

**BOW VALLEY NATURALISTS
NEWSLETTER, WINTER 2014
BOX 1693, BANFF, AB
T1L 1B6**

PHONE: 762-4160

Web site: <http://www.bowvalleynaturalists.org>

PROGRAMS/EVENTS

REMINDER!

Memberships are now due for 2014.

OUR FINANCIAL YEAR IS THE CALENDAR YEAR.

We want to keep the membership at the low cost of **\$5.00**. If you have extra change to add to the pot when attending a meeting it would help us cover the costs of renting the hall for meetings. We want to remind you that you will receive a charitable donation receipt for donations of \$5.00 or more.

THE BVN MEETINGS WILL TAKE PLACE ON THE 4TH TUESDAY OF THE MONTH DURING 2014 INSTEAD OF THE 4TH WEDNESDAY OF THE MONTH.

Tue., January 28 7:30 pm.
Badgers in BC: Can We Dig Them Out of The Hole? with Nancy Newhouse.
Location: Banff Seniors Centre.

Tue., February 25 7:30 pm.
Birdbrains performance by Joel Hagen.
Location: Banff Seniors Centre.

NOTE.

February 25th is the evening of our **Annual General Meeting and elections.**

Anyone interested in participating on the Board of Directors should contact Karsten Heuer (see separate notice), Peter Duck (403-762-4335 - evenings), or Heather Dempsey (403-762-3056) before mid-February.

Tue., March 25 7:30 pm.
To be announced.
Location: Banff Seniors Centre.

Tue., April 22 7:30 pm.
Between rocks and hard places: Wolverines in the Banff-Yoho-Kootenay park complex
with Dr. Tony Clevenger.
Location: Banff Seniors Centre.

Other Programs:

Fri., January 24 7:00 pm.
Beauty and the Bugs: A Bioblitz in the Flathead River Valley, A Y2Y presentation.
Location: Canmore Collegiate High School.

Wed., February 5 7:00 pm.
Amar Athwal photography show
Location: Cave & Basin.



Please Note:
From now on, the BVN newsletter will be available in electronic form only unless specifically requested otherwise.

New BVN Bylaws to be Approved at February 2014 Annual General Meeting

As stated in the Fall 2013 BVN Newsletter, BVN must update our Bylaws and file an "Articles of Continuance (transition)" form to ensure compliance with the new Canada Not-for-profit Corporations Act. The replacement Bylaws and accompanying Articles need to be approved by a Special Resolution, a vote passed by at least a two-thirds majority of members attending the February 2014 Annual General Meeting.

Accordingly, our current Bylaws, the proposed replacement Bylaws, as well as Articles are being sent electronically to all BVN members. Note that some of the information that used to be in the original Bylaws is now in the Articles, which become part of the official documentation on how BVN operates. The proposed Articles will be transferred to the official, required form, once approved.

New BVN Board Members Needed

Karsten Heuer

As everyone knows, Mike and Diane McIvor are scaling back their involvement with our organization. Existing board members are already stepping up their efforts to take on tasks such as organizing bird counts and our monthly meetings and presentations, but we need at least a couple of new board members to help share the load. Please consider serving your community and the wild by donating a few hours of time per month. For more information please contact Karsten Heuer at 403-609-4173 or email him at karsten@necessaryjourneys.ca before February 15th.

Recognition of Donations

The Bow Valley Naturalists acknowledge with gratitude the generous donations we have received from members. We also wish to make special mention of the donation we received from the Edmonton Community Foundation at the request of the family of the late John and Barbara Poole. Our Board is carefully considering options for spending these funds and would welcome suggestions from members.

2013 Banff-Canmore Christmas Bird Count

Heather Dempsey

Mallard	118	American Crow	9
Green-winged Teal	cw	Common Raven	297
Bufflehead	6	Black-capped Chickadee	140
Common Goldeneye	29	Mountain Chickadee	178
<i>Goldeneye sp.</i>	1	Boreal Chickadee	56
Hooded Merganser	cw	<i>Chickadee sp.</i>	88
Common Merganser	3	Red-breasted Nuthatch	53
Ruffed Grouse	1	White-breasted Nuthatch	7
Bald Eagle	<i>adult</i>	Brown Creeper	13
	<i>imm.</i>	American Dipper	12
Northern Goshawk	2	Golden-crowned Kinglet	7
<i>Hawk sp.</i>	1	Townsend's Solitaire	34
Rock Pigeon	108	American Robin	3
Northern Pygmy Owl	cw	European Starling	4
Belted Kingfisher	3	Bohemian Waxwing	271
Downy Woodpecker	5	Song Sparrow	2
Hairy Woodpecker	5	Dark-eyed Junco	87
A. 3-toed Woodpecker	6	Rusty Blackbird	2
Northern Flicker	1	Common Grackle	cw
Pileated Woodpecker	3	Pine Grosbeak	1
<i>Woodpecker sp.</i>	2	Red Crossbill	28
Northern Shrike	1	White-winged Crossbill	19
Gray Jay	44	<i>Crossbill sp.</i>	10
Blue Jay	11	Common Redpoll	8
Clark's Nutcracker	59	Pine Siskin	8
Black-billed Magpie	171	House Sparrow	156

CW: reported count week

TOTAL SPECIES: 43

TOTAL INDIVIDUALS: 2077

This year's Christmas Bird Count on Sat. December 14th was mild with the temperature hovering near 0° C most of the day. That may account for the abundance of birders (66, tied with the 2007 Count

for most participants ever) and the collective amount of time spent looking (123.6 hrs). Although this meant a pleasant day outdoors for everyone, we know from past counts that this doesn't always translate into outstanding results. I think probably the best word to describe this year's results is average.

The total number of 43 species for the day (47 for the Count Week, including 1 new species - Common Grackle) is exactly average for our count. Altogether 2077 individual birds were spotted, almost 400 birds less than the long-term average of 2446. Most of the individual numbers of birds recorded were typical, except for the 118 mallards which was the third lowest ever counted since 1975. A few birds, such as Townsend's Solitaires and Dark-eyed Juncos, were more numerous than usual. The numbers of seed eaters, e.g. crossbills, grosbeaks and siskins were low as there is a good food supply across Canada and these birds are more thinly dispersed than in some years. (see: <http://ebird.org/content/canada/news/ron-pittaways-winter-finch-forecast/> for more information on this)

The warm weather also may have accounted for the high rate of activity of magpies and ravens -- plus all those noisy red squirrels! A few of our "regular" birds, such as killdeer and snipe, were noted for their absence. Lastly, no owls were seen during the count, but a pygmy owl was heard near Cougar Street on the day after the count by Kevin Barker and the Cave & Basin team did come across evidence of perhaps a large owl in the neighbourhood that week. (see box below for details) To review past count results, go to: <http://www.bowvalleynaturalists.org/page40/page5/page5.html>.

Thank you to everyone who came out for the count, and especially thank you to fellow organizers Mike & Diane McIvor, Colleen Campbell, and Jason Rogers. Mike and Diane also deserve special thanks for the many decades they've kept this Count going. Please mark Saturday, December 20, 2014 for next year's Banff-Canmore Christmas Bird Count.



White-breasted Nuthatch

photo: Michael Shuster

Poop or Pellet?

This was found on the steps leading down to the bird blind at the Cave & Basin National Historic Site on the day of the Count. The big splash of white chalky poop nearby suggested a large bird had perched on the fence post above. But was this lump from the same animal or ...? Luckily the Site had called the Resource Conservation staff and before we left, Dan Rafla came by to pick up the mystery object and examined its contents the next day. His

conclusion? It was indeed an owl pellet and consisted of the remains of a muskrat.



Owl pellet.

photo: Lynn Calvert



Muskrat remains in owl pellet.

photo: Dan Raffia

ISSUES

National Parks

Mike McIvor

Jasper National Park: the Maligne Valley Implementation Strategy will be released for public review and comment sometime soon. We understand in the recent public review of the proposed overnight accommodation at Maligne Lake, Parks Canada got an earful, and rightfully so, from people very upset this was even being considered. Apparently the proposed hotel development at Maligne Lake will be part of the larger discussion for the valley. We'll let you know when the process is underway.

A central issue that Parks Canada has been ducking for many years is the impact of human activity in the Maligne Valley on mountain (woodland) caribou. We hope it will be taken seriously this time. (A hearing was held in a court in BC a short while ago as a case was brought against the federal government for its failure to

produce Recovery Plans for some endangered species, including mountain caribou, within the legally defined timeline. We'll keep you posted as to the outcome.)

Parks Canada does deserve some credit for finally biting the bullet and prohibiting cross-country skiing and snowshoeing for part of the winter in a small number of areas with important caribou habitat. The purpose is to prevent creation of packed trails that facilitate access for wolves to caribou. This decision came despite aggressive lobbying by some avid recreationalists who didn't want any restrictions on their enjoyment. To "compensate" for their "loss" Parks Canada was planning to open some new trails in other areas.

Banff National Park: Parks Canada and its partners with Big Tourism are celebrating increased levels of visitation and looking forward to a series of special events this year. It's embarrassing to hear Parks officials present elaborate rationalizations for these intrusions when everyone knows it's all about bringing money to the Agency and to businesses in the park.

Conditional approval was given for a new, permanent day-lodge on Goats Eye Mountain at the Sunshine Village Ski Area. However, the ski area has appealed the decision arguing it is too restrictive and the environmental standards too rigorous. Also filing an appeal was the Canadian Parks & Wilderness Society arguing a variety of points and trying to remind Parks Canada of its true mandate. No word on when a final decision will be made.

Please don't hesitate to let decision-makers know what you think about these and other issues in our national parks.

Wildlife Corridors - Town of Canmore

Mike McIvor

The establishment of effective, permanently protected areas for wildlife to move around Canmore is an essential step to ensuring the long-term health of the Bow Valley ecosystem. Unfortunately, it is all too obvious that a common characteristic of many developers is to continually push against limits. This is a reality in every jurisdiction. So it is absolutely crucial that all citizens remain vigilant and encourage elected officials at every opportunity to resist the pushing. Canmore residents should keep a close eye on issues associated with the Three Sisters development and be prepared to contact members of Town Council – and the provincial government - as often as it takes until the process of establishing viable wildlife corridors is complete.

Canada's List of Endangered Species Grows (but there are signs of some improvement)

Dwayne Lepitzki, PhD (member of COSEWIC)

Twice a year, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) gathers to assess the risk of some of Canada's biodiversity going extinct at a Wildlife Species Assessment Meeting (SAM). The latest SAM of COSEWIC occurred in late November 2013 in Ottawa. Including the 15 species that used to roam, fly, swim, crawl, or live in Canada (the latter being a moss), the list of species at risk has just passed 700.

Another 171 species have been assessed by COSEWIC as being Not at Risk (NAR) – a species not considered to be at risk of extinction given the current circumstances.

Only 9 of the 30 wildlife species discussed at the recent SAM were new assessments, the remainder were re-assessments, stemming from the requirement in the *Species at Risk Act* for COSEWIC to reassess at risk species every 10 years, or sooner if warranted. Unfortunately none of the 21 reassessed species moved into the Not at Risk category and while 2 were downlisted, another 2 were uplisted to higher risk categories (including an uplisting from NAR).

The two uplisted species were Bocaccio, a marine rockfish off the west coast, and the Cutlip Minnow, a freshwater species confined to eastern Ontario and Quebec. The population of Bocaccio has been in continuous decline for 60 years, with its life history, where females can live for 52 years, making it susceptible to overfishing. While fishery bycatch has been reduced, it remains the main threat and contributed to its uplisting from Threatened to Endangered. Meanwhile, the minnow has been lost from two watersheds over the past 10 years and much of its habitat is threatened by widespread habitat degradation and multiple invasive species. In 1994 it was assessed as NAR; it was reassessed as Special Concern in Ottawa.

All three bat species, two of which can be found in Banff, had their emergency assessments (February 2012; see Spring 2012 BVN newsletter) as Endangered confirmed at the recent SAM. It is just a matter of time – about 20 years - before White-nose Syndrome, the disease responsible for the up to 94% declines in bat numbers in eastern North America, is predicted to spread to the west coast.



Little Brown Myotis bat (COSEWIC Endangered) in Banff National Park, summer 2013. Brenda Lepitzki.

A better news story is found to the south and west of Banff, where the Rocky Mountain Tailed Frog, confined to two isolated watersheds in BC, was downlisted from Endangered (May 2000) to Threatened. This mountain stream-breeding amphibian has experienced a reduction in habitat loss and damage from sedimentation due to roads, logging, and fires as a result of increased habitat protection and a moratorium on mining in the Flathead River portion of its limited range.

Another success story is the Wood Bison, a close cousin of the Plains Bison. COSEWIC reassessed the Wood Bison for the fourth

time at the November 2013 SAM. This animal has experienced a remarkable recovery from fewer than 300 animals nearly a century ago. It was originally assessed as Endangered in 1978, downlisted to Threatened in 1988, a status confirmed in 2000, and most recently further downlisted to Special Concern. Nine separate wild subpopulations of Wood Bison survive with about 60% of the world's population confined to Wood Buffalo National Park and surrounding areas. But this species is not out of the woods yet. A recent 53% reduction in the Mackenzie herd was caused by an outbreak of anthrax and a 20% decrease in the Hay-Zama herd resulted from winter starvation. Meanwhile the Plains Bison, original extirpated from Canada, maintained its status of Threatened as reassessed at the recent SAM; this species, confined to five isolated wild subpopulations, continues to occupy only 0.5% of its original range in Canada.



Plains Bison (COSEWIC Threatened) in Elk Island National Park, summer 2008. Dwayne Lepitzki.

Success stories in the world of conservation biology are few and far between. But when they do occur, they should be embraced and used as examples of what is possible, given the will.

Full results, including the press releases from the recent assessment meeting can be viewed at <http://www.cosewic.gc.ca>.

A Gathering at the Parks Canada Basilica

Parker Knot

Imagine them all together, the senior managers of Parks Canada, as they stroll about the atrium talking about the future of their great places of worship.

"We are no longer relevant. We must find ways of attracting new worshippers."

"Yes, let's change the homilies and the hymns. Let us talk of things that matter to them."

"But don't these places already matter to them."

"Yes, we know they do. But not to enough of them."

"Shouldn't we keep in mind that sometimes the true spirit cannot be shared among so many at one time. The spirit is moved not so much by how many worshippers are in the cathedral but perhaps by

how many worshippers are actually worshipping."

"Ah, my son, we will never really know that. We shall hope that more worshippers worshipping perhaps a little less will add up to more worshipping overall."

"But will you try to measure that?"

"Well, if we pass the plate in more places we can count the money; that will tell us how much they care."

"But what of the poor? Won't they be discouraged from coming? Are they not as deeply moved by these places as those who pay the tithes?"

"Yes, quite right. We must find balance. Perhaps we can enhance the roadside chapels for them?"

"And pews are no longer suitable. They want more of a praying 'experience' these days. They must be tired of looking up toward heaven. Perhaps they would like a change?"

"Interesting. We will let them look down. We can build a walkway over the nave. It will be like being in heaven. Yes, with a glass floor, so they feel like they are in the clouds. And we can ask for offerings there as well."



Parks Canada Welcome Centre, Cave & Basin

photo: Parker Knot

Of Wild Things

Update on wolverine gene flow and population connectivity research

Tony Clevenger

Expanding highways and increasing vehicle traffic have been identified as among the most severe human-caused impacts to the ecological integrity of the Rocky Mountain cordillera. The Trans-Canada Highway (TCH) in the Canadian Rocky Mountains has long been recognized as a lethal barrier to wildlife and a potential fracture zone for population connectivity in the Yellowstone-to-Yukon region. After more than 30 years of mitigating sections of the TCH in Banff National Park, monitoring and research has demonstrated habitat connectivity is essentially restored across those sections of this major transportation corridor. However, the combined effects of an additional 30 kilometers of twinned TCH in Banff National Park with more lanes for traffic threatens to

fragment and isolate trans-boundary populations of wide-ranging, fragmentation-sensitive species residing in the very heart of the Canadian Rocky Mountains. Thus, monitoring populations of wide-ranging species, such as lynx and wolverine, has been identified as a critical management objective in Banff and Yoho National Parks.

In 2010, we initiated the first wolverine research project in the mountain national parks. Our research addresses how roads and other man-made and natural barriers influence wolverine movement and gene flow. We delineated a 6000 km² study area based primarily in Banff and Yoho National Parks; it was bounded by Bow Summit (north), Cascade River (east), Simpson River (south) and Golden, B.C. (west). We overlaid a 12 x 12 km grid on the study area. In each grid cell we placed a sampling site consisting of a hair trap and remote camera. Sites were set up during the first month (mid-Dec to mid-Jan) and then revisited three times at monthly intervals to rebait, collect hair samples and service cameras. We surveyed our study area for wolverines during two full seasons in 2010-11 and 2012-13.

Survey results – 2010-11. During our first season, 48 hair traps were set up. The visitation rate increased during the three sampling sessions: 38%, 71% and 79%, respectively. Overall, 84% of the sites were visited during at least one session. Eight sites were not visited by wolverines; five in the national parks and three outside the national park. Within the national park boundaries, wolverines visited 89% of the sites. More than 850 hair samples were collected. By the end of winter we collectively skied more than 2000 km to access and check the hair sampling sites.

Survey results – 2012-13. The second season 51 hair traps were set. Visitation rates increased again, similar to 2010-11. However, this year the visitation rate doubled the first session (61%) compared to our first year. The second and third rounds were similar to 2010-11 with 72% and 82%, respectively. A total of 1165 hair samples were collected of which 1064 (91%) were obtained from sites/sessions with wolverine detections by camera. Both years' hair and scat samples were sent to the US Forest Service Conservation Genetics lab in Missoula, Montana. We expect the genetics analysis to be completed in November 2013. Dr Mike Sawaya was awarded an NSERC-Parks Canada fellowship and will be leading the wolverine genetics analysis. A final report will be prepared for Parks Canada in March 2014 and a presentation will be made at a Bow Valley Naturalists meeting in spring 2014.

Wolverine Watch

More than 100 people inquired about volunteering with Wolverine Watch and eventually 56 citizen scientists were involved assisting set up and checking hair traps as part of WolverineWatch.org. The volunteers assisted a total of 178 volunteer-days and 1424 hours working on the project.

Wolverine mortality in Kootenay National Park

On March 24, 2013, the remains of at least one wolverine was discovered in Hawk Creek. It appeared that the wolverine was killed by a pack of wolves. We collected hair and scat samples from the site and will have the genetics lab try and identify the individual/s killed.

Partnerships and funding

Our project is a public-private international partnership, with primary partners being the WTI at Montana State University, Parks Canada, Miistakis Institute and the Woodcock and Wilburforce foundations. We also have secured vital support from the John & Barbara Poole Family Fund at the Edmonton Community

Foundation, Bow Valley Naturalists, National Geographic Society Committee for Research and Exploration, Disney Worldwide Conservation Fund, Cameron Plewes, Patagonia Environmental Grants Fund and Yellowstone to Yukon Conservation Initiative.

High Elevation Localized Species

Mike McIvor

We didn't quite make it to 400 observations of HELS reported to our website this past year – the total was around 370 – but we did very well anyway, particularly when you think of the areas that were not accessible for at least part of the year. Despite the flooding disruptions, we received sightings from a wide variety of locations in the mountains and throughout the seasons. A summary and final report for 2013 will be prepared shortly.

We extend a huge thank you to everyone who contributed observations in the past and hope you will continue to help as we try to increase our understanding of life in these mountains. The data we are collecting is valuable so everyone is strongly encouraged to participate. Go to the HELS Page on our website for more information and to enter your results.

<http://www.bowvalleynaturalists.org>

Calling all Birders: Rusty Blackbirds Need Your Help

Jason Rogers

Prior to 1920, the Rusty Blackbird was a common to abundant species in North America. By 1950, a decline in its population was apparent. And since the 1960s, the species has been in a free fall with its numbers dropping by up to 95 per cent!

Over the last 15 years, scientists have been working to identify threats to the species. Because "Rusties" require forested wetlands, they've likely suffered as a result of wetland destruction on their wintering grounds in the U.S. Southeast. It's also likely that they've been incidental victims of blackbird control programs there.

On their breeding grounds in more northerly forests, climate change (which may reduce the extent of boreal wetlands and alter their chemistry and invertebrate communities) could be taking a toll. And human activities such as logging, peat production, and reservoir formation have affected Rusty Blackbird breeding habitat by consuming boreal wetlands and altering hydrology. Acid rain and mercury contamination may also be affecting this habitat.

While the greatest Rusty Blackbird declines have been seen in the breeding populations of eastern North America, the current and planned industrialization of the boreal forest here in western Canada could deal a major blow to our breeding populations.

But while we're getting a clearer picture of the threats faced by this species in winter and summer, we still know very little about its ecology, distribution, and habitat use during migration. Are there hotspots where Rusties congregate? Are there stopover areas that they use predictably each year, and are these locations protected.

These are questions that the Rusty Blackbird Spring Migration

Blitz is hoping to answer. The blitz, which kicks off this spring, is a three-year citizen science project organized by the International Rusty Blackbird Working Group, eBird, and the Vermont Center for Ecostudies. Birders from across the southeastern U.S., East Coast, Midwest, Alaska, and Canada (all areas through which Rusties migrate) are being encouraged to participate in the blitz.

Participating is easy: Simply go birding this spring and submit your bird sightings to eBird (<http://ebird.org/content/ebird/>). Even if you don't find any Rusties on your outings, the bird sightings you submit will contribute to the blitz by showing when and where Rusties were not found.

I'll be serving as a blitz coordinator here in Alberta and will happily answer your questions about the blitz, Rusty Blackbird identification, when and where to look for Rusties, and how to submit sightings to eBird. Also, please contact me (hawkowl@hotmail.com) or Judith Scarl (jscarl@vtecostudies.org) if you'd like to become more involved in the blitz.

As we await the arrival of spring, I encourage you to check out the newly revamped website of the International Rusty Blackbird Working Group (<http://rustyblackbird.org/outreach/migration-blitz/>) for information on Rusty Blackbird identification, vocalizations, and habitat as well as types of data to collect to support the blitz. You can also like us on Facebook (<https://www.facebook.com/rustyblackbirdspringblitz>) for up-to-the minute information about the blitz.



This Rusty, photographed in a spruce tree in Banff National Park is a male in October. Over the winter and spring, most of his rust- and buff-coloured areas will disappear (by means of feather wear and replacement) to reveal a glossy black summer plumage.

We're in "Bee-g Trouble"

Brenda Lepitzki

Since the 1990s North America has experienced extreme collapses of bee populations. Most of the reporting highlights honey bees and bumble bees, however many other species of bees are experiencing catastrophic declines. Factors implicated in these declines include loss of habitat, mite parasitism, fungal infections, commercial bee farming practices, and lethal pesticides known as neonicotinoids ("neonics"). Although banned in Europe, many types of these pesticides are used heavily across North America. They not only kill the sap- and vegetation-eating insects that are targeted, but also almost any other insect including butterflies and aquatic insects. Also at risk are vertebrates such as insect- and seed-eating birds, herbivorous mammals, amphibians, and insectivorous bats.



Bumblebee

Diane McIvor

The entire food chain is affected by neonics. And now there is research showing accumulation of these pesticides in wetland peats as well as terrestrial soils. Also troubling is that there's little evidence that the use of these pesticides on their targeted crops has resulted in either cost savings compared to other pest management techniques or in increased crop yields.

But, you say, here in the national park we should have no danger of exposure to these chemicals. Not true. Many garden plant seeds are pre-coated with pesticides before packaging and sale. Some garden soil and a high percentage of bedding-out plants have been contaminated with neonicotinoids. Think about all these flowers and plants in our communities. We and our fellow creatures are not safe from pesticides in the national park. Make sure you find out if neonics or other pesticides have been used to treat the soil, seeds, or plants you might purchase. If the answer is yes, or you don't know, take your purchasing power elsewhere to businesses that sell untreated products.

Resources used for this article include:

Letter to Editor, by Glen A. Fox, M.Sc., Retired Wildlife Toxicologist, in Nature Saskatchewan's Nature Views newsletter, Issue 176 Winter 2013.

Disappearing Bees, by Gwen Barlee, Free report published by the Wilderness Committee, Vol. 32 No. 7, Fall 2013

Web article: <http://www.cbc.ca/news/canada/saskatchewan/pesticide-contaminating-prairie-wetlands-scientist-1.2482082>

Book Review

Mike McIvor

The War on Science: Muzzled Scientists and Wilful Blindness in Stephen Harper's Canada.

Chris Turner. Greystone Books. 2013

You need to prepare yourself before reading this book to make sure there are no objects within easy reach of where you are sitting that you could grab and throw across the room. This is because Turner portrays not only the current federal government's deliberate and vicious assault on science but also its betrayal of fundamental principles of democracy in the process. (It should be noted that the assault has been focused to a great extent on environmental science.) I'm guessing the likely reaction on the part of concerned citizens will be a sense of outrage along with a sense of dread about how much more damage will be done before the election in 2015.

It might be tempting for some to dismiss *The War on Science* as partisan-based criticism of the Conservative Party but such a characterization would be completely inaccurate. The facts presented by Turner are irrefutable and the potential damage from actions taken, all too real.

There can be no doubt, we have entered a dark age in recent years. World-class science, for which Canada was well known has been terminated. World-class scientists have been given the axe or in some instances, simply prohibited from discussing their results with those who have paid for them – the citizens of Canada. Laboratories have been shut down, significant, ongoing projects eliminated, and irreplaceable libraries full of original data and analysis have been closed, their volumes of material consigned to the junk heap. And, perhaps ironically, the savings to taxpayers will be miniscule.

Ideology is clearly the driver in these decisions. Science, in this view of the world, has no value unless it serves the interests – and profits – of industry. There is no value attached to nature except when it can be exploited for business purposes. Progress is measured in the form of technological development not knowledge or understanding.

Examples abound but one of the best is the fact the long-standing, highly reputable National Research Council has been transformed to become a "conciierge" – the term used by the federal Cabinet Minister responsible – to business. Sadly, the list goes on and on.

You can't read this book without thinking a lot about what you could and should do in an effort to prevent further damage.

Mysteriously Marked Trees

Brenda Lepitzki

It seems more often than not that the day of the Christmas bird count throws some challenges to the intrepid souls out all day counting birds, and 2013 was no exception. Although the count was on a day with mild temperatures, there were strong, gusty winds making it difficult to hear the soft calls of smaller birds. After constantly scanning the skies and forest, and not seeing or hearing birds besides ravens, we began noticing the non-avian world a bit more. At the same time Dwayne and I saw something different about the trees behind Tunnel Mountain. Many of the live spruce

trees were clad on at least one side with reddish coloured bark. We've seen this elsewhere and think it's the result of Northern Three-toed Woodpeckers peeling the outer gray layer of bark as they look for insects. But this area of peeled bark stopped at the same level, on many of the surrounding trees, making an obvious line. It was as if a ruler had been used to mark these trees at about 120 cm above the ground. Unfortunately we saw no woodpeckers that day. Being scientists, we naturally had to propose a hypothesis! Our theory is that perhaps only one individual 3-toed woodpecker had worked over the trees in the area, and that the species' behaviour is to not approach the ground too closely, to avoid predation. This might be the second kind of browse line you can see in the park, only in reverse of that made by elk on aspen.

We observed a similar phenomenon on our next walk around the Fenland trail, although fewer trees were exhibiting the line, and we did notice silt on many trees from the flood. A counter theory has been proposed: the line is merely a high water mark. However, not all trees had the line although all would have been underwater and silted to similar depths in the same area. Trees with reddish underbark all had the peeled area end in a definitive line. Perhaps I may yet be convinced of a compromise theory: woodpeckers had to stop their insect search because of the high water level! Obviously this requires a bit more research and observation of woodpecker behaviour, but until I get out there again, what do you think?



photo: Dwayne Lepitzki

Editor's note: watch for the author's update in the next newsletter following her additional research and observation.

Addresses

Environment Minister
leona.aglukkaq@parl.gc.ca
House of Commons
Ottawa, Ontario
K1A 0A6

NDP Environment Critic
megan.leslie@parl.gc.ca
House of Commons
Ottawa, Ontario
K1A 0A6

Liberal Environment Critic
john.mckay@parl.gc.ca
House of Commons
Ottawa, Ontario
K1A 0A6

Leader, Green Party
elizabeth.may@parl.gc.ca
House of Commons
Ottawa, Ontario
K1A 0A6

Alan Latourelle,
CEO Parks Canada Agency
Alan.Latourelle@pc.gc.ca

Dave McDonough,
Superintendent, Banff Field Unit
Dave.McDonough@pc.gc.ca

Melanie Kwong
Superintendent, LLKY Field Unit
Melanie.Kwong@pc.gc.ca

Greg Fenton
Superintendent, Jasper National Park
Greg.Fenton@pc.gc.ca