingest many seeds and store them in their throat pouches. Then, in a more sheltered, warmer location, they can regurgitate the seeds, husk them, and swallow them.

Redpolls and other northern finches can also reduce the amount of energy they use at night by undergoing a process called 'controlled hypothermia,' where they allow their body temperatures to drop. Redpolls with low fat reserves may undergo a drop in body temperature of about 10°C . Chickadees and House Sparrows do this as well. The reason they drop their temperatures is to conserve energy. A bird will use less energy to maintain a body temperature

of 30°C than a body temperature of 40°C . The disadvantage is that they cannot move around well with such a low body temperature, but that doesn't matter too much when they are sleeping.

Redpolls and many other small northern birds will also 'clump' together in tree cavities – or snow tunnels – to conserve heat. Redpolls in particular often tunnel into the snow to stay warm. On very cold days and nights, the 'subnivean space' (area under the snow) may be many degrees warmer than the area above the snow. Ptarmigan and grouse will also rest underneath the snow to stay warm. At rest, redpolls will also fluff up their feathers to trap air among them. The extra air trapped between the feathers does add some extra insulation.

Additionally, redpolls will grow very thick coats of down before the winter season.

In the winter, redpolls will happily visit feeders and they particularly like black Nyger (or “Niger”) seeds. To see redpolls, try putting out a feeder stocked with Nyger seeds in winter. If there aren’t any redpolls in the area, you may still attract other finches, such as Pine Siskins. Like redpolls, Pine Siskins are finches that wander North America and migrate in response to varying food supplies.

Redpolls can also be found in parks, where they will forage on birch, spruce or aspen seeds. Their buzzy calls can help a birder locate them. Additionally, the presence of birch seed husks on top of snow suggests that redpolls have been in an area. Redpolls are very acrobatic

birds and often feed, upside down, at the tips of branches. They may also hold food items in their feet, much like parrots do. They can be very amusing to watch.

For me, redpolls mark the coming and going of winter. They tend to show up in Alberta in November or December, and head out by March or early April. However, I did not see very many of them during the winter of 2013/2014, which likely means that there was a good crop of tree seeds further north. No redpolls showed up on Christmas bird count lists in several Alberta locations that year (including St. Alberta and High River), although 144 were reported in Edmonton.

A “winter finch forecast” published by Ron Pittaway suggests that there should be a good number of redpolls heading to southern

Canada this year, as birch crops in the north are mediocre. This finch forecast focuses on Ontario, but is frequently accurate for the west as well. So be sure to keep your eyes open for these fascinating little finches this winter.

References

- Groth, J. 2001. “Finches and Allies.” In: *The Sibley Guide to Bird Life and Behavior*. Elphick, C., Dunning, J. B. Jr., and Sibley, D. A., Eds. Alfred A. Knopf, New York, NY.
- Knox, Alan G. and Peter E. Lowther. 2000. Common Redpoll (*Acanthis flammea*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/543>
- Newton I. 2006. Advances in the study of irruption. *Ardea*. 94: 433-460.
- Reinertsen R. E. 1983. Nocturnal hypothermia and its energetic significance for small birds living in the arctic and subarctic regions. A review. *Polar Research* 1 n. s. 269-284.

NATURE CANADA: NEW EXECUTIVE DIRECTOR AND ANNIVERSARY

Nature Canada has announced that Eleanor Fast assumed the role as its Executive Director starting on October 6, 2014.

Fast comes to Nature Canada with a passion for nature and a background in ecology, biodiversity and the not-for-profit sector. She has previously held senior management positions with the Federation for the Humanities and Social Sciences, as well as with the Council of Canadian Academies and holds a Master’s degree in Natural Resource Sciences (Biodiversity).

“It’s not often that you find a person who is this strong in the hard sciences, government, not-for-profit management, fundraising and communications all at the same time,” said Richard Yank, Chairman of Nature Canada’s Board of Directors. “We’re absolutely thrilled that

Eleanor has agreed to join us and we’re excited to have a dynamic new leader going into our 75th anniversary year.”

Ms Fast assumes the duties of Stephen Hazell, who was the previous Executive Director and who will be staying on with Nature Canada as Director of Conservation and General Counsel.

Now in its 75th year, Nature Canada has been vital for conservation in Canada ever since 1939, when it produced the magazine *Canadian Nature*. In 1948, it became The Audubon Society of Canada, then the Canadian Audubon Society, then the Canadian Nature Federation; the name Nature Canada was adopted in 2004.

Recently, Ottawa’s *Hill Times* chose Nature Canada as the # 1 environmental Non-Governmental Organization (NGO) lobbying group, and Charity Intelligence ranked it the best advocacy NGO in Canada. Strong – and deserving – praise! Nature Alberta congratulates Nature Canada on its dedication and reaching a milestone.

ELEANOR FAST



A Tale of a Black Wolf

BY SHARIF GALAL

A beautiful, quiet morning after a long night of snowfall...everything, including the trees, is covered with a spectacular white frost...a forest Raven is calling repeatedly...a man steps out of his camping tent, thinking of having a cup of hot coffee to overcome his sleepiness and the cold weather. Then he sees a big, black, lone Wolf with bright yellow eyes steadily staring at him from not farther than thirty feet away.

This was not a scene from a horror movie. It was me camping at Banff National Park, when I encountered this gorgeous big black Wolf. For a moment, I recalled all the Wolf stories that my parents used to tell me when I was a little kid. I was talking to myself: is this Wolf going to swallow me

as he did with the grandmother in the tale of “the little Red Riding Hood”? Is he so hungry and sees me right now as a big tasty piece of juicy steak?

Then I realized that I got my lifetime chance to get a close-up portrait of him that probably I will never again get in my life. I stepped back slowly and grabbed my camera from the tent, deciding to take a good picture that would tell a story before anything bad could happen. I shot some frames in a bad lighting condition, as he was standing next to a shadow of a big tree; it seems the Wolf

was reading my mind when he just decided to move two steps to let the diffuse morning light fall on him, and he paused for a perfect picture.

The Wolf was very calm looking at me while I was taking his photo and by the time I was done, he just decided to turn back and slowly walked into the bushes. The whole situation reminded me of Kevin Costner in his legendary movie “Dances with Wolves”. The difference is that I was photographing but only my heart was dancing. It is a very strange

SHARIF GALAL



Sharif Galal ©



**AUTHOR AND PHOTOGRAPHER
SHARIF GALAL
READY FOR WINTER PHOTOGRAPHY!**

Dr. Sharif Galal is a medical doctor and a biotechnology researcher. He received his M.D. from Egypt and his specialty degree in diving medicine from Stellenbosch University- South Africa in addition to a Master's degree in biomedical sciences from University of Calgary. Apart from medicine and research, Dr. Galal is an amateur underwater photographer, scuba diving instructor and an enthusiastic wildlife and nature advocate. He currently resides in Calgary, Alberta and can be contacted at: Sgelsbah@ucalgary.ca; www.flickr.com/sbarifgalal.

feeling with a mix of fear, thrill and enjoyment at the same time. In the movie, the Wolf kept coming back to visit him, but my Wolf never showed up again.

There is a psychological fear inside each of us toward Wolves, part of which is because of the tales we were told about Wolves when we were little – Wolves as evil animals or bad spirits representing the dark side of the world or sometimes death. But in fact, Wolves play a

significant role in our ecosystem and it is scientifically proven that having Wolves around increases the biological diversity.

Taking Wolves out of the system impairs its ability to function and because of this fact, the US wildlife authority took some Canadian Wolves and re-introduced them to Wyoming's Yellowstone National Park and some other states after being extirpated due to massive kills that took place in the last century.



NEW BIRD BIOLOGY WEBSITE AWAKENS THE SENSE OF DISCOVERY

INFORMATION FROM WWW.THEOUTDOORWIRE.COM/STORY/1414087247X568XJAKEPK

Cornell Lab of Ornithology has introduced the new "All About Bird Biology" website, an interactive activities site about bird song, feathers, and more, designed to appeal to anyone who's even a little bit curious about what makes birds tick.

We know birds have feathers – but what are they made of, how do they work, and how many kinds are there? Birds sing songs – but how do they produce those sounds, what do they mean, and can you learn to identify birds by sound alone? If just knowing the name of a bird isn't enough, then it's time to make new discoveries at the Cornell Lab of Ornithology's "All About Bird Biology" website.

"All About Bird Biology is all about inspiring people to find out what's really going on in the lives of birds," says Cornell Lab eLearning specialist Mya Thompson, who says scientists, teachers, artists, designers, and programmers all played an important role in developing the site and making it so appealing.

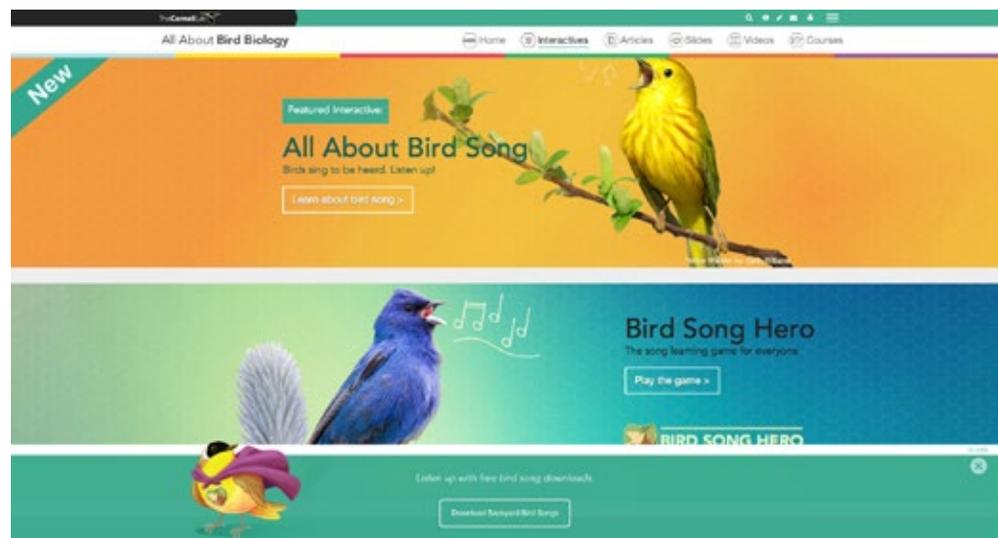
"The site contains a video library of eye-opening bird behaviors, along with self-paced interactive lessons, articles, and animations that make learning a blast!"

Chapters currently online go in-depth on feathers and bird song. Playing the "Bird Song Hero" game allows users to keep score as they gradually learn to recognize more than 50 bird species by sound. Educators and students surveyed after the website launch found that using

birds to understand biology makes the learning go down easy.

"We're developing the next chapter right now," Thompson explains. "It's called 'Fancy Males' and will focus on the ways birds use bright colors, strange ornaments, and even a little song and dance to capture a female's attention!"

Visit the "All About Bird Biology" website: www.biology.allaboutbirds.org



CELESTIAL HAPPENINGS

Starry Nights

Spring: March to May

BY JOHN MCFAUL



FEATURED CONSTELLATIONS: – LUPUS, ARA AND NORMA

For those seeking a spring vacation down south, these are three lesser constellations to look for. They are found between the much better known constellations Scorpius and Centaurus.

Lupus (the Wolf) is one of the 48 original constellations recognized by Ptolemy in his treatise called “The Almagest”. Its mythology is the story of Lycaon who was the king of the lands of Arcadia located in the centre of the Peloponnesian peninsula in ancient Greek times. At a feast, Lycaon decided to test Zeus, the king of the gods, to see if he really was a divine being. He did this by offering the cooked flesh of a child to Zeus. Zeus immediately recognized this deceit and turned Lycaon into a wild beast, often depicted as a wolf. He also killed Lycaon’s 50 children using his powerful lightning bolts.

In some paintings Lupus is shown as a sacrifice to the nearby centaur. Lupus may be seen from our latitude. This is during the latter part of July and the first part of August when the head of Lupus just barely peaks above the southern horizon.

The constellation Ara (the Altar) is another of Ptolemy’s constellations. It is thought to either represent the altar of Lycaon or the altar where the Olympian gods pledged their allegiance after winning their mighty battle against the titans who were led by Cronos, the father of Zeus. The smoke created by the altar is represented by the Milky Way.

Between Lupus and Ara is the obscure constellation Norma. It was identified by the French astronomer Nicolas Louis de Lacaille. He had travelled to the Cape of Good Hope in 1750. While there he catalogued close to 10,000 stars. This constellation was originally named “Norma et Regula”, the carpenter’s square and level – important tools for the Sculptor’s workshop.

CELESTIAL HAPPENINGS

- Sun:** Rise – March 1 (7:22 MST), April 1 (7:08 MDT), May 1 (5:59 MDT)
Set – March 1 (18:12 MST), April 1 (20:09 MDT), May 1 (21:04 MDT)
Note: Day Light Savings Time will start on March 8th.
Spring Equinox occurs at 4:44 PM MST on March 20th.
- Moon:** Full – March 5, April 4, May 3
New – March 20, April 18, May 17
Note: Total Eclipse of the Moon on April 4th. Eclipse starts at 4:17 AM. Totality starts at 5:57 AM.
- Planets:** **Mercury** may be seen about 5 degrees above the western horizon a little after sunset from about April 20th to May 14th. It will be furthest from the sun on May 8th. On April 21st Mars will be just to the left of Mercury.
Venus will be a brilliant beacon in the western evening sky throughout the spring. Watch for the thin crescent moon to be close by on March 22nd, April 21st and May 21st. On June 30th Jupiter and Venus will be very close together.
Mars may be seen just below Venus on March 1st. On April 21st it will be a couple of degrees left of Mercury. Afterwards it will be too close to the sun to be seen.
Jupiter has moved into the constellation Cancer, the Crab. It will be fairly high in the SSE in March. By the end of May it will be low in the SW after sunset.
Saturn is to be found in the constellation Scorpius. It is best seen before sunrise low in the southern sky during the spring months.
- Meteor Shower:** Lyrids (April 21, 15/hour in a dark sky), Eta Aquirids (May 4th, 20/hour)
The rate of meteors observed is for dark skies well away from city lights and with no Moon.

BOOK REVIEW

The Homeward Wolf

REVIEWED FROM ROCKY MOUNTAIN BOOKS (WWW.RMBOOKS.COM)

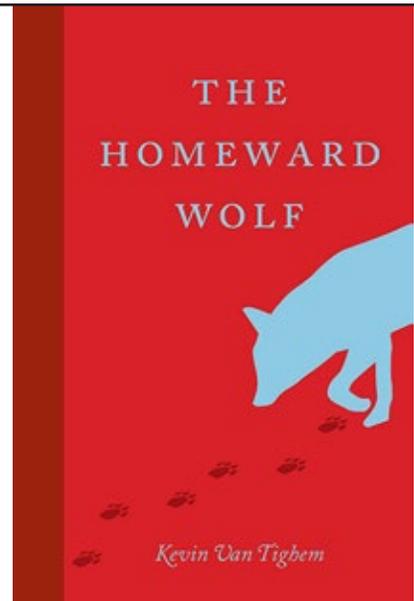
Wolves have become a complicated comeback story. Their tracks are once again making trails throughout western Alberta, southern British Columbia and the northwestern United States, and the lonesome howls of the legendary predator are no longer mere echoes from our frontier past: they are prophetic voices emerging from the hills of our contemporary reality.

Kevin Van Tighem's first RMB Manifesto explores the history of wolf eradication in western North America and the species' recent return to the places where humans live and play. Rich with personal anecdotes and the stories of individual wolves whose fates reflect the complexity of our relationship with these animals, *The Homeward Wolf* neither romanticizes nor demonizes this wide-ranging carnivore with whom

we once again share our Western spaces. Instead, it argues that wolves are coming back to stay, that conflicts will continue to arise and that we will need to find new ways to manage our relationship with this formidable predator in our ever-changing world.

Van Tighem brings his knowledge from 40 years of experience as a naturalist to this manifesto on the importance of wolves in our ecological systems. With detailed examples, he educates the reader on the history, politics and science related to the rising and falling wolf populations in and around western Canada. Highlights include the specific role of wolves in our ecosystems, the conflicts over territory with ranchers and possible solutions to creating sustainable landscapes for all wildlife.

Rocky Mountain Books' Manifesto series features books deliberately



Kevin Van Tighem. ISBN 9781927330838; 168 pages hard cover; \$16.00 (CAD)

short in length, small in size and rich in information. They are all written by experts to encourage a public conversation and to facilitate social change. Topics are drawn from a wide variety of fields such as environmental issues, urban planning, indigenous issues and public policy.

The Homeward Wolf is the winner of the 2014 Mountain Literature/Jon Whyte Award, Banff Mountain Book and Film Festival.

Nature Alberta

Celebrating our natural heritage!

Nature Alberta welcomes submissions of articles, photos, humour and other suitable material on Alberta's natural history. Submission guidelines for articles and photos are available on the NA website at www.naturealberta.ca.

Join **Today!**

E-VERSION » Individual*: \$25/yr

Family*: \$25/yr
(includes Young Naturalist Program membership)

Less \$5.00 for members of NA Clubs

* add \$15/yr for hard copy of magazine

Donations welcome!

Your support means
a great deal to
Nature Alberta and its
conservation objectives.

MAIL TO:
Nature Alberta
Attn: Membership
11759 Groat Road
Edmonton, AB
T5M 3K6





IT'S OURS NOW...WHAT ARE YOU GOING TO DO ABOUT IT!? SEE THE STORY, PAGE 31. AYSLEY STELFOX

A SNOWY OWL; SEE THE STORY, PAGE 37. DR. SHARIF GALAL



Nature *gallery*



IT PAYS TO BE THE BIGGEST! SEE THE STORY PAGE 33. OWEN SLATER



PRINTED ON  ENVIRO 100
PRINT

