

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



PAUL TESSIER/COURTESY ONTARIO NATURE

feature article

Woodland Caribou in Jasper National Park

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SPRING ISSUE. **FEBRUARY 14**
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FALL ISSUE. **AUGUST 15**
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Nature Alberta is composed of natural history clubs from across the province. The aims of the Federation are:

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

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CELEBRATE NATURE ALBERTA

IT'S OUR 40TH BIRTHDAY IN 2010!!!



EDITORIAL DISCLAIMER

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Editor's Page

BY DENNIS BARESCO

LOSING SPECIES

Although White Nose Syndrome (WNS) has not yet been found in Alberta, it may just be a matter of time. WNS has had a devastating effect on eastern bats in an extremely short time. The article on page 18, "The Fate of our Bats" by Lynsey Franks, provides details on why we all must take this disease very seriously and assist in whatever way we can.

One of the problems, as Lynsey points out, is the struggle "to convince the Federal Government of the urgency of the situation." In the case of bats, you wouldn't think that convincing would be necessary, especially considering

that the "agriculture and forestry industries are going to take a huge hit."

However, convincing, prodding, pleading and even suing appear to be necessities to get governments motivated. We could be forgiven for thinking that extirpation or extinction is actually the secretly hoped-for goal by some of those in government. Alberta's Caribou have been, to coin an old expression, "thrown to the wolves" – with the wolves being used as scapegoats in the continuing greedy destruction of caribou habitat. There are fears that Greater Sage-Grouse could be gone within two years – two years! – if the population

continues to plummet, as it has in the past few years. This year, only 31 males on 9 leks (traditional dancing grounds) were found.

In both those cases – Caribou and Greater Sage-Grouse – the province seems unwilling to actually do anything meaningful to save them. If they *are* eliminated from Alberta, it could be one of those rare occasions where

historians might actually be able to identify the individuals whose actions (or lack of action) exterminated the final population of a species.

WORDS

On page 6, you will find a somewhat different type of article than normal: "Vocabulary, Meaning, & Method." The power of "language and what we do with it" is well appreciated by advertisers, politicians, speech writers, heritage interpreters and anyone with a message to send and a mandate to convince. This article by Judy Fort Brenneman is a good reminder – if not a whole new awareness – of the subtle power of words. It is well worth a close reading.

HOPE JOHNSON

While the passing of the renowned Hope Johnson is sad, she leaves many people with more than enough great memories. Indeed, Hope – a past recipient of Nature Alberta's Loran Goulden Memorial Award – will never be forgotten. (See "In Memoriam, pg 11.)

My favourite of many memories occurred on a trip to Red Rock Coulee. I was the interpreter taking an Elderhostel group to the coulee and asked Hope to come along; the fact is, there was no better person anywhere to lead a field trip to that amazing place.



USFW

Hope was already in her mid-eighties and having fairly serious bouts of arthritis. Most of the Elderhostelers, though all seniors, were in reasonably good shape and considerably younger than Hope. Just before we stepped off the bus to go exploring, Hope mentioned that because of her age and arthritis, she may be walking very slowly – and she hoped they would forgive her if she could not keep up.

I am sure that no one expected what happened next. It was as if being out at one of her favourite geological wonders gave her wings! She scurried up and down the coulee hills, this way and that, moving back and forth to the scattered groups of Elderhostelers, pointing out and talking about the many wildflowers, explaining the innumerable geological features of the giant red rocks and the bentonite soil. By the time we headed back to the bus, almost everyone was exhausted trying to keep up to Hope. What an amazing person!

SUMMER?

All across Alberta, people were saying the same thing: “What Summer?!” It was definitely not the usual Alberta Summer in most places. The fact that the Summer issue of *Nature Alberta* is reaching you in the Autumn seems very appropriate. In reality, this issue is late because the Spring issue was so late. Your Editor hopes to get caught up after the next issue. I hope you thoroughly enjoy the “Summer-in-Fall” edition, regardless of the timing. Have a great...er...late Summer-early Fall?



BONNIE MULLIN

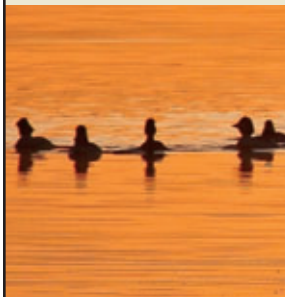
On the Covers:



FRONT COVER

How many words can you think of to describe a photo of a Woodland Caribou? The cover photo, by Paul Tessier, brings to mind words like “dramatic” and “power”! Scenes like this, and the chance to see and capture them on film, is what continuously drives photographers’

passion to head out into the great outdoors. As an aside, one word that might best describe Woodland Caribou in the near future (in Alberta, at any rate) is “extinct”! The cover photo is reprinted courtesy of Ontario Nature.



INSIDE BACK COVER

Astotin Lake, Elk Island National Park; photo by John Warden. For the story, see “Spirit Shouting” on page 14.

WHAT IS IT? For the story, see “Mystery Toad?” on page 38; the photo is by Holle Hahn.

Two people who spend a lot of time taking photos in Waterton are Sandra Hawkins and Rick Price; the latter’s photo graces the inside back cover.



BACK COVER

Teresa Dolman’s photo of a Skipper on a sunflower is the kind of summer scene that brightens everyone’s day. Now for the big questions: 1) What KIND of skipper? 2) What KIND of sunflower? Do you know? C’mon, lepidopterists, botanists

and naturalists: let’s see what you can do! Send *Nature Alberta* your answers: na@naturealberta.ca; or wildhavn@memlane.com.

ALBERTA ISSUES IN BRIEF

Canada's Birds and the BP Blowout

The violent BP oil blowout in the Gulf of Mexico has been stopped (at least, as far as we know at the time of writing), but the environmental (and economic) damage may continue for many years. The full, long term effects will only be known as time passes. For Canada's migratory birds, the harm may well be huge.

Ted Cheskey, manager of bird conservation with Nature Canada, estimates that between forty and sixty species could be impacted as they migrate through, feed or spend the winter in the Gulf: endangered species such as Piping Plover and Roseate Tern, Yellow Rail (a species of Special Concern), waterfowl, diving birds, shorebirds, herons, predators (such as Osprey and Bald Eagle from eating contaminated prey), geese, American White Pelican and our national icon, the Common Loon. According

to Greg Butcher, the director of bird conservation for the National Audubon Society, one billion birds could be threatened.

It isn't just birds, of course, that are suffering; whales and other Cetaceans, turtles, fish, and uncountable billions of invertebrates and micro organisms are destined for death. What can Canadians do? Take personal action to insist that oil development in Canada has ALL the safeguards in place, with severe penalties and aggressive enforcement against those who are less than vigilant (as appeared to be the case with BP) – penalties not just for the corporations, which is practically useless, but for the executives who actually run the companies. Canadians can also support those organizations that are working on behalf of us all to keep our environment healthy.



Burrowing Owls in Suffield National Wildlife Area Ignored

A proposal by the federal government that would limit habitat protection for the endangered Burrowing Owl has raised alarm among conservation groups. In an August letter sent to Environment Minister Jim Prentice, members of the Suffield Coalition voiced concern that his department's apparently selective identification of critical habitat overlooks burrowing owls in the Suffield National Wildlife Area (NWA).

"It is baffling that Burrowing Owl critical habitat has not been identified in the Suffield NWA. National Wildlife Areas are supposed to be havens for species at risk. Yet in this NWA, the government has overlooked critical habitat for the endangered Burrowing Owl, while its decision is still pending about a 1275 gas well development," said Alberta Wilderness Association's Cliff Wallis. "We hope to see the final Recovery Strategy identify all critical habitat, including at Suffield."

The coalition is urging the government to revise its proposal to include Burrowing Owl critical habitat in the Suffield NWA, arguing that this is necessary to meet both the needs of the species and the requirements of the federal Species at Risk Act. Environment Canada's

**WILL ONE OF OUR MORE MAGNIFICENT BIRDS BE
HARMED BY THE BLOW FROM BP? RICK PRICE**

own testimony before a joint environmental assessment review panel in February 2008 would seem to support such a revision. The department told the panel (established to consider EnCana's – now Cenovus' – proposal to drill 1,275 gas wells in the NWA) that the Burrowing Owl is known to nest in the area's rare prairie environment.

The Species at Risk Act requires the federal government to have produced a Recovery Strategy for the Burrowing Owl by June 2006, and that it identify the species' critical habitat to the extent possible based on the best available information.

This is the second proposed Recovery Strategy since 2007. "These delays mean that land use decisions are being made without identified critical habitat despite there being sufficient information available," says Carla Sbert of Nature Canada. "That's not a recipe for recovery but for extirpation."

Nearly nineteen months since the Joint Review Panel made its recommendations on the Cenovus

project, the government's decision is still pending. The Suffield Coalition continues to call on the government to reject EnCana's proposed gas drilling project in order to ensure the conservation of wildlife in the Suffield National Wildlife Area, and hopes to see this area adequately protected to support the recovery of Burrowing Owls and the many other endangered species in it.

The Suffield Coalition comprises seven groups: Alberta Wilderness Association, Nature Alberta, World Wildlife Fund Canada, Nature Saskatchewan, Southern Alberta Group for the Environment, Grasslands Naturalists, and Nature Canada. The above information is from an August 10 Press Release by the Coalition.



RICK PRICE

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*"Words can sometimes, in a moment of grace,
attain the quality of deeds."*

- ELIE WIESEL

Vocabulary, Meaning, & Method

Some mostly random thoughts about language and what we do with it

BY JUDY FORT BRENNEMAN



JUDY'S WEEDY GARDEN

THE OZ PARADE: MUCH MORE FUN THAN
WEEDING THE GARDEN!



It has been an interesting summer. Most summers, I work (writing coaching, writing, editing, and an occasional workshop), invent ways to avoid yard-work, volunteer for the Front Range Family Theatre Project (we're half-way through a five-year cycle of plays based on L. Frank Baum's Oz stories, and it's a great excuse for not weeding the garden), do one Big New Thing (this summer, I'm taking a playwriting class and an ongoing scriptwriting workshop), and read.

Reading is, for a writer, as important as writing. Reading the works of superb writers inspires me and challenges me to push myself harder in my own work. When I read, part of my brain is always paying attention to how the writer is telling the story. What metaphors does the author use? What language choices? How does the structure of the story--whether it's a single paragraph on a signpost or a 90,000-word novel--help or hinder? Is the author manipulating me, and if so, how?

A single word can make a world of difference.

Slaves or enslaved?

The metaphor you select can define a universe.

Fiscal storm

Storms are scary, unpredictable, powerful, destructive, and caused by nature, the gods or God, not caused by man...so, too, for economic ups and downs? Are we powerless against the forces of local and global finance? Are we brave sailors or tornado chasers? Do we venture forth only when the weather is calm? Who defines calm?

The June 22 issue of *The Denver Post* ran a front-page splash titled, "How much oil is that really? A little mathematical context to the spill size can put the environmental catastrophe in perspective." Reporter Seth Borenstein has the right idea -- numbers, especially large numbers, are meaningless without context -- but

even in this short article, there is plenty of vocabulary for thought.

The article begins:

"126,300,000 gallons spilled since the oil rig exploded on April 20. That calculation is based on the higher end of the government's range of barrels leaked per day and BP's calculations for the amount of oil siphoned off as of Monday morning."

First the oil rig **exploded**—that brings up an image of impressive destruction. Then millions of gallons **spilled**—which triggers an image of something not huge, but not small, either, and the gallons got out fast, all at once, like spilling a pitcher of milk all over the kitchen floor. Range of barrels **leaked** conveys an entirely different image; leaks are small, and they come out little bit by little bit. **Siphoned?** Makes me think smaller yet, sucking up a bit of mess from the surface, like using a Dustbuster to clean up cracker crumbs on the sofa.

So by the end of this short opening paragraph, I'm already beginning to think that maybe this mess isn't so bad after all. The structure of the paragraph acts as a funnel: mayhem and destruction at the beginning sloping down to a narrow neck that minimizes this catastrophe. Whether intentionally or not, the writer of the paragraph is implying that I should calm down and not worry so much.

This impression is reinforced by two of the four examples Borenstein uses to illustrate the "mathematical context" of the oil spill.

"For every gallon of oil that BP's well has leaked, there is more than 5 billion gallons of water in the Gulf of Mexico." (Patrick Semansky, AP). One gallon isn't very much. That's the size of a milk jug.

"If all the oil spilled were divided up and equal amounts given to every American, we would each get about four soda cans full of crude oil." Only four pop cans? No worse than a couple of oil changes in my car. Nothing to worry about.

And it's (somewhat) counterbalanced by his other two examples:

1) Converting the oil spilled to gasoline produces "58.6 million gallons of gas—the amount American drivers burn every three hours and 43 minutes. It's enough to fill up the gas tanks in nearly 3.7 million cars." This one is actually closer to the middle: we'd burn through the oil in less than half a day—so maybe that's not so bad (though wow, now I'm feeling really guilty about being an American, even though I ride my bike all the time); but I really don't know how many 3.7 million cars is. More than four pop cans and a gallon of milk, that's for sure.

2) *"If you put the oil in gallon jugs and lined them up, they would stretch about 11,000 miles. That's a round trip from the Gulf of Mexico to London, BP's headquarters, and a side trip from New Orleans to Washington, D.C."* This one is better in that it puts the numbers in an understandable, tangible context. It also tweaks us with a bit of humor (our round trip could have gone somewhere other than BP's HQ – to Japan and partway back to Hawaii, for example). It's almost as one-sided as the first two examples, but supports the "other" side.

I'm not saying that the author is right or wrong in his approach. I'm not defending or attacking his message. I am paying close attention to how he is communicating his message: the vocabulary he chooses, the method he uses, and the meaning he ultimately conveys.

Peter Parker's Uncle Ben told him,

"With great power comes great responsibility."

That's true for writers, not just Spiderman.

As writers telling some of the most important stories in the world, stories that help people understand and care for the world and each other, we have a tremendous responsibility. **We need to get it right.** That means thinking about the story, the message contained within the story, and the words and ways we convey that story.

Judy Fort Brenneman, owner of Greenfire Creative, LLC, helps people, agencies, and organizations tell their stories.

She created and presents the Interpretive Writing Intensive and other writing workshops and is an award-winning author, editor, writing coach, and speaker.



This article is reprinted with the permission of the author, from the Greenfire Creative e-Newsletter, August 2, 2010. Author contact information:

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The Dangers of Birding

BY PHIL HORCH

Never let it be said that birdwatching – “birding” for short – is for the faint of heart.

Phil Horch has had more bear encounters than he can count while birding in the mountains and boreal forest. Birders regularly battle biting insects, stalling vehicles, raging storms and all manner of Nature’s tantrums. Phil has twice locked his keys in the car while birding alone in remote areas.

Recently, on August 1st, this was driven home once again when Ben Velter and Milt and Elaine Spitzer were riding home after

a birding day in Brooks in Bob Frew’s jeep, with Bob at the wheel. They were in the grips of a fierce thunderstorm between Suffield and Medicine Hat on the Trans-Canada Highway.

Just at the point where the highway reaches a high rise of land, their vehicle was struck by a tremendous lightning bolt with an instantaneous clap of thunder. Bob’s jeep was brought to a halt in short order because of “fried” electronics. Our intrepid birders

were stranded in the storm until Bob’s daughter could come and rescue them.

It took several days of mechanical work and \$1200 to restore Bob’s Jeep back to an acceptable birding functioning level again! Nonetheless, each of those birders have been back out in the field once again...after all what are the chances of being struck by lightning a second time!

Reprinted with permission from the September 2010 issue of the “Sagebrush Chronicle” (newsletter of Medicine Hat’s Grasslands Naturalists).

Nature Alberta NEWS



EMERALD AWARD FOR ALBERTA NATIVE PLANT COUNCIL

The Alberta Native Plant Council (ANPC), a Nature Alberta Corporate Club, has received the 2010 "Not-For-Profit Association" Alberta Emerald Award. ANPC's mandate is to: "Promote knowledge of Alberta's native plants; conserve Alberta's native plant species and their habitats; and preserve plant species and habitat for the enjoyment of present and future generations."

ANPC is a volunteer organization that has been very successful in its mandate, carrying out a wide variety of projects and programs, including acting as volunteer stewards for four natural areas, data collection and maintaining its excellent website (www.anpc.ab.ca).

Nature Alberta sends its heartiest congratulations to ANPC for being awarded this exceptionally well-deserved honour. ANPC Director on the Nature Alberta Board is Chrissie Smith.

EMERALD AWARD FOR DR CHARLES BIRD

Legendary naturalist, botanist, entomologist and long-time University of Calgary professor Dr Charles



ABSRD

(Charley) Bird has received the 2010 "Individual Commitment" Alberta Emerald Award. The project for which he was nominated is his documenting of the moths of south-

central Alberta; to date, he has documented over 1,100 species.

Among the many awards Dr Bird has received is Nature Alberta's 1978 Loran Goulden Memorial Award for Outstanding Alberta Naturalist. Not only has he published over 260 scientific articles, but he was also the senior author of the book *Butterflies of Alberta* (available through the Nature Alberta bookstore). Dr Bird is a founding member and director of the Alberta Lepidopterists' Guild, a Nature Alberta Associate Club.

Nature Alberta is very proud to have been associated over the years with Charley Bird and is thrilled to see him receive yet another award in recognition of his tremendous contribution to natural history knowledge in Alberta.

SUPPORT FOR "LIVING BY WATER"

Living by Water, a major Nature Alberta project, recently received \$29,000 in funding from the EcoAction Community Funding Program. This is good news for the project. "Funding provided by EcoAction will allow the Federation of Alberta Naturalists [Nature Alberta] to better engage shoreline communities and to provide education on and awareness of riparian ecosystems,"

said Project Coordinator Kim Dacyk. "Our goal is to develop healthy shorelines in Alberta lakes through stewardship by the residents of shoreline communities."

The funding was announced by the Honourable Rob Merrifield, Minister of State (Transport) and Member of Parliament

for Yellowhead, who said: "As part of the International Year of Biodiversity, residents can play a part by protecting the biodiversity in their own community. The

EDMONTON'S FOUNTAIN LAKE IS AN EXAMPLE OF THE TYPE OF DEVELOPMENT IN WHICH LIVING BY WATER'S URBAN LAKES PROGRAM IS INVOLVED. WWW.NATUREALBERTA.CA



Federation of Alberta Naturalists is helping to preserve Canada's wealth of natural rivers and lakes that will benefit all Canadians."

EcoAction is a Government of Canada initiative that supports

projects that rehabilitate, protect or enhance the natural environment, and builds the capacity of communities and individuals in support of a more sustainable Canada. For more

information about the EcoAction Community Funding Program, visit the Environment Canada's website, at www.ec.gc.ca/ecoaction.

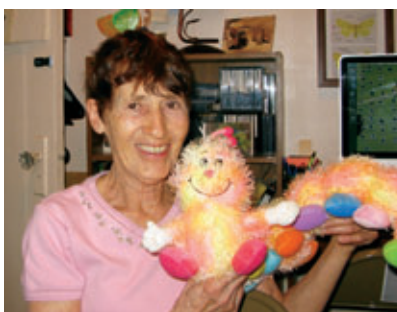
STAFF CHANGES

Kim Dacyk, coordinator of Nature Alberta's "Living by Water" Project for many years, has moved on to other things. Over the years, Kim worked very hard to promote, fund and sustain the project. Nature Alberta wishes her all the best in the future and thanks her for her long service. Kim's replacement has not yet been decided as Nature Alberta evaluates the future direction of Living by Water.

Vid Bijelic, Nature Alberta's in-house computer technology expert, is heading back to school. Vid has been invaluable in his position as we work to keep up with the techno-times. Thankfully, Vid will still be contributing to Nature Alberta and our many IT needs, but in a reduced capacity.

AWARD FOR JAN SCOTT

Late last year, Medicine Hat's Jan Scott was awarded the highly prestigious Frederick S. Carr Award from the Entomological Society of Alberta to honour her "contributions to the furtherance of entomology in Alberta". The society gives this award no more than once a year.



This award for Jan's outstanding contributions is a well-deserved and fitting honour bestowed by a society with a diverse membership and a stated objective to "foster the advancement, exchange, and dissemination of the knowledge of insects in relation to their importance in agriculture, horticulture, forestry, public health, industry and for its own sake, among the people of the Province of Alberta."

[Article by Paul Thibault; reprinted with permission from the Sagebrush Chronicle, Nov 2009, Vol 29, No. 10]

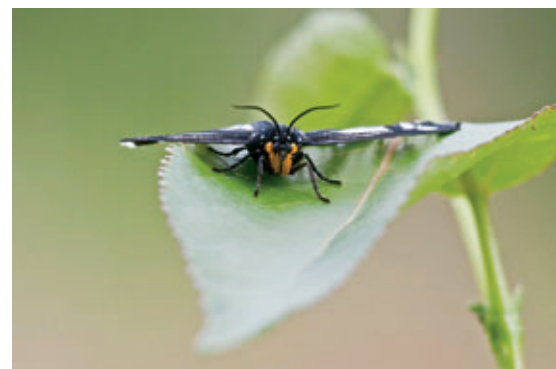
ALBERTA LEPIDOPTERA CHECKLIST NOW AVAILABLE!

The Alberta Lepidopterists' Guild (ALG) has completed a checklist of Alberta's Lepidoptera (butterflies and moths), documenting the 2,367 species known to occur in the province. The checklist is extremely well done, containing everything from: an overview of the Order; to a

JAN IS A MEMBER OF GRASSLANDS NATURALISTS, A NATURE ALBERTA CORPORATE CLUB.

review of the 63 Families that occur in Alberta; to up-to-date names of species; to details on the 171 species which had been previously, but erroneously, reported – and much more.

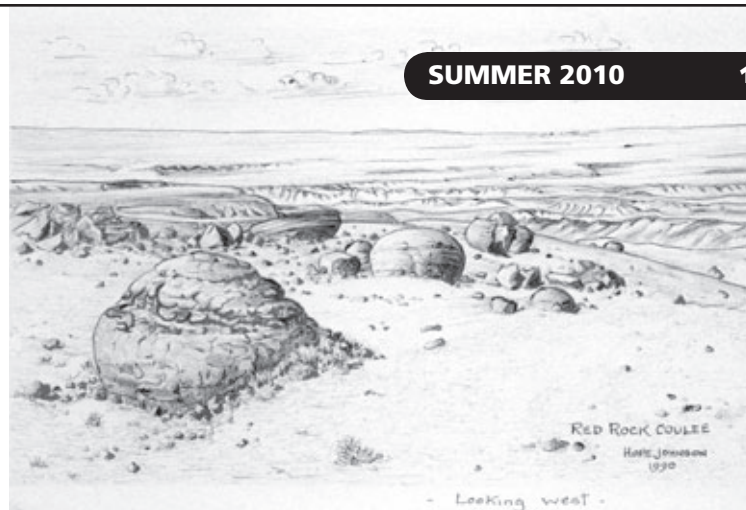
Authors of this highly valuable checklist are Greg Pohl, Gary Anweiler, Christian Schmidt, Norbert Kondla. You can download it from the ALG website at www.biology.ualberta.ca/uasm/alg/index.html. The ALG is an Associate Club member of Nature Alberta.



POLICECAR MOTH. GERALD ROMANCHUK

In Memoriam

Hope Johnson (1916-2010)



HOPE'S ART WENT FROM HIGHLY DETAILED LANDSCAPES TO SIMPLE BUT LOVELY DRAWINGS, LIKE THIS IMAGE OF RED ROCK COULEE FOR A CARD.

To tell everything about Hope Johnson's amazingly active life would be possible only in two thick volumes.

Her life in Alberta started in 1943 with a posting to the newly established Suffield Experimental Station; previously, she had been a 1st Lieutenant and army instructor in the Canadian Women's Army Corps, which she joined in 1941.

It was here in southeastern Alberta that she developed her great interest in natural history. Self-taught, she became an expert in palaeontology, fossils, geology and botany – as well as being a magnificent artist.

An expert illustrator of dinosaur fossils, Hope published her first book in 1973: *A Guide to Alberta Vertebrate Fossils from the Age of Dinosaurs*, co-authored by Dr. J. Storer. She was Curator at Dinosaur Provincial Park from 1978 to 1981. Only last year, in 2009 at the age of ninety-four, she published another book of dinosaur fossil drawings, *Guide to Common Vertebrate Fossils from the Cretaceous of Alberta*.

As a botanist, if anyone had a plant that needed identifying, Hope was the person to turn to; there appeared to be nothing that would stump her! Needless to say, her presence at Medicine Hat Spring Flower Counts was a blessing! Her book, *Prairie Plants of Southeast Alberta*, illustrated with her own drawings, is a classic*.

Red Rock Coulee, south of Seven Persons AB, was a special place for Hope. It is likely that no one has more knowledge than she about Red Rock Coulee, and she has written extensively about its history, including the origins of the massive red concretions (refuting the common myth that they started around a shell or other solid object).

Hope received many awards during her very full life, including an honorary Doctorate of Laws from the University of Lethbridge (1981)

and Nature Alberta's Loran Goulden Memorial Award (1997).

Hope's excellence as an artist did not stop at fossil drawings; many of her nature scenes, including of badlands and Red Rock Coulee, can only be described as beautiful. She shared her gift for art through many, many hours of instruction in Medicine Hat.

There's much more, of course, including her human and cultural history work – for which she was named, in 1981 by the Alberta Historic Resources Foundation, as one of fifty women who have made an outstanding contribution to Alberta society. She was also actively involved with the local Alzheimer's Society (she was President from 1981 to 1992).

Nature Alberta sends its condolences to her two daughters and two sons. Their mother was an extraordinary person indeed.

* (Copies of *Prairie Plants of Southeast Alberta* can be purchased from the Medicine Hat Interpretive Program; call 403 – 529 – 1275, or email Val at val.mhip@natureline.info.)

Up Close Naturally: Spider Silk

BY MARGOT HERVIEUX



Wherever you go at this time of year, you will find spider silk. Spiders are famous for their webs but they use silk in a variety of ways.

Spider silk is amazing stuff. The complex protein is produced by the spider's spinnerets and it comes in many forms including sticky and non-sticky. By weight, spider silk is as strong as steel but it is also very light and flexible.

The most familiar use of spider silk is for webs. Spider webs start with a y-shaped frame strung between some sort of support. Radial strands are added using non-sticky silk and then a sticky spiral is laid in place. The spider then waits at the edge of the web for an insect to come along.

Not all spiders make spiral webs. Funnel web spiders create a dense funnel in the grass and then hide in the back until an insect vibrates the flared part of the funnel. Others, including the introduced house spiders, build a simpler sheet of silk to snag prey.

Once prey is caught, spiders use yet another type of silk to wrap the meal for future consumption. By necessity, this silk

is the strongest of all the silks a spider can produce.

Spider silk is also used as a safety line by jumping spiders and crab spiders. These spiders actively hunt their prey and they let out a line of silk as they move to catch themselves if they miss a jump.

Mother spiders also create egg cases out of silk. Some leave the case to develop on its own; however, wolf spiders carry their case on their backs, while fishing spiders carry the sack around in their jaws until the babies hatch.

Silk is also used for travel. Spiders, especially the young ones, will climb to the top of a stem and let out a few strands of silk. When the wind catches the silk, the spider "balloons" to a new location.

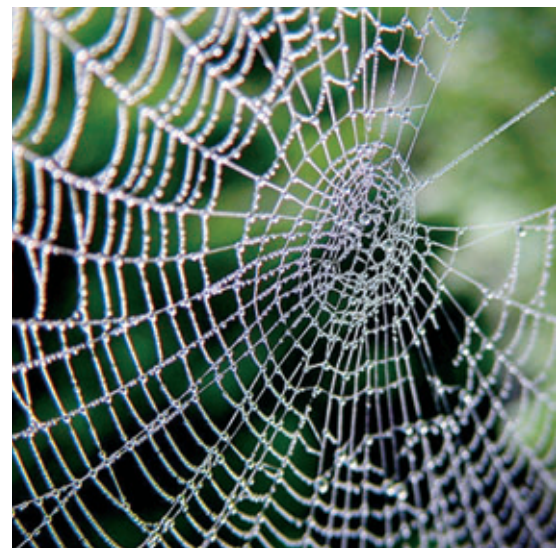
Spiders are not the only creatures that make silk. Caterpillars spin cocoons and use the silk as a safety line. Caddisfly larvae use silk to hold their houses together, and bees and wasps cap their larval cells with silk. The most famous silk comes from the silk

worm moth. This caterpillar spins the silk that humans have been gathering for thousands of years to weave fabric.

Spider silk can be found everywhere, in woods, fields and even our buildings. Not only has it helped spiders become very successful creatures, but it also gives us pleasure when it glitters with dew in the morning sun.

Want to photograph spider webs as works of art? For an easy-to-understand, good starter course, check out the website: www.pentaxbody.com/uncategorized/how-to-photo...

JOSEF STUEFER/WWW.PENTAXBODY.COM



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



DEBBIE GODKIN

Nature Diary: New Resident Flickers

BY DEBBIE AND ALAN GODKIN

It would have been the third year in a row that a pair of Yellow-bellied Sapsuckers nested in a poplar tree at the edge of our yard, but a pair of persistent Northern Flickers decided they

wanted to use the tree and forced the sapsuckers out.

The female Flicker spent a lot of time perched on a limb of the nest tree preening, paying particular attention to her right wing. Upon

looking through the camera lens, it was apparent that she had an injured wing and was missing a few primary feathers. It was a wonder that she could still fly so gracefully! The pair was successful in raising four young.

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!

Close to Home: Nature Photography in Alberta



JOHN WARDEN

Spirit Shouting

BY JOHN WARDEN

It was another one of those mornings at Elk Island National Park when everything was perfect.

There was no one else around - just me, Nature and the solitude. The rising sun had painted the sky pink and orange, and it was beautiful. Swans and geese were murmuring and honking out on the ice, and the air was warm and electric with energy. It was a buzzing energy: of waking up, of melting snow and ice, of bursting willow buds and of life coming

back to the land. It was wild and exciting, and it was filling me up. It was building and bubbling and I felt that I just wanted to shout with the exuberance and magnificence of it all. Yahhhh!

You know you make me wanna (Shout!)

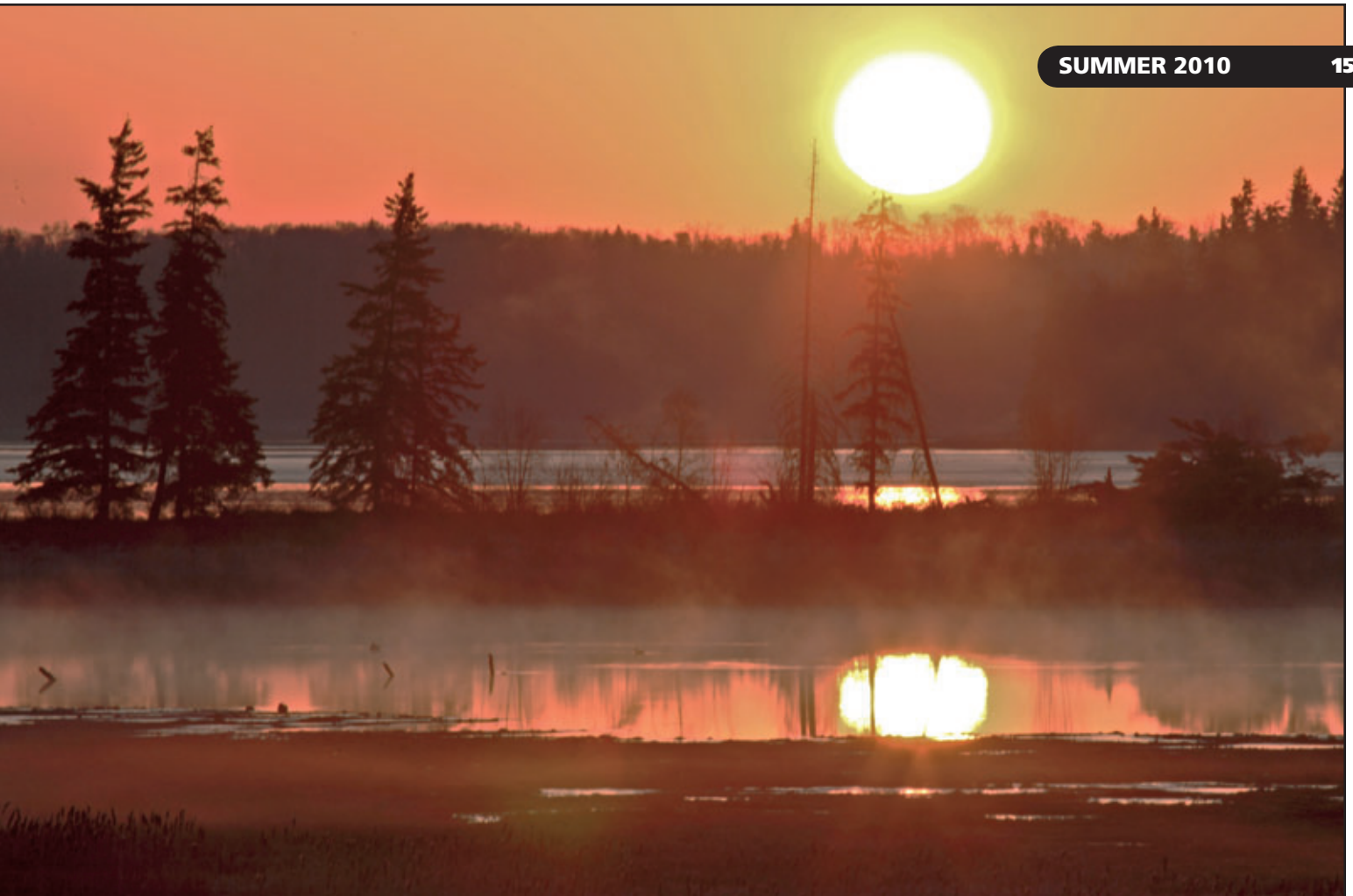
Whoop! Out of the buzzy murmur of the morning bird babble,

came the whoop of a tundra swan. It was clear and musical, a whoop with purpose, a whoop of exclamation. And then there was another, and another. Swans were whooping it up all around me. It was an ecstatic whooping of swans. A whooping celebration, a jubilation even for the rising of the sun and the warming energy of a glorious new day. And then the coyotes threw their heads back and joined in. It was an extraordinary experience of sight, sound and color.

Later that day, I was listening to a CBC radio program about an *acapella* gospel choir that was touring Canada. The program host advised that we should listen for the 'spirit shout' at the end of the song. Sure enough, apparently caught up in the wonderfulness of the song and overflowing with the energy of the moment, one of the choir members spontaneously shouted out 'hallelujah'. And it caused me to think of the swans,



JOHN WARDEN



JOHN WARDEN

and their clear note, whooping as the sun came up. To my mind, it was also a spirit shout.

*You know you make me
wanna (Shout!)*

Kick my heels up and (Shout!)

*Throw my hands up and
(Shout!)*

*Throw my head back and
(Shout!)*

Come on now (Shout!)

- ISLEY BROTHERS. 1959

In the way that one thought leads to another, I considered spirit shouting in the context of the twenty years I spent training as a martial artist. In some martial traditions, students are taught to shout or 'Ki-ai' as part of their

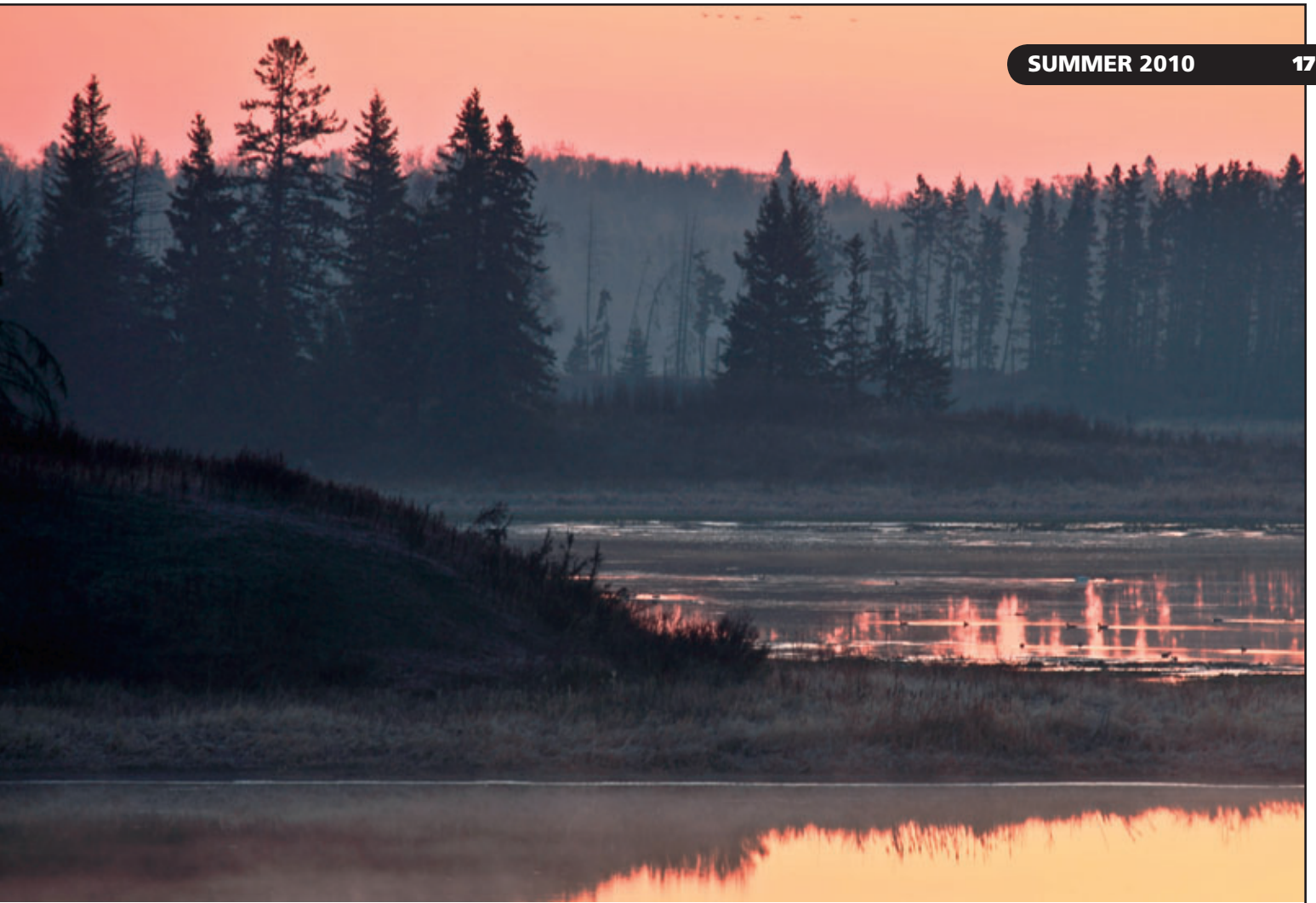
physical fighting technique, sort of like a battle cry. In other traditions, the spirit shout is an unconscious expression. Not something forced, but rather a natural vocalization flowing out of

the mounting mental and physical forces coming together in combat, a shout with the spirit of life in a confrontation with death. The martial spirit shout can be very powerful, mystical even.



JOHN WARDEN





JOHN WARDEN

Singing and fighting are just two of the many activities that can fill our bodies with energy until it overflows and we just “wanna shout.” But quieter things can have the same impact. I can remember standing in front of a painting by one of the old masters at the National Art Gallery in

Ottawa. The depth and mastery of paint was so amazing, so awesome that a quiet little spirit shout escaped me.

Wow!!

Well, a sunrise is so much more than a painting. So as the sun rose over Astotin Lake, the swans

whooped and the coyotes howled and I yelled. We were all spirit shouting in celebration as curls of mist rose from the surface of the lake and Nature, the oldest of the Old Masters, painted another masterpiece across a canvas of Alberta sky.

Ponderables

Miracles are not contrary to nature, but only contrary to what we know about nature.

ST. AUGUSTINE

The Fate of Our Bats

BY LYNSEY FRANKS

A fungus that attacks bats in hibernation, known as White Nose Syndrome, has biologists deeply concerned about the affected species' future.

Bats are said to consume their body weight in insects and other prey every night. They live anywhere from a surprising 25 to 45 years. Sadly, they are also a group of mammalian species that we know very little about.

Until recently, wind energy and habitat loss were the biggest threats to bats. Now, there's an epidemic sweeping through caves in North America, poised to affect every hibernating bat species. It's called White Nose Syndrome (WNS), a fungus that attacks them while they are in hibernation.

"It happens in the winter," explains bat biologist Cori Lausen who has dedicated over the last 10 years of her life to these nocturnal species through the study of behaviour, ecology, genetics and acoustics. "Bats lower their body temperatures to preserve fat for the winter, when this fungus grows best."

Lausen, who is based in Kaslo, B.C., started studying bats as a field assistant and "became completely fascinated with them." She now has a Masters and a PhD in bat biology and studied at the University of Calgary and the University of Alberta.

She says that it is not the fungus that ends up killing the bats — it's starvation. Because this fungus can only grow in cold temperatures, once the bat has contracted White Nose Syndrome it will arouse from its dormant state, warm up its body, and as a result, lose essential fat storage. "The fungus makes a real mess of their wings too," says Lausen. "They probably wouldn't be able to fly anyway."

Lausen is also an active member of the Alberta Bat Action Team, a working group that met with Parks Canada and Provincial Parks in early 2010 to decide what needs to be done to prevent the spread of

White Nose to the west. The solution: buy time.

By closing down high visitation caves, preventing cavers from carrying spores into hibernacula (locations chosen by the bats to hibernate), this will, Lausen says, prevent the spread through human transmission. In Alberta and B.C., it is not known where the majority of bats hibernate. Cadomin Cave, near Hinton, is to date the largest hibernaculum discovered in Alberta, with only 800 bats overwintering there. "That's a drop in the bat population bucket," says Lausen. We don't know where the rest of Alberta's bats go during the winter, though while studying bats in the province, Lausen discovered that many bats overwinter in the river valley walls.

As of April 2010, Cadomin Cave has been gated to "buy time" for biologists; full closure of Procrastination Pot, the hibernaculum in the front ranges of Jasper National

**LITTLE BROWN BATS WITH
WHITE-NOSE SYNDROME,
NEW YORK.** COURTESY
NANCY HEASLIP/NEW YORK
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION





LITTLE BROWN BAT; CLOSE-UP OF NOSE WITH FUNGUS, NEW YORK, OCT. 2008. COURTESY RYAN VON LINDEN/NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Park, was implemented on July 5 2010. With only four known hibernacula in Alberta (the other two being Wapiabi Cave near Nordegg and Wood Buffalo in Wood Buffalo National Park), there is much research left to do.

In Albany, New York, where White Nose was first discovered in North America, biologists found over 100,000 deceased bats in one single hibernaculum cave, a very obvious sign that there was a problem. “At first they had no idea what it was. It’s an interesting looking fungus,” explains Lausen. It’s thought that the fungus may have come from Europe, where all bats are legally protected due to low population numbers. Unlike in the East, bats do not hibernate in large numbers in western North America. “We’ll never see these big masses of dead bats in the west. In the summer, we will just wonder: ‘Where are all our bats?’”

It was first discovered in 2007 that bats were dying in the North Eastern United States; by 2008, biologists said there were one

million dead bats. “Since then, they’ve just stopped counting,” says Lausen.

“It’s almost guaranteed that bats are going to bring it here,” she says. Bats either migrate or hibernate; in Canada, there are 20 species of bats, 18 of which hibernate. Although White Nose can be in a cave for several years before mortality sets in, so far it has been spotted throughout Ontario and in the southern part of Quebec. “There are quite a few records stating that bats in Manitoba and Ontario have a lot of movement connections,” explains Lausen. “Manitoba is likely to see it soon too.”

Though the fungus has not yet been spotted in Alberta, bat biologists saw the disease spreading into Eastern Canada in the summer of 2009. In March 2010, the Federal Government officially announced that White Nose has made its way to Canada. “The government was slow to announce it,” says Lausen. “All hibernating bats in North America

Read all about Alberta’s nine species of bats! An excellent article can be found in the Spring 2009 *Nature Alberta*.

are now at risk of White Nose Syndrome.”

Biologists are struggling to convince the Federal Government of the urgency of the situation. Lausen notes that there is only a handful of bat specialists in Canada, and that very little is known about the hibernation and migration patterns of bats. Funding is needed to study the disease and the various species in greater depth. The US Congress earmarked two million dollars to go to nation-wide bat research last year. “In Canada, bats are mandated at a provincial level,” says Lausen. “Our chance to protect bats and plan for the future is now. For federal funding to kick in requires the species be endangered, and by then it’ll be too late.”

Some US biologists speculate that if the kill rate continues as it is, 90 per



LITTLE BROWN BAT; FUNGUS ON WING MEMBRANE, OCT. 2008, NEW YORK. COURTESY RYAN VON LINDEN/NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

cent of our North American bats could be dead in 20 years.

"It's a bleak outlook, and I don't think that people really understand," says Lausen. "It's going to have far-reaching consequences." Bats are a major consumer of pests, such as on corn crops, and of the spruce budworm on spruce trees. "The agriculture and forestry industries are going to take a huge hit, and pesticide use will likely increase," she says of the possible impacts.

There are several suggested, though temporary, solutions in the works; right now it is about buying time. A bat biologist in Manitoba, Dr. Craig Willis, has come up with something called a hot box; it is installed in the entrance to the cave and operates using a car battery and solar panel, giving the bats a place to go and stay warm. "If they become infected with the White

Nose fungus close enough to spring, they might survive through the winter, and use of hot boxes may help extend their fat supply," says Lausen.

Biologists believe that bats may never bounce back from a population impact. "They are the slowest-reproducing mammals in the world for their size," Lausen says. Most bats produce only one young per year; the pup has only a 50 per cent chance of survival. "Even if White Nose were to disappear after sweeping across the continent, bat populations would never come back in our lifetime."

Nation-wide, biologists are talking about strategies to protect the delicate species. Though, with such an intricately linked natural world, our bats are more than just a provincial or national issue – they are internationally vital.

YOU CAN REALLY HELP!

- Prevent human transmission of WNS by not going underground (into a mine or cave) using any equipment or clothing that has been in areas where bats roost in eastern North America or Europe
- Report to your local Government of Alberta biologist:
 - observations of multiple bats flying in winter during the day
 - observations of multiple dead bats
- Canadian or provincial WNS funding sources have not yet been established, but donations to continental efforts can be made to Bat Conservation International or the National Speleological Society
- Take every opportunity to inform others of the huge benefits of bats and the seriousness of this issue
- Learn more about White Nose Syndrome:
 - www.fws.gov/WhiteNoseSyndrome/about.html

HOUSE OF COMMONS OF CANADA

CHAMBRE DES COMMUNES DU CANADA

BILL C-469

PROJET DE LOI C-469

An Act to establish a Canadian Environmental Bill of Rights

Loi portant création de la Charte canadienne des droits environnementaux

Whereas Canadians share a deep concern for our environment and recognize its inherent value;

Attendu :

que les Canadiens portent un intérêt profond à leur environnement et reconnaissent sa valeur intrinsèque;

Whereas Canadians understand that a healthy and ecologically balanced environment is inextricably linked to the health of individuals, families and communities;

que les Canadiens comprennent qu'un environnement sain et écologiquement équilibré est indissociable de la santé des individus, des familles et des collectivités;

Whereas Canadians have an individual and collective responsibility to protect the environment of Canada for the benefit of present and future generations;

que les Canadiens ont une responsabilité individuelle et collective de protéger l'environnement du Canada pour les générations présentes et futures,

Whereas Canadians want to assume full responsibility for their environment, and not to pass their environmental problems on to future generations;

que les Canadiens souhaitent assumer l'entière responsabilité de leur environnement et ne pas transmettre aux générations futures leurs problèmes environnementaux;

Whereas Canadians understand the close linkages between a healthy and ecologically balanced environment and Canada's economic, social, cultural and international interests;

que les Canadiens comprennent les liens étroits qui existent entre un environnement sain et équilibré et les intérêts économiques, sociaux, culturels et internationaux du Canada;

Whereas Canadians have an individual and collective responsibility to protect the environment of Canada for the benefit of present and future generations;

que les Canadiens ont une responsabilité individuelle et collective de protéger l'environnement du Canada pour les générations présentes et futures,

Whereas Canadians want to assume full responsibility for their environment, and not to pass their environmental problems on to future generations;

que les Canadiens souhaitent assumer l'entière responsabilité de leur environnement et ne pas transmettre aux générations futures leurs problèmes environnementaux;

Canadian Environmental Bill of Rights

A private member's bill was recently introduced in Parliament to enshrine the right of all Canadians to a healthy environment. Bill C-469 had its second reading and debate in the House of Commons in May 2010.

The Bill:

- Requires the federal government to take action to protect Canadians' right to a healthy environment.
- Ensures access to environmental information and the right to participate in decisions related to the environment.
- Expands the right to request investigations of environmental offences and bring environmental issues to the courts.
- Provides whistleblower protection for employees.
- Ensures accountability by giving Canadians the right to bring the federal government to court when it fails to enforce environmental laws.

Talk of an Environmental Bill of Rights has been going on for decades. Many people and groups think it is time to actually enact one.

If you wish a copy of the bill or to show support for it, contact your Member of Parliament.

FEATURE ARTICLE

Woodland Caribou in Jasper National Park

BY DICK DEKKER

SOME HERDS DOING WELL, OTHERS NOT SO WELL, AS REVEALED BY 20 YEARS OF AERIAL CENSUS.

The decline of Alberta's caribou has often made the news, and conservation groups have repeatedly warned that the species will become extinct unless something is done to stop the escalating destruction of its old-growth wilderness habitat. The figures given are indeed startling. In the 1960s the provincial population was estimated at 7000-9000. By the end of 2009, it had dropped to less than 3000.

However, to roughly paraphrase Mark Twain, reports of their death are greatly exaggerated. First of all, the downturn needs to be

seen in a historic perspective. Based on government records, the population peak of half a century ago followed on a decade of intensive poisoning of the caribou's natural enemies in combination with an unusually long period of mild winters. At that time, all hoofed mammals, not only caribou, were at a high. However, by 1966, after routine wolf poisoning was finally halted, the predators came back with a vengeance, so to speak, taking advantage of a huge prey base weakened by starvation due to overgrazed winter range and record snow falls. At that time, the caribou had only one way to go: *down*.

It took years of sensible management before wildlife populations in western Alberta found their dynamic equilibrium, but at much lower levels than before. Unfortunately, Alberta's caribou continued their decline, and the reasons are well-known. The basic cause is the breaking-up of formerly closed forests by resource industries. A dense network of access roads and cutlines are now used by people on ATVs, while the clearcuts have expanded habitat for deer, elk and moose, which in turn attract more wolves, increasing predation pressure on caribou.

Even in Jasper National Park (JNP), some herds are in decline. This is surprising, for there is no hunting, no forestry, no oil and gas exploitation, and no motorized travel on Jasper's backcountry trails. Furthermore, park staff are now discouraging human disturbance (by skiers and their dogs) in critical caribou winter ranges such as the Bald Hills and the Tonquin Valley. However, the hopeful point is that not all is bleak. Apparently, at least one of the park's major caribou herds has been holding its own for some twenty years.



**WOODLAND
CARIBOU LICKING
SALT FROM A
ROADWAY.**

JOSEPH HALL

AERIAL SURVEYS IN JASPER NATIONAL PARK

The mountain or woodland caribou native to western Alberta was declared a threatened species by COSEWIC decree in 2002, and a recovery action plan for JNP was implemented in 2005. The first objective was to monitor the park's population through yearly helicopter surveys during the fall mating season when caribou herds assemble in the alpine. The best time to do so was after a fresh fall of snow. As well, chartered helicopter crews gun-netted a number of animals to be fitted with radio telemetry. The objective was to have twenty collared caribou in the field as a means to learn where they go and perhaps how they die, but also to serve as a control on the accuracy of the visual aerial counts. The "grey ghost of the northwoods" is notoriously hard to spot in forest cover. A lone caribou and even a herd can be easily missed from the air. To arrive at a population estimate, the researchers extrapolated the percentage of collared animals discovered from the air to the total number seen. For instance – in simple terms – if they had spotted 75% of their collared caribou, it could be assumed that they had also seen only 75% of the total population, which was then calculated to be 25% larger.

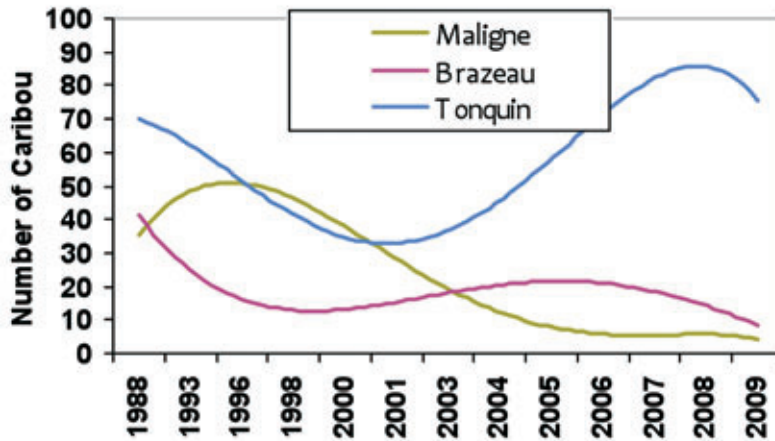
Caribou in the northern portion of JNP and adjacent provincial lands were monitored by the Alberta Fish and Wildlife Division, whereas JNP personnel primarily concentrated on caribou habitat in south Jasper, which included the Brazeau and Maligne ranges and the Tonquin Valley. After five years of data gathering, JNP biologists Layla Neufeld and Mark Bradley produced a comprehensive and well-written progress report, which includes the following information.



1. CARIBOU SURVEY CHART FOR SOUTH JASPER NP

(supplied by Layla Neufeld)

Graph representing ten years of aerial surveys in three southern districts of Jasper National Park. While the Brazeau and Maligne herds declined, the Tonquin Valley herd increased for reasons that are not clearly understood. (Chart courtesy Layla Neufeld, JNP caribou biologist.)



SOUTH JASPER:

Based on surveys conducted in four consecutive years, 2005-2008, the caribou population of southern Jasper National Park was estimated, respectively, at 147, 151, 93, and 127 animals (graph #1). Statistically, the three highest figures are not significantly different, and the low of 93 in 2007 was an anomaly that should not be taken out of context. According to the researchers, spotting conditions in the Tonquin were poor that year. Unfortunately, the 2009 estimate was even lower than 90. Furthermore, recruitment and survival rates turned out to be substantially below normal. According to the JNP caribou biologist: "These latest data show a very real drop in the caribou population size in southern Jasper National Park."

A depressing finding was also that the number of caribou

spotted on the Maligne range, which used to be one of their main hang-outs, had dwindled to less than half a dozen. So had the remnant population in the Brazeau district. Better results

were obtained in the Tonquin Valley with about 80 caribou counted, substantially more than in earlier years. The major reason for the ups and downs was not exactly known. However, the obvious explanation that caribou had switched from the Maligne to the Tonquin was not supported by DNA evidence.

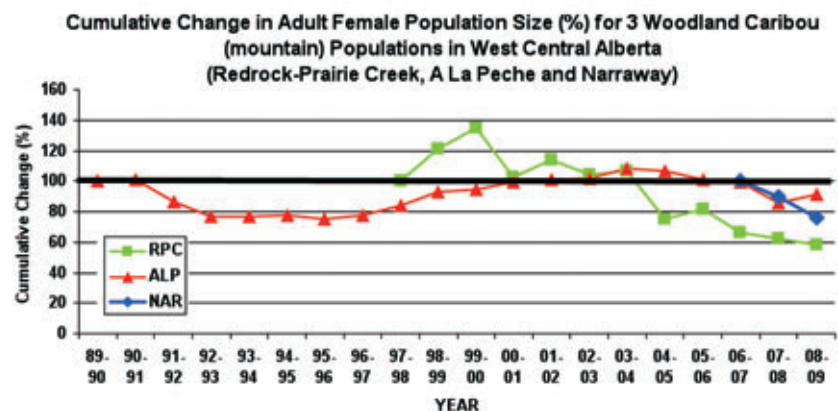
NORTH JASPER:

By comparison, the "A la Pêche" caribou herd of the northern district of JNP has remained remarkably stable since 1989 (graph #2). Roughly 120-150 members of this herd remain year-round in the mountains and about 30 migrate to the forested Alberta foothills and return to the mountains in summer, although some may stay in the foothills all year. These details were provided by Kirby Smith, the senior AF&W biologist stationed in Edson. He further explained that the decline

2. CARIBOU SURVEY CHART FOR NORTH JASPER NP

(supplied by Kirby Smith)

Population estimates (adult females only) for three mountain caribou herds in western Alberta. The A La Pêche herd, which frequents the northern district of Jasper National Park, has remained quite stable from 1989 to 2009. The dip during the mid 1990s was mainly attributed to traffic kills on the Hinton-Grande Cache highway. (Chart courtesy Kirby Smith, senior biologist AF&W, Edson region.)



of the North Jasper caribou herd in the mid 1990s was attributed to vehicle collisions on the #40 highway between Hinton and Grande Cache.

Over five years of conducting aerial surveys and meticulous record keeping, JNP biologists have gained remarkable expertise in spotting the elusive “grey ghost” from the air. The percentage of collared animals counted in alpine regions of Jasper National Park has grown steadily from 55% in 2005 to respectively 73, 79, and 83% in 2006-2008. In the most recent survey of 2009, the score was a full 100%. Although the researchers are never fully satisfied with the real and statistical merits of the data, their evident success invites the conclusion that collaring is no longer a prerequisite for doing an adequate survey job. A management decision to that effect would release the defenceless animals from the horrendous ordeal of helicopter pursuit, capture, and man-handling, with all the inherent and proven risks of injury and death. As old time park wardens and some conservationists have insisted all along, the responsible way to survey the park’s caribou is to leave them alone and monitor the population from the air, even though a few animals may be missed.

Kirby Smith does not apologize for having collared the caribou.



GORDON COURT

“It has provided the objective information that has led to our current knowledge. What I do apologize for is that we have put these animals through a lot

without a clear guarantee that we would actually change any of our land use practices once we found out the answer to the questions posed by the caribou’s plight.”

Dick Dekker, PhD., is a wildlife ecologist living in Edmonton.

Fun With Birds:

The 2010 Grassland Tour

BY BOB PARSONS

BACKGROUND

The Brooks and Lake Newell May Species Count, now in its 12th year, is traditionally held on the May long weekend: in 2010, on May 22-23. The Count continues to be a joint Edmonton/Calgary multi-club initiative, drawing over 40 participants from central and southern Alberta, as well as northerly parts of B.C.

The well-defined count circle includes many reservoirs – Kitsim, Tilley A and Tilley B, Lake Newell, Bantry 1 and Bantry 2, as well as Eastern Irrigation District grasslands and spillways. There are many well-maintained Ducks Unlimited (DU) projects in the area. The Bow River also plays an important role. The

communities of Cassils, Bow City, Duchess, Patricia, Scandia, Rainier and Rolling Hills are dotted throughout the count circle and contribute to the event. Native prairie grasslands, woodlots and agricultural lands are well studied by those taking part in the 2-day event.

PREPARATION

As per usual custom, I arrived six days prior to the weekend enabling me to contact local press and media. Linda Hajash, my liaison in Brooks, again set up a nice distribution of brochures and flyers. Tillebrook Park campsite was our headquarters again and on arrival I was informed that there would be complimentary camping for everyone this year!

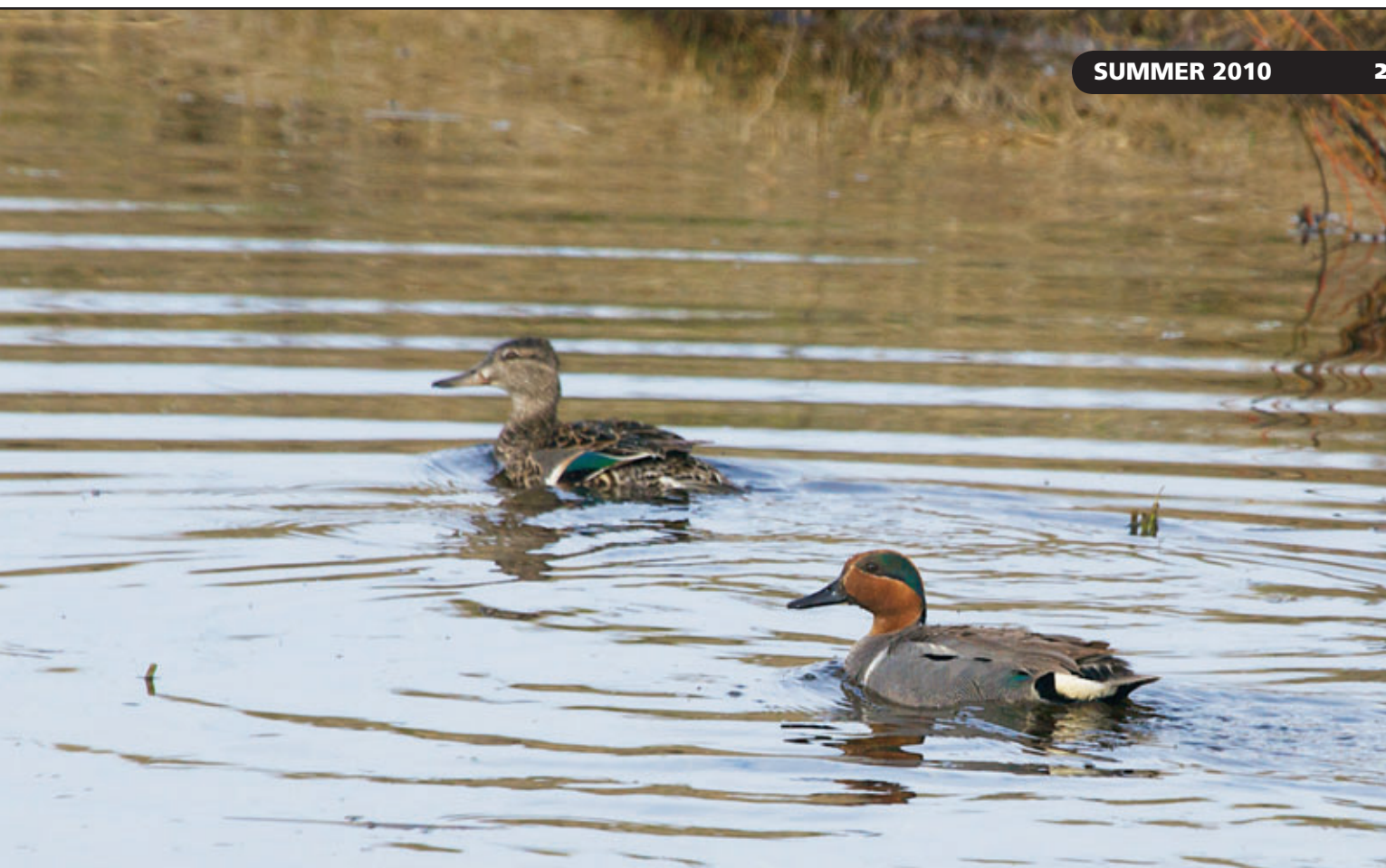
Ben Verner from Medicine Hat had his motor home all set up, under the watchful eye of his charming wife Donna who told me: “you sleep here”. Nice – no back strains from crawling in and out of my tent! Ben and I were soon out and about, scouting the park’s surroundings as well

as the immediate area. It was soon obvious that after all the recent wet weather most of the reservoirs were topped up and all ponds and sloughs were overflowing. To be honest there was water lying in areas where I had never seen moisture before, so it looked like an interesting few days lay ahead.

Sponsorship funding from Cenovus, TransCanada Pipelines and DU (Canada) allowed us to freely spend up to fifty gas-scouting dollars each day. The first couple of days were spent in the Kitsim, Cassils and Rolling Hills areas; around 80 species were seen. Whimbrel numbers (300) appeared to be way down from previous years but we were fortunate to find a Ruff mixed in with Black-bellied Plovers and Red Knots at the north-west corner of Kitsim Reservoir. It was soon apparent that “peeps” were going to be hard to find and even the folks at DU and EID were not sure which species were around! Tillebrook was relatively quiet during the days leading up to the count... very few warblers, intermittent waves of sparrows, no kinglets, few flycatchers but big numbers of Swainson’s Thrush and Common Grackle.



BLACK TERN. RICK PRICE



A PAIR OF GREEN-WINGED TEAL. RICK PRICE

COUNT WEEKEND

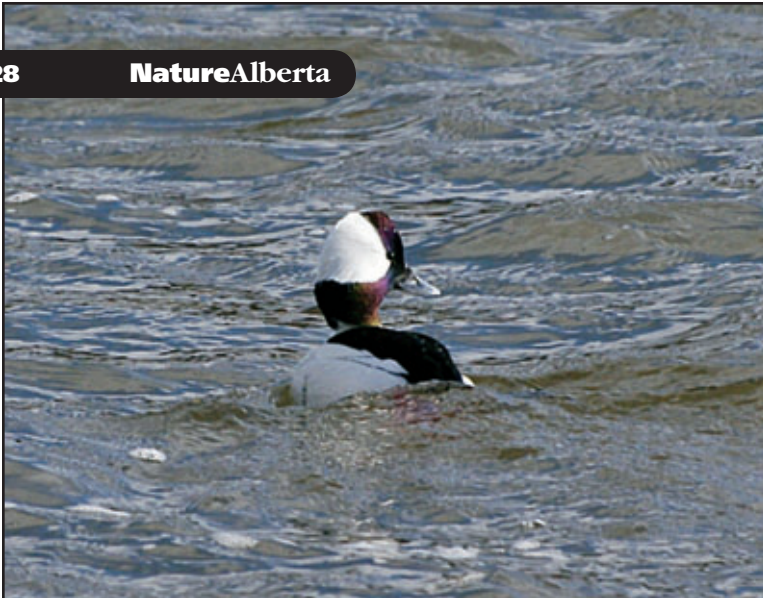
Weather conditions were cool and overcast as the 40 plus participants started to count in the nine zones. Nine regions were represented this year and I was especially delighted to see the big, enthusiastic Calgary contingent as well as the regular “keeners” from Red Deer (who wimped out staying in a local motel!). A total of 161 bird species were counted over the weekend, which is just about average for the count but, checking on the zone results, it was obvious we missed some of the usual suspects: Turkey Vulture, Prairie and Peregrine Falcon, Stilt Sandpiper, Short-eared Owl, Say’s Phoebe, Cedar Waxwing (!), Pine Siskin and American Goldfinch.

Some thought that some species were late, others queried that some species had overflowed the area due to weather conditions.

Nineteen species records – i.e. high number of individual birds – were broken this year. Broad-winged Hawk (9) was a real surprise, plus Bufflehead (175), Black Tern (569), Gray Catbird (21), Swainson’s Thrush (290) and Ovenbird (4). In fact a kettle of 8 Broad-winged Hawks was seen just west of Brooks, an exceptional sighting by Wes Grout and crew. Higher than average totals include American Bittern (10), Green-winged Teal (66), Black-necked Stilt (146), Brown Thrasher (20) and Baird’s Sparrow (30). A Lapland Longspur was

seen in the Contra Costa Project which is, I think, a first for the count.

As a consequence of the cold, sometimes windy, conditions, and maybe because of early migration, some species were seen in low numbers compared to previous years. Western Grebe (17), White-faced Ibis (1), Red-tailed Hawk (19), Red Knot (36), and Pectoral Sandpiper (2) all come to mind. Only 20 Whimbrel were counted, down from an average of close to a thousand. Some low figures may be cause for concern but the reader has to wonder if the late cold spells played havoc during the migration north. I should also add that one lone Burrowing Owl was seen close to Kinivie Marsh.



I managed to get good views of many McCown's Longspurs in the sections I was counting but I somehow managed to miss Lark Bunting and Lark Sparrow. I also looked for Bobolink in the usual

the nest had blown down. The Medicine Wheel Project resulted in some great birding again although 18 big electric pylons were down after the early May ice-storm.

spots but came up empty-handed like everyone else! Golden Eagle was missed by Milt Spitzer in Zone 8 this year; I think he said

Curtis pointed out a Ferruginous Hawk's wire nest, placed on one of the towers by Hardy Pletz a few years ago, that was lying on the ground.

Overall accessibility was excellent, level of expertise was of the usual high standard and it was satisfying to see the enthusiasm shown again this year. We again organized a nature walk for the children staying in the park. Special thanks to Donna and Terry who will try to post full results on the Nature Calgary website. Sponsors, we could not do this without you, so plenty of gratitude from those who hope to be back next year!

The Milk River and Writing-on-Stone Count

BY BOB PARSONS

PREPARATION

We saw lakes where we've never seen lakes before!

On completion of the Brooks count, I immediately headed to Milk River and on to Writing-on-Stone Provincial Park, our traditional count headquarters. It was soon apparent that the wet weather had affected this southerly area too, with high water levels in the wetlands and flooded fields wherever I looked. The park was in good shape and emptying out after the long weekend. I was not expecting too much company, as Del Huget from Lethbridge was not expected to scout till mid-week. Tuesday and Wednesday saw cool, overcast conditions and I was able to check out most of the coulees,

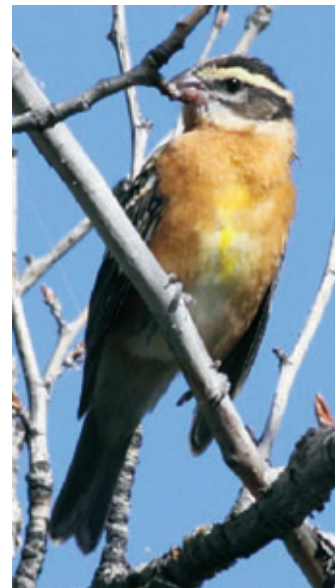
as well as the Pinhorn Grazing Reserve where I came across a pair of Greater Sage-Grouse.

Secondary Road 880 from Highway 501, down to Aden, can be a bird watching Mecca and I saw many McCown's Longspur, as well as a Prairie Falcon being harassed by a Golden Eagle. Sprague's Pipit was active but no Grasshopper Sparrow this year. Viewing five elk was a pleasant surprise as I entered the Ross Ranch, where I found a few Lark Bunting and over 50 Swainson's Thrush. The predicted rain-showers on Wednesday night soon turned into a two-day continuous downpour and by Friday evening it was soon

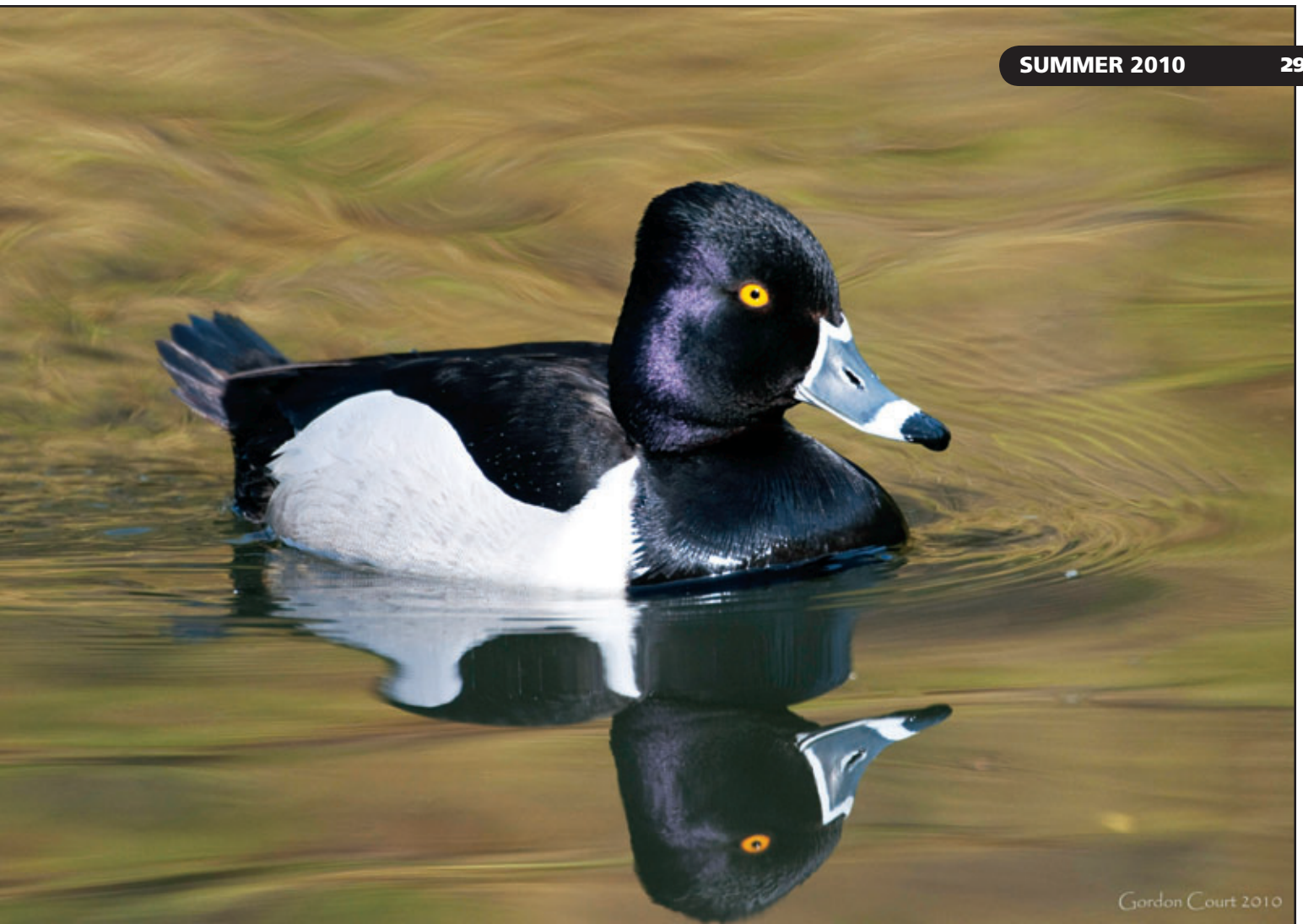
obvious that many of the dirt and gravel roads in the count square were going to be impassable. A brief overnight visit to Medicine Hat resulted in aqua-planing in both directions!

COUNT WEEKEND (MAY 28-29)

Wet heavy snow greeted Wes Grout and me early Saturday morning, so we quickly decided to concentrate on the paved 501.



FEMALE BLACK-HEADED GROSBEAK. SANDRA HAWKINS



Gordon Court 2010

RING-NECKED DUCK. GORDON COURT

Wes said, "I'll go west towards Milk River and Coutts, then I'm heading home to Strathmore!" Del Huget phoned to say his team of four would do their best counting in the northern section and west towards Pakowki Lake, so it was left to Marie Otis (park staff) and yours truly to concentrate on the paved eastern section of the 501. The overcast morning did not produce any bird species of note and we were not able to access any of the coulees to the north of us. I did not fancy waiting two hours or so for a tow truck! No "peeps" (a grouping of the smaller sandpiper species that are often difficult to tell apart)

were noted in the many roadside sloughs, and duck counting kept us both very busy. "I did not come all this way to count ducks". Quite a few species were missing but who is going to perch on a fence post in these poor conditions! We did manage to find a few Ferruginous Hawks and many Swainson's of varying colour. Last year's cool spring breeding conditions had affected the Red-tailed Hawk population and we were hard pressed to find any this time around. Northern Harrier were active and two Rose-breasted Grosbeak were found in a run-down property. We came across fair numbers of Avocet

and Marbled Godwit, but only one Loggerhead Shrike. The day's tally was a meagre 60 species with a travel distance of 150 km. Del phoned to say that he and his crew seemed to have had a better day than expected, totaling close to 70 species in the Crow Indian Lake and Etzikom Coulee areas. Terrible road conditions affected his counting too, but he had good numbers of grebe, swallow and Black-crowned Night-Heron.

Heading out, I was able to access Verdigris Lake, the southern sections of Etzikom Coulee and Crow Indian. I searched in vain for quite a few missing species – Clark's Grebe, all

the “peeps”, Mountain Bluebird, and Bullock’s Oriole – but many of the acreages were productive, with McGillivray’s Warbler, many Swainson’s Thrush (again), Western Tanager, and Great-horned Owl. The wet weather closed in again as I headed to a soggy and desolate Writing-on-Stone Park. Del phoned to say that continuous downpours in Lethbridge had prevented him from venturing out to meet up with me. “You did not miss much,” I announced!

The final total of 119 species, plus five during Count Week, is below average for the count (as expected) and one can only hope for better weather next time around.

Count highlights include 1200 Eared Grebe and 860 Ruddy Duck

at Verdigris Lake, 5 Bobolink at the wonderful Gilchrist Ranch and a Black-headed Grosbeak found at a feeder in Milk River townsite. Ring-necked Duck (51) were spotted in a large group on the east side of Verdigris. 132 Swainson’s Thrush was a new record as was Wilson’s Snipe, Eastern Phoebe and Greater Scaup. Green-winged Teal (6) were spotted in a roadside slough, traditionally a tough duck to find on this Montana border.

Notable by their absence or low numbers include all the “peeps”, Western Grebe (1), Turkey Vulture, Say’s Phoebe, and only one White-faced Ibis (35 reported in the Lethbridge count!). Warblers were also in short supply with only five species counted. Hawk

numbers were poor but again many sections were not surveyed; seen were Ferruginous (5), Red-Tailed (3) and Swainson’s (30). A lone Burrowing Owl was found by Del Huget but outside the Count Week period.

Many thanks must go to the park staff and the seven participants who did their best in very tiring conditions. Bravo everyone! Gratitude to our sponsors as well – Cenovus, TransCanada Pipelines, Ducks Unlimited and the Wildbird General Store (in Edmonton). This count is of real importance due to its isolation, but the habitat and scenery is quite unique, in my opinion. Count results will be posted on the Nature Calgary website when we have figured out how to do it!! See you all again soon, I hope; we will be back.

Snow Goose Chase 2010

BY BOB PARSONS



The annual Snow Goose Chase was held on the third weekend of April and was the anticipated success despite the cold, dry conditions we were accustomed to the past couple of years. Six buses of inner-city school children, and other agencies, were all booked solid and the three buses for the paying public were sold out by the first week in April! All participants were expecting to experience local nature along with the customary spring migration of ducks, swans, geese, hawks and other bird species. Some local naturalists were concerned about the very dry conditions and some thought the migrating Snow Geese might overfly the Beaverhill Lake/Riley area, or even move further east towards the Saskatchewan

border. As it happened, buses had to travel as far as Holden to find the thousands of Snow Geese north and south of the town. Many thanks must go to Jim Lange, Bob Gehlert and others for their persistence and enthusiasm during the scouting period leading up to the Chase weekend.

This year we cannot mention frozen lakes and sloughs as there was very little water to be found in them! The buses from Percy Page Centre were able to stop at a couple of locations at the north end of Hastings Lake and some excellent bird species were spotted: grebes, merganser, Bald Eagle as well as some light coloured Red-tailed Hawks. Janos

GERALD ROMANCHUK

Kovacs, one of the scouts, thought that there was “more variety of birds seen than last year at Hastings”... but I still think this year’s migration patterns were unsettled.

The buses eventually made their way to the Tofield Community Hall to view the various exhibits and enjoy coffee and muffins compliments of Synergy and UMC Financial. A brief visit was made to Amisk Creek and Parsons Quarry to view the small numbers of migrating waterfowl, but as expected low water levels were again apparent and no rarities were spotted. The Great-horned Owl on nest made for great viewing; then it was off to the Legion for the usual gastronomic buffet luncheon!

After this break, it was back on the bus to look for the “Snowies” (Snowy Owls) which had been scouted out by Bob G. and his team. The activity at the Ryley dump area was pretty well inaccessible, and it was only when the buses arrived in the Holden area that participants were able to view the thousands of geese north and south of the village. The ponds to the south of Holden

were exceptional in that all five species of geese were all mixed in together, including Cackling Goose and Ross’s Goose. There were also good views of Red-tailed Hawk, Rough-legged Hawk, Swainson’s Hawk and Northern Harrier.

Approximately 50 species were seen by most buses, which is just below average for this event. I would like to thank all the exhibitors for making the day so special and a special thank-you must go to all the volunteers who made the day so memorable for all those who took part. We could not do this without you! As usual the sponsors were generous in their support and they played a huge part in making the Chase the event it is. The Edmonton Nature Club will never forget all the efforts and enthusiasm! Let us hope we can do it all again next year!

THE INNER-CITY BUSES

Here are comments from some of the children and the teacher who took part in the Snow Goose Chase.

Dear Mr. Bob Chase.

Thanks for making the snow goose chase, I really had fun – here are some things I liked about



GERALD ROMANCHUK

it when we went to Tofield. 1) Hiked to the beaver dam and lodge. 2) Owls – saw a real barred owl who was blind. 3) Community centre we had a nice lunch, activities like the dipping pool, we saw the zoo guy with raptors. 4) The bus got stuck in the mud so played in the field. Watched a big machine (Hutterites) pull the bus out of the mud, we were playing tag while the bus was getting out of the mud then we saw snow geese flock in a pond and looked through binoculars at them. 5) Tofield museum was fun and it was all free. After we got to go around and look at some things, we got swag that means free things. At the museum we got to look at things that were really old like from the 1900, I might be wrong because I’m only guessing. Thank you Bob Chase and everybody, from *Johnny T.*

Dear Mr Bob Chase.

Thank you for the trip. First we went on a hike and saw 5 beaver dams and one real beaver. Next we went to Tofield town, went past and stopped in the middle of nowhere it was exciting we went for a bathroom break and we saw a real barred owl who was blind



GERALD ROMANCHUK

we got to pet him. Next we went to the Hall we had lunch there the lunch was hamburger but I pulled off my lettuce. What we also had was apple juice and had a choice of vegetarian and meat. You also get rice crispy chocolate or regular both with sprinkles. Then I went to see the owls then I saw the shrimp and one saltwater crab then a centipede there was a scorpion and a snake. Then I got to carve part of a duck then I got a pencil, sticker, magnet and there were whistles but Sarah got last one. When we got on the bus we drove for a little then we got stuck in the mud we made a straw fort then played tag and a bob cat came to get the bus. Finally we saw snow geese there I think 140 of them. Then we looked through telescopes, got back on the bus and went home! Thanks for this wonderful day it was awesome! From *Nakomis*.

To our Wonderful Snow Goose Chase Sponsors! My name is Julie Mouris, and I am Program Coordinator for the Inner City Children's Program here in Edmonton.

When I asked many of the kids if they had ever travelled around Alberta, many of them said no. A significant proportion of the children we work with are immigrants and refugees. Although they have come from elsewhere, they do not always have the chance to go outside the city they now call home, to see the beauty that the rest of Alberta has to offer. Even for those



GERALD ROMANCHUK

families who have been here their whole lives, other barriers often stand in the way of travelling around the province for pleasure. Our children were ecstatic to have the chance to run around in a field, see animals in their natural habitat, and simply have fun with their friends on a full-day field trip.

Sincerely, *Julie Mouris*.

At Last... a Good Use for an iPhone!

Marilyn Ross, a *Nature Alberta* proof reader, reports that you can now get the full Sibley eGuide to the Birds of North America – with full descriptions, photos and their songs! The guide is available as an app for iPhone and iPod Touch.

Price of the Sibley eGuide is only about \$30 – but of course, as Marilyn pointed out, first you need the iPhone or Ipad!



New *Birds of Canada* Is User Friendly

REVIEW BY: PHIL HORCH

Since 1966, the authority on the status of Canada's birds has been Earl Godfrey's 428-page coffee table book, *The Birds of Canada*, which came out in a revised edition in 1986. Now there is a worthy rival to Godfrey's tome and it is decidedly more user friendly.

Just published by Lone Pine Press is the new *Birds of Canada* by Canadian authors Tyler Hoar, Ken De Smet, R. Wayne Campbell and Gregory Kennedy. This smaller, novel-size 528-page first edition is handier to handle and read and will be helpful as a reference publication, especially for those less familiar with Canada's rich avian population. The hard cover is brightly adorned with a magnificent photo of a Snowy Owl by Jean Chiasson (a soft cover is also available; list price is \$32.95). There is a colour-keyed table of contents divided into bird families with corresponding colours on the edge of the pages, allowing quick location of specific bird groups. In addition there is a pictorial reference guide at the beginning of the book (pages 5 to 21) with miniature illustrations of every common Canadian species, allowing the searcher to find the bird they wish quickly and then turn to the page with its information.

The well-written introduction describes some of the prime birding sites in every province of the country, though it is far from being comprehensive and many fine birding areas have been omitted.

The introduction covers the gamut of birding more at a beginner level than advanced, making this book designed more for a mass market.

The organization of *Birds of Canada* is one of its greatest appeals and makes it much more user friendly than Godfrey's version. Each page is dedicated to only one species featuring both a photograph and coloured illustration with accompanying write-up and maps. Godfrey's book has marvelous illustrations by John Crosby of some species, but not all, and they are not grouped together with the write-up, causing the reader to flip back and forth trying to match things up. *Birds of Canada* has everything on one page, and the range maps are superior because they are multi-coloured – showing not just breeding range (as per Godfrey), but seasonal distributions and migratory routes. Also, the range maps are more up-to-date because of their recent creation.

The write-ups are similar to Godfrey's in that they include ID descriptions, bird size, habitat, nesting information and voice. A helpful addition to the write-ups includes descriptions of similar species. Because of space limitations, this publication is unable to show all plumage variation among species, such as one would find in Sibley's field guides, but



Tyler Hoar, Ken de Smet, Wayne Campbell, Gregory Kennedy. Lone Pine Press. ISBN 978-1-55105-603-6; 528 pages. Hardcover. Retail List Price: \$39.95. 2010

an effort has been made to show male and female plumages where there is a difference and also to show the bird both standing and flying where that is important to identification. Among shorebirds, however, an effort has been made to show breeding and non-breeding plumages.

Overall, this is an excellent addition to Canada's bird literature and much-needed because of recent changes in bird populations and ranges. It documents 451 species that one could commonly expect to see in Canada; there are also illustrations and brief write-ups on some vagrants and rarities at the end of the book. At \$39.95, bird lovers will find this book a worthy investment, especially considering that every page is colourfully illustrated.

EDITOR'S NOTE:

Lone Pine's *Birds of Canada* should not be confused with another *Birds of Canada* published this year by Dorling Kindersley Publishers of New York.

First Hand: Following Mother Merganser!

BY PAUL THIBAUT AND JAN SCOTT

Medicine Hat naturalist and birder Paul Thibault reports a strange but exciting event in the southeast Hill section of the city on Thursday July 1.

The southeast Hill is an older, heavily-treed, residential area just up the hill from downtown.

Jan Scott, well known local lepidopterist and naturalist (see article, pg 10), was walking her dogs when she suddenly came across a mother Common Merganser and her ducklings on the shale pathway. The duck must have made a nest somewhere in the area, although she had never been seen before.

Mother Merganser took her brood down the hill towards South Railway Street, the busy street that separates downtown from the CPR railyards. Jan gave Paul a call from her cell phone, and he came to meet her on the trail.

Being at the top of the hill, Paul was not very close when he took the pictures. The sequence of photos shows the ducks walking along the back of the Pattison Funeral Home, then across South

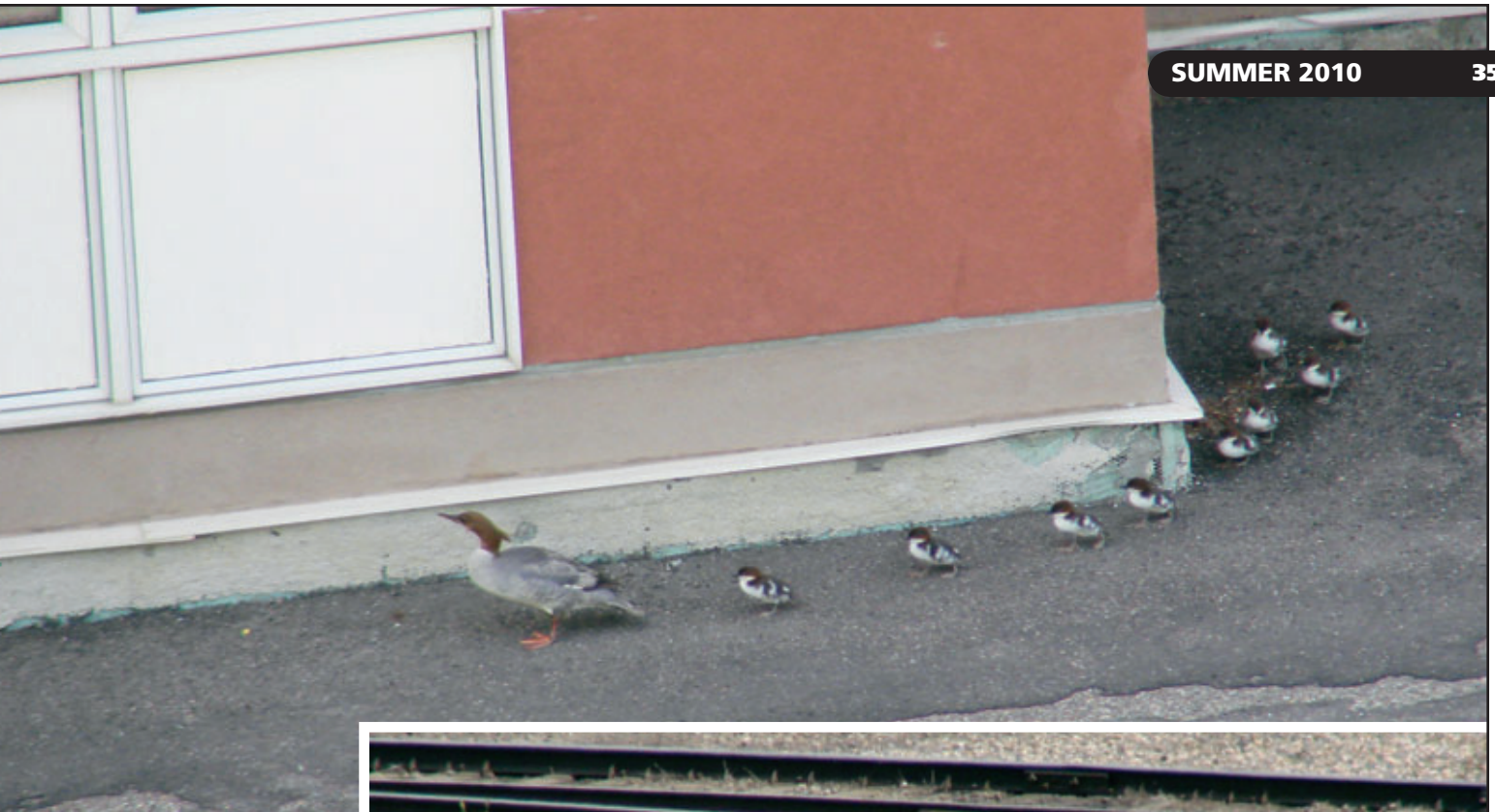
Railway Street, through the fence, into the railway yard – including a swim in a large puddle left from the rain!

Paul and Jan's guess is that they were heading to the river, about two blocks north. Everyone hopes they all made it safe and sound, as they had at least two more busy roads to cross – unless they went onto the railway bridge and jumped!

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.



PAUL THIBAUT



PAUL THIBAUT



PAUL THIBAUT

DID YOU KNOW?

- Common Mergansers usually nest in tree cavities, but will also use a nest box and if pressed, a rock crevice, old building, ground hole or similar site.
- Ducklings leave the nest site within a day or so of hatching.
- The mother merganser protects but does not feed the chicks, who dive to catch all of their own food.
- Chicks start by eating mostly aquatic insects, switching to fish when they are about 12 days old.

Wildlife! Starring... Alberta's Toads

BY DENNIS BARESCO

Both toads and frogs are small, hard to find, usually in swampy, vegetated surroundings, and cryptically coloured – thus hard to see once found. “Toad ‘n frog watching” takes considerable patience – and possibly good boots – which may be why it has never been a big naturalist-type activity.

Still, there is a feeling of triumph if your patience pays off and you are able to observe these amphibians close up. Better yet, standing at the edge of a marsh after sunset is an exhilarating experience as the evening air is filled with the sounds of breeding males singing in unison. This is where patience comes in: armed with a flashlight and a soft step, it's possible to watch the musical extravaganza.

Four species of toads inhabit Alberta. What people often call a “horned toad” is, in fact, not a toad; it is a reptile, the Short-horned Lizard.

What follows is a quick look at the toads of Alberta. The information is mainly from two sources: the AB Sustainable Resource Development website (from which the photos are also taken); and the book, *The Amphibians and Reptiles of Alberta*, by Anthony Russell and Aaron Bauer. Both the book and the website are highly recommended as resources for anyone wishing much more detail on toads as well as frogs.

CANADIAN TOAD (*ANAXYRUS HEMIOPHRYS* (*BUFO HEMIOPHRYS*))

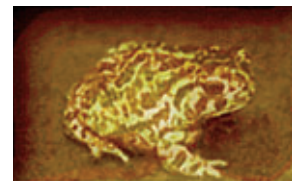


The Canadian Toad is active from April or May to September. It is widely distributed in the province: all the way to the Northwest Territories, though it is confined mainly to Alberta's eastern half in river valleys and sandy lake margins and primarily in aspen parkland or boreal forest.

The breeding season (May to July) call of the male toad is a low-pitched, short trill lasting 1 to 5 seconds and repeated approximately every 15 to 30 seconds. The female lays a single, long, egg strand numbering up to 7000 eggs, which hatch three to twelve days later. Tadpoles take six or seven weeks to transform into juveniles.

Canadian Toad is classified as “May Be at Risk” in the current *Status of Alberta Wildlife Report*.

GREAT PLAINS TOAD (*ANAXYRUS COGNATUS* (*BUFO COGNATUS*))



The Great Plains Toad is active from April to September, but being mostly nocturnal, it is rarely seen in Alberta except during breeding season. Being at the northernmost part of its range, it is restricted to short-grass prairie, with most sightings from the South Saskatchewan River and its tributaries.

Like the Spadefoot, the Great Plains Toad emerges only after spring or summer rains, breeding in almost any flooded area, including ditches and temporary ponds. It will not, however, breed in muddy water, preferring a clear, shallow water source.

When moisture conditions are right, the male begins calling: a rapidly repeated, harsh, metallic-sounding,

cricket-like trill that can go on for up to 50 seconds; it is extremely loud, almost deafening at very close range and carrying up to two kilometers away on the prairie. The female lays long strings of as many as 20,000 eggs which are usually attached to debris on the bottom of the pool. Eggs hatch roughly forty-eight hours later, with the transformation from tadpole to toad occurring in about six weeks time. However, these “young of the year” will not become sexually mature until the age of three to five years.

The Great Plains Toad is classified as “May Be at Risk” in the current *Status of Alberta Wildlife Report*. In a subsequent detailed status assessment, Alberta’s Endangered Species Conservation Committee identified the species as Data Deficient—a species for which there is not enough current information to determine its status. However, there appears to be little doubt of its At Risk status: its habitat is threatened by drought and human activity and recent research indicated that there may be fewer than 2000 adults in the province.

WESTERN TOAD (ANAXYRUS BOREAS (BUFO BOREAS))



Western Toads are active from April to September, but they too are difficult to find outside of the breeding season because of their mostly nocturnal lifestyle. Western

Toads can be found in western and central Alberta, primarily in boreal forest and alpine and subalpine habitat near ponds, streams, or lakes. The species actually may be more prevalent in the northern region of the province, but little monitoring work has been conducted to determine its presence.

Breeding takes place April to June in shallow, cool water and sandy bottom ponds, either permanent or temporary. The male call is a soft, repeated peep, similar to the peeping sound of baby chicks. The female may produce thousands of eggs which are laid in long strings, often entwined about submerged vegetation. The hatch occurs within 3 to 12 days and, because of the great number of eggs laid, tadpole densities can be very high. In six to eight weeks, the tadpoles transform into juvenile toads, with an additional two to three years required for them to become sexually mature.

The western toad is classified as Sensitive in the current *Status of Alberta Wildlife Report*. Despite lack of information, Alberta populations appear to have been reasonably healthy and widespread in the past; however, populations elsewhere are decreasing.

PLAINS SPADEFOOT TOAD (SPEA BOMBIFRONS)



The Plains Spadefoot Toad is active from late April or May to September. Seeing one is another matter, especially outside of breeding season.

Spadefoots get their name from a wedge-shaped (“spade”-like) projection on the “heels” of the hind feet which they use for digging their burrows. Like a corkscrew, they tunnel backwards and downwards into the soil until they find moisture, and have been found as deep as 1 metre below the surface.

With spring rains comes the breeding season, generally in May in temporary ponds. However, Plains Spadefoot Toads will only emerge from their burrows if the rains are heavy, which could mean delaying breeding to as late as July – or if there is insufficient rain, they may not breed at all that year.

The male’s call is short (only 2/10ths to 7/10ths of a second long), given in one-second intervals, and described as being a duck-like scream. Eggs are laid in clusters of 10-250, attached to vegetation just below the surface of the water. Because Plains Spadefoots are adapted to temporary water bodies, the egg-to-adult process is rapid: they hatch within 48 hours, and 21-40 days later, the tadpoles have transformed into toads capable of burrowing.

The Plains Spadefoot Toad is currently classified as “May Be at Risk” in the current *Status of Alberta Wildlife Report*. Habitat alteration and destruction, especially of its breeding ponds, due in large part to agricultural and petroleum industrial activities, continues to increase. As well, many of these toads are killed on roadways as they migrate to breeding ponds.



HOLLE HAHN

Mystery Toad?

Toads are difficult to identify, at least from photos. Holle Hahn sent this one to *Nature Alberta* and admitted that she was unsure of what species she had photographed. That didn't lessen the enjoyment of some different wildlife in the backyard, as she explains:

"We seem to get quite a few hopping about this year. It's been quite wet here in the Battle River Valley. They like to startle us when working in the garden. This little guy was hopping around the firepit and then sat under the bench for the longest time, completely still and barely visible."

Nature Alberta went to John McFaul for identification. John in turn went to the acknowledged expert in (among other things) amphibians: University of Calgary's Dr. Tony Russell, co-author of the book *The Amphibians and Reptiles of Alberta*. Dr. Russell replied with the answer:

"Thanks for sending the picture of the toad. Its locality sits in a region of overlap between the Canadian Toad and the Western Toad. The most telling diagnostic features are the shape of the parotid glands (the big lumps behind the eyes) and the form of the cranial boss and crest (the ridge between the eyes

and across the neck). Neither are easily assessed from this photograph. So the next feature to look at is the size of the warts on the body. These are considerably larger in the Western Toad than they are in the Canadian Toad. The animal in the picture has large warts, so my conclusion is that it is a Western Toad (*Bufo boreas* – actually *Anaxyrus boreas* now). Both species have been recorded from Pigeon Lake."

And now we know. Our thanks to all who solved the mystery of the toad.

Waterton Lakes National Park: The Marshes of Maskinonge

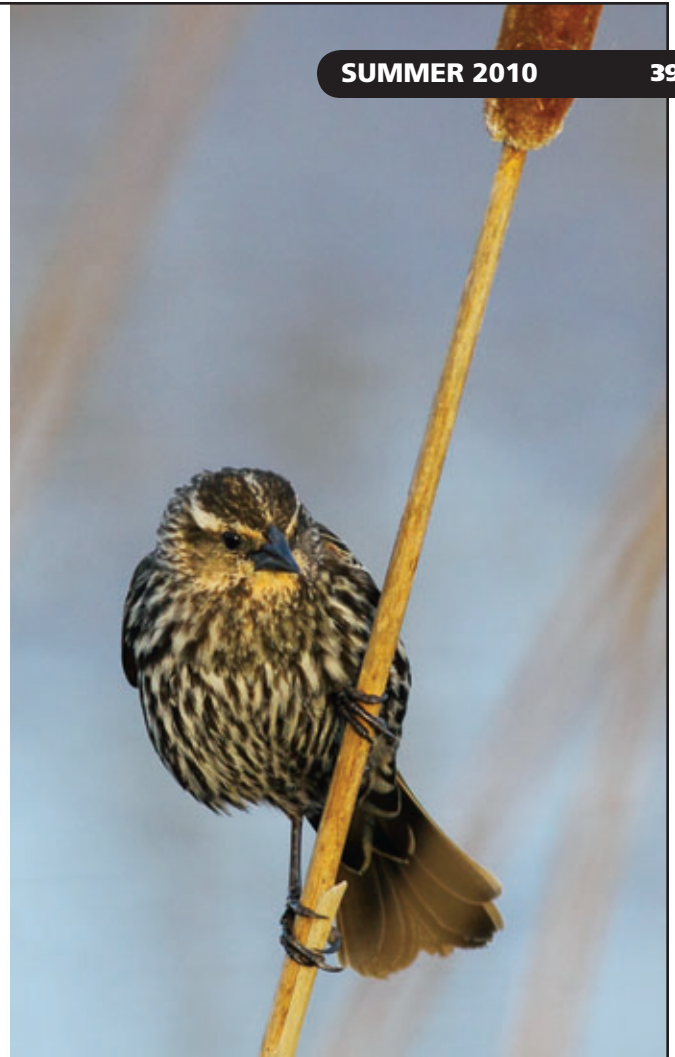
BY SANDRA HAWKINS

Marshes, and the microcosm of life they nurture, have been a lifelong passion for me. In recent years, after travelling to many of the earth's "exotic" places where ancient marshes no longer exist, that passion has been strengthened beyond description.

Where marshes have been drained or polluted, the life they once supported is gone and the world is diminished a little bit more.

In Canada, we often take our marshes for granted. We seem to have so many of them; some

folks even believe that wetlands are simply road blocks to "progress". We drain them and build sterile featureless condos and strip malls and then decry the lowering of the water table and the lack of wildlife.



FEMALE RED-WINGED BLACKBIRD.

SANDRA HAWKINS

SANDRA HAWKINS



MULE DEER BUCK.

SANDRA HAWKINS

One of my favourite and seemingly under-appreciated marshy areas is Maskinonge Lake located near the main entrance to Waterton Lakes National Park. I am always astounded with how few visitors I encounter there, since this lake at the edge of the prairies is one of the richest and most readily accessible wildlife habitats in the park. It serves as a sanctuary for deer, coyotes, bears, birds (waders, divers, puddlers, and aerial hunters), butterflies, bees, and other insects. The willows and cattails that border its shoreline provide a protected haven for its residents, while the nearby Rockies and the adjacent prairie abound with wildflowers of every hue.

The shoreline of Maskinonge Lake is serviced by a picnic ground complete with cozy cookhouse.



This is a great location to take a short hike. The adjacent stands of willow and aspen, along with some open grassy prairie, are home to a great variety of non-water birds such as Red-winged Blackbirds, Cat Birds, Red-naped Woodpeckers, Northern Flickers,

and Tree Swallows. In August 2009, a Black-headed Grosbeak (female), a bird quite rare to Alberta, obliged me with her photo. For more information about this bird in Alberta, click on the following link: <http://talkaboutwildlife.ca/profile/index.php?s=294>

Maskinonge never fails a patient observer. Although a telescope or a pair of binoculars may enhance one's viewing pleasure, nature's rewards may also be reaped by simply sitting quietly along the shoreline or on the hill overlooking the marsh. In summer, White-tailed and Mule Deer with their fawns, Sandhill Cranes with their chicks, and waterfowl or shorebirds with their young, play out their daily lives constantly on the lookout for the wily Coyote or hungry bear.

A loud plop, followed by much splashing, often signals an Osprey's successful catch of

**MALE RED-WINGED BLACKBIRD.**

SANDRA HAWKINS

OSPREY AT NEST.

SANDRA HAWKINS

the day. With a fish grasped firmly (head first) in its talons, it returns to its nest and its eagerly-awaiting mate and ever-hungry youngsters. For many years, there was a large Osprey nest atop a tall pole that was situated in the middle of a much smaller marsh opposite Maskinonge on the north side of the access road into Waterton town site. A tree-sheltered parking lot provided a quiet, safe and welcoming haven for avid photographers and other interested observers. On many occasions, I shared my telescope with visitors eager to view the Osprey family's domestic routine.

As it aged the supporting pole began to lean and falter. Rather than repair it, Parks Canada decided to remove the nesting platform altogether. A new nest now exists outside the park along the Belly River adjacent to the busy highway that leads to Cardston. Anyone who may be interested in observing the birds now has to contend with the noise and danger of high speed traffic. The joy attained

from extended periods of quiet observation and contemplation is not possible there.

Ospreys still fish in Maskinonge, but the loss of this nest inside the protective boundaries of the park denigrates the marsh and diminishes its ecosystem. Let us hope that the nesting platform will eventually be restored and we, as stewards of Alberta's natural beauty, do not contribute to its gradual decline.



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For additional information, please consult the URLs listed below:

www.pc.gc.ca/eng/pn-np/ab/waterton/activ/activ3.aspx
(Parks Canada site, includes maps)

<http://www1.travelalberta.com/en-ca/index.cfm?pageid=42>
(Travel Alberta. Maps, Wildlife Viewing, Birdwatching)

www.onf-nfb.gc.ca/eng/collection/film/?id=11965
(Link to information about the classic award-winning National Film Board of Canada's 1956 documentary "World in a Marsh"). This film was once a staple at national parks' amphitheatres.

KILLDEER. SANDRA HAWKINS



BOOK REVIEW

Hunting tactics of Peregrines and other falcons

REVIEW BY: LISA PRIESTLEY, BEAVERHILL BIRD OBSERVATORY

".... Attacks on prey flying lower than the falcon were made by deep stoops with wings partly or fully flexed. Some of these attacks began with a burst of wing beats and ended in a stoop, which could either be near vertical or oblique. If the prey evaded the initial stoop, the falcon might follow-up with additional stoops or passes." (Dick Dekker)

I read this paragraph while listening to young Merlins screaming wildly outside my window, begging for food. The stories presented in this thesis are not for the faint of heart, with detailed descriptions of how these magnificent birds hunt and how their prey try to avoid being captured. Although nothing is presented too graphically about how these aerial hunters eat their prey, you do gain an appreciation of their stealth. This book is a compilation of forty-eight years of observations and is a real inspiration to other naturalists. When you are out observing nature and you see something amazing, write it down. This is what Dick did, and now he has completed a thesis on his thousands of hunting observations.

Dick Dekker was born in Rotterdam and emigrated to Canada in 1959. He trained as a graphic designer and worked in the Edmonton area till 1982. He spent most of his free time enjoying

nature, and now has devoted himself full time to wildlife writing and field research. Dick's passion for studying Peregrines comes from growing up in a human-dominated landscape and wanting to pursue something which is truly wild and natural. His interest in predator prey relationships has also led him to study the mammals of Jasper National Park (wolves and ungulates).

Presented in sixteen chapters, the book is a compilation of papers that have been published in various scientific journals. His thesis details the hunting methods of Peregrines, Prairie Falcons, Merlins, and Gyrfalcons, and also presents information about prey theft between raptors (klepto-parasitism). Although a common theme is present throughout the book, each chapter brings in another new concept about the different hunting strategies of Peregrines and other falcons. It is nice to see also that observations are done throughout the year, so that you get a full picture of how these birds hunt during migration, breeding, and wintering, and in different locations. I won't say this is a leisurely read; there is a lot of information to take in. I found it best to read a chapter at a time, and read the results a second time through a few days later to gain a full appreciation of all the details of the observations.

"Hunting tactics of Peregrines and other falcons" is available from the Nature Alberta Bookstore; www.naturealberta.ca (secure website); christineb@naturealberta.ca; or call (780) 427-8124.

DICK DEKKER

Hunting tactics of Peregrines and other falcons



Dick Dekker. Hancock House Publishers Ltd., Genre: Nature (PhD Thesis, Wageningen University, Wageningen, Netherlands). ISBN978-0-88839-683-9. 2009

Although it is a thesis, the statistics are presented in a way that is understandable. And if you need a break from reading you can always admire the beautiful color paintings in the center, which Dick himself painted.

I have been fortunate to spend a few evenings at Wabamun Lake with Dick Dekker, watching the Peregrine Falcons teaching their young to hunt. They used the thermals created by the power plant to climb up until they were a tiny speck in the sky. Then they drop like an orange bullet (evening sunlight on them) and stoop on an unsuspecting gull. I've also bumped into Dick at Beaverhills Lake in the early spring as I am setting up the bird observatory for the new season, and always enjoyed listening to Dick talk excitedly about his various observations.

If you love learning new and interesting things about falcons, this is the book for you. And if you know Dick, you will read it with that lovely Dutch accent he speaks with.

CELESTIAL HAPPENINGS

Starry Nights

Summer/Fall: August to October

BY JOHN MCFAUL

FEATURED CONSTELLATION: DRACO

The constellation Draco the Dragon is a denizen of the northern sky. It is to be found twisting its way between Ursa major and Ursa minor (the big and little bears) with its head near the feet of Hercules. None of its stars are particularly bright. However, one of its members was of great importance in ancient times, especially to the builders of the great pyramids of Egypt.

Half way between the bowl of the little dipper and the handle of the big dipper lies Alpha Draconis, also known as Thuban. This star was the pole star about 4800 years ago, during the "Old Kingdom" of ancient Egypt. This corresponds to the time of the great pyramid constructions. There is a belief that the descending passage of the Great Pyramid of Khufu at Gizeh was purposefully orientated to point toward Thuban. Since that time the precession of the Earth's axis of rotation has placed Polaris as the Pole Star.

A number of myths relate to Draco the Dragon. One myth describes Draco as being the dragon that was one of the monstrous beings that participated with the Titans to battle the Olympian gods for supremacy of the universe. Draco fought with Minerva, the goddess of wisdom. After a great struggle Minerva tossed Draco into the heavens toward the celestial pole. The dragon became entangled about the pole and froze in a twisted position.

The other myth of note is that Draco was the dragon Lagon who guarded the Golden Apples of the Hesperides. Hercules managed to trick Atlas (he who holds up the world) to get the apples for him, as only Atlas could enter the garden containing the apples. Once Hercules had the apples, he completed his 12 labours and was a free man.

The most famous celestial object located in Draco is NGC 6543, the



Cat's Eye Nebula. It was recently voted as one of the most intriguing of the Hubble Space telescope images. It was the first planetary nebula observed with a spectroscope. This observation proved that planetary nebulae are clouds of dust and gas given off by evolving stars. It is thought that our star shall become a planetary nebulae for a brief period as it enters old age.

CELESTIAL HAPPENINGS

Sun: Rise – Aug. 1 (05:49 MDT), Sept. 1 (06:43 MDT), Oct. 1 (07:36 MDT)
Set – Aug. 1 (21:30 MDT), Sept. 1 (20:23 MDT), Oct. 1 (19:10 MDT)
Note: Times are for Edmonton Autumnal Equinox Sept 22nd

Moon: Full – Aug. 24th, Sept. 23rd, Oct. 22nd
New – Aug. 9th, Sept. 8th, Oct. 7th

Planets: **Mercury** may be seen low in the western sky just after sunset in early August. Afterwards it will be too close to the Sun to see until September 18th when it may be seen low in the eastern predawn sky.

Venus will be visible low in the western sky from August through September. On Aug 13th it will form a nice grouping with Mars, Saturn and the crescent Moon.

Mars will be visible low in the western sky through most of August to October.

Jupiter will appear low in the east late in the evening in August and gradually climb higher in the night sky until the end of October when it will be due south at sunset. The Moon will be quite close to Jupiter on Sept. 22nd and then again on Oct. 19th.

Saturn - In mid to late August Saturn may be seen low in the southwest just before sunset. By October it is in the eastern morning sky. It will be quite close to Venus on August 7th.

Meteor Shower: The Perseid Meteor Shower peaks in the late evening and early morning of August 12th into the 13th. 50 meteors/hour.

Orionid Meteor Shower peaks on October 21st. 25 meteors/hour.

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

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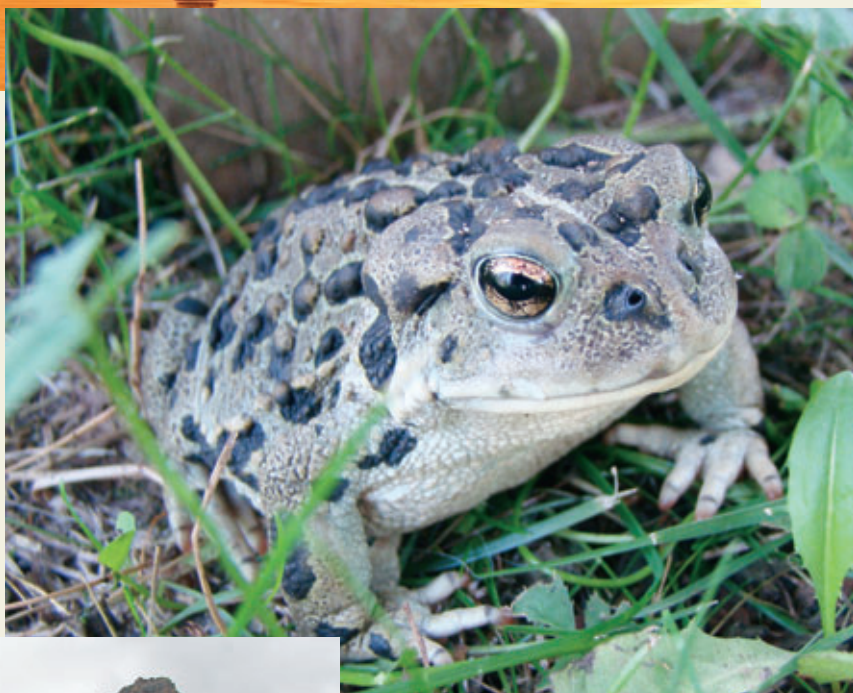
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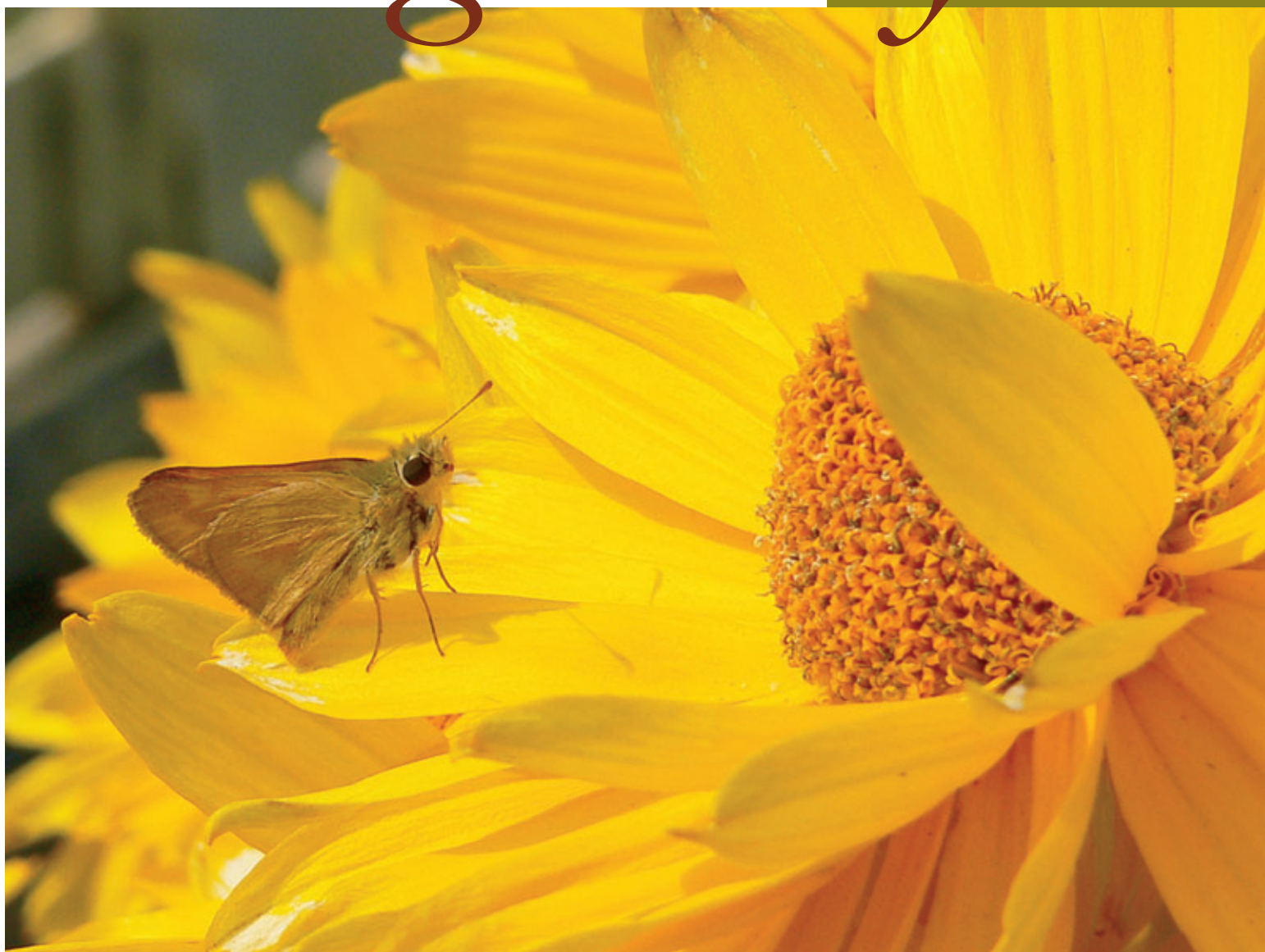


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BLAKISTON VALLEY, WATERTON LAKES NATIONAL PARK. SEE ARTICLE, PG 39. RICK PRICE

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