

SPRING 2014 NEWSLETTER

BOW VALLEY NATURALISTS
BOX 1693, BANFF, ALBERTA, T1L 1B6

COMING PROGRAMS AND EVENTS

Meetings And Natural History Presentations

BVN meetings and natural history presentations take place on the 4th Tuesday of every month, October through April. Visit our [website](#) or watch for the fall newsletter in mid-October for next season's programming.

May Species Count Banff Area May 25th

We are not organizing any formal group outings but we strongly encourage people to make their own arrangements for spending this day outside, enjoying the diversity of life in this wonderful place we call home and making an effort to learn more about it. Anyone wanting to contribute bird or flower information should avoid Parks Canada closed areas, even voluntary closures such as the trails behind Johnson Lake and the wildlife corridor near the old airport. We will not use bird or flower sightings from these areas as we want to respect the intent of the closures. Contact [Brenda Lepitzki](#) with questions or if you have observations to contribute.

NEWS AND ISSUES

[What The Heck Happened to the Newsletter?](#)

[Glacier Sky Walk: An Interpretive Perspective](#)

[40 Mile Creek Dam Fact Sheet](#)

[Developments at Maligne Lake](#)

[Banff Has Another Endangered Species](#)

WILD THINGS

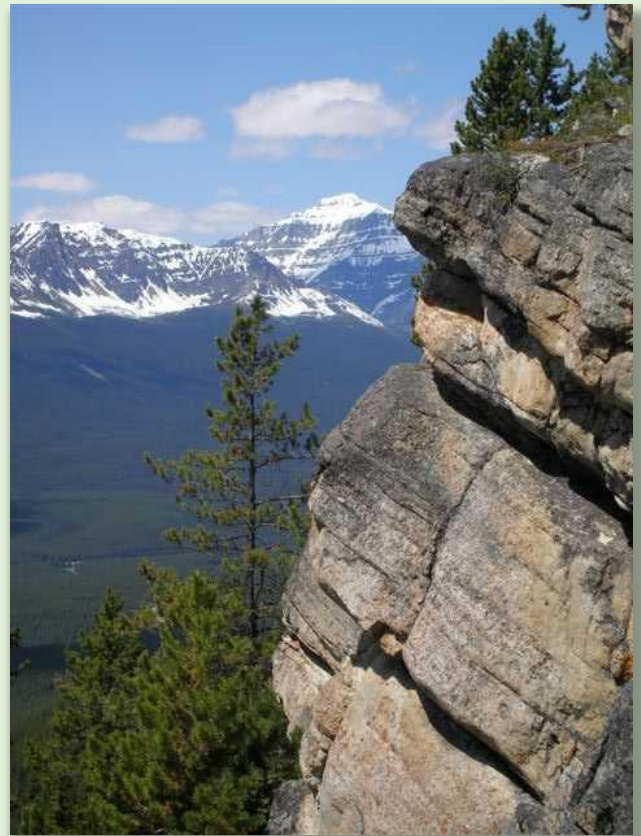
[High Elevation Species – Make Your Mark](#)

[Swift Fox In Banff National Park](#)

[Godwits, Beavers and Video of Wonderful Weasels](#)

LET THEM KNOW YOUR MIND...

[Contact Information](#) for letting politicians, governments and land managers know what you're thinking.



From Castle Lookout Trail
P. Duck Photo

1967 - 2014

Promoting Ecosystem Protection And Education

NEWS AND ISSUES

What The Heck Happened to the News Letter?

Well, we're not sure. This edition is an experiment to see if we can circulate a newsletter that works in a variety of formats and is accessible from the range of electronic media in use by our members and readers. We hope the title page / home page format makes it easier to view the content that strikes your interest. Expect this to be a work in progress over the next few issues. Please send us creative ideas and let us know how it's working for you. Many thanks to Mike and Diane McIvor for all those years of chasing down contributors, editing, formatting and circulating the BVN Newsletter. Their dedication to publishing the BVN newsletter has been an important contribution over the years and we hope we can start to fill those shoes. While we put this together in a basement somewhere we trust they are enjoying a sunny May weekend.

[Index](#)

Glacier Sky Walk: One Interpreter's Perspective - Peter Duck, IGA Master Interpreter

There is no doubt, like every other viewpoint on the Icefields Parkway, the Sunwapta Canyon Viewpoint was a spectacular location. Like many others it needed some site improvements in the interest of safety and visitor experience. However, many years of guiding interpretive tours and hikes along the Icefields Parkway suggest that the Glacier Sky Walk solution should have been reconsidered a little more carefully from the perspective of providing interpretation.

The Glacier Sky Walk website tab "A Day at the Ice" identifies a wide range of already existing interpretive experiences that are based out of the Icefield Visitor Centre and adjacent facilities for



Tour coach view of the Glacier Sky Walk under construction and projecting across the viewscape of the Icefields Parkway. P. Duck Photo

people of a wide range of abilities and interests. The "Glacier Sky Walk" experience is not mentioned there. This web page makes it clear that visitor experience of the interpretive resources in the Columbia Icefield are available at arms-length in the vicinity of the Icefield Centre and not down the road suspended over a rocky talus slope. So why pay someone to drive you five kilometres away from the actual interpretive resources? It's all a matter of the spin about the thrill of standing on a manufactured structure fully secure and contained within and on top of the protective glass. Sure, the age-old argument can be made "but this thrill gets them to partake in an activity where they actually read the interpretive signs". Perhaps, but pretty darn expensive sign post. Exciting for sure, but not directly connected to the land. The point of the thing is to be suspended over the land and not actually in contact with the land. People travel thousands of kilometres to get the Rockies. Why not give them the already available stroll

in a real glacier forefield with the katabatic breeze in their faces, Cambrian fossils at their toes, the local golden eagle soaring over goats and sheep in adjacent meadows they can actually see all woven into a story by an inspired interpretive naturalist?

[Index](#)

40 Mile Creek Dam Fact Sheet - Heather Dempsey

The Forty Mile Creek Dam was being modified this spring to account for flood risks after last June's exceptional runoff event. Immediately before circulating the newsletter we heard that approval had been given to reduce the dam all the way to allow for natural flow patterns and restoration of ecological connectivity. This is welcome news with spring runoff about to force work crews to abandon the site. Let's hope this weekend's rain does not delay the project! Here are some facts about the dam you can share with friends.

Forty Mile Creek drains the south end of the Sawback and Vermilion Ranges, with a 20-km west branch that drains south from Forty Mile Summit and an 8.5-km easterly branch that drains the Elk Lake summit area. The two branches converge at the bases of Mount Brewster, Mount Norquay, Cascade and Stoney Squaw Mountains can be considered a "run-of-the-river" dam characterized by a small hydraulic head and storage volume, a short residence time with little or no control over the water release rate, and the ability to pass peak flows.



40 Mile Creek Dam in 2004.
H. Dempsey Photo

History

- 1905 Used as a source of domestic and fire-fighting water for the town of Banff.
- 1911 First dam built, enlarged in 1913.
- 1914 Water system and intake works constructed.
- 1949 New dam built; storage capacity of 91 million litres.
- 1983 Banff townsite stopped using water from dam due to the presence of *Giardia lamblia*.
- 1983 - Present Dam and related facilities are now used only for emergency back-up purposes. 5 wells built to supply town's drinking water; 4 in use and the dam inoperable and its condition is deteriorating.
- 1989 1989 Town of Banff inherits dam as part of its incorporation agreement under 42 year lease.
- 1997 Banff Park Management Plan:
"Pursue the removal of Forty Mile Creek dam to restore more natural flow in the creek and in downstream wetlands; and to use the results of this initiative to evaluate possible approaches to Lake Minnewanka."
- 2004 Proposal submitted to remove dam and restore Forty Mile Creek.
- 2010 Banff Park Management Plan:
"Work with the Town of Banff to restore Forty Mile Creek through a decommissioning plan for the aging dam between Stoney Squaw and Cascade Mountains."
- 2013 Dam drained after June floods.
- 2014 Town of Banff lets contract to partially demolish dam to address flood concerns.

[Index](#)

Developments at Maligne Lake

We understand that many BVN members remain concerned about whether Parks Canada will allow a hotel complex to be built in the sensitive viewscapes and ecosystems at Maligne Lake. Approval of this proposal would allow a major development to occur in endangered species habitat. There are a number of letters and analyses commenting on this proposal and its potential effects on the ecosystem and its implications for park policy and planning. Comments from professional biologists, retired park staff and a detailed analysis undertaken by EcoJustice are available for review.



Contact Info@BVN.org if you would like to be directed to copies of these documents and responses from Parks Canada. We will continue to keep you in touch as this story unfolds and you can follow information on the [Jasper Environmental Association](#) web site.

Historic boathouse near the proposed hotel development at Maligne Lake. *P. Duck Photo*

[Index](#)

Unfortunately, Banff Has Another Endangered Species, At Least On Paper

Dwayne Lepitzki, Ph.D., Member of COSEWIC

Just on the heels of the closing of the public comment period on the Recovery Strategy for the Mountain Caribou of Jasper and Banff National Parks (18 March), COSEWIC (Committee on the Status of Endangered Wildlife in Canada) has re-assessed the Central Mountain populations as Endangered, an up-listing from the previous status of Threatened. This brings the total number of COSEWIC Endangered species who call Banff National Park their permanent home to five, at least on paper. The caribou join the Banff Springs Snail, Whitebark Pine and two species of bats, Little Brown and Northern

Myotis, as being endangered: species facing imminent extirpation or extinction. The reality is that the last 5 Central Mountain Caribou that lived in Banff were killed in an avalanche in 2009.



Will Central Mountain Caribou share fate with the Type 1 Beetle? *P. Duck Photo*

COSEWIC met in Halifax during the last week of April and the caribou were one of a number of species or populations they assessed for the first time, or re-assessed. By law, COSEWIC re-assessed the status of at risk species once every 10 years, or sooner, if conditions warrant an early re-assessment. The last time COSEWIC looked at the caribou was in 2002. At that time, the Jasper and Banff herds were included in the Southern Mountain populations. Updated information on genetics, behaviour including seasonal movements, and life history warranted a splitting of the previous Southern Mountain

populations into two in 2011: the Central Mountain and the Southern Mountain populations. COSEWIC re-assessed the Southern Mountain populations, currently confined to 11 separate and isolated subpopulations in southeastern BC, also as Endangered. The caribou in Revelstoke-Glacier National Parks are part of the Southern Mountain populations.

Industrial development, human settlement and recreation were identified as threats to caribou across their range with the threats for the Central and South Mountain populations continuing and escalating. While population augmentation and transplantation are recognized techniques to turn back the tide of extinction and might be required for the remaining herds in Jasper (population estimates for Tonquin, Maligne, and Brazeau herds, according to the draft Recovery Strategy, are 38, 5, and 8, respectively), we must also recall the fate of the caribou that were transplanted from the Northern Mountain populations to the Southern Mountain populations in March 2012: most died within months (see links at end of article).

Introducing genetic material from inappropriate source populations is another recognized threat to species at risk. Introgression or hybridization with introduced, non-native Rainbow Trout was listed as a threat for the Endangered Athabasca River populations of Rainbow Trout, a species originally found in Jasper National Park, and assessed for the first time by COSEWIC last week. Alberta had previously assessed this fish as “May be at Risk” in 2005.



Western Grebe designated “special concern” by COSEWIC.
A. Athwal Photo

Of other local interest, the Wolverine was re-assessed as Special Concern (a species that may become Threatened or Endangered because of a combination of biological characteristics and identified threats), which is the same status it had from the previous assessment in 2003. Fragmentation of habitat from industrial activity, increased motorized access which could increase harvest pressures, and climate change were all threats to the Wolverine. And while a number of species of grebes have already been observed during this spring’s migration, keep an eye open for the Western Grebe, which is returning from its wintering grounds on the Pacific coast to nest on the prairies. This species was assessed for the first time by COSEWIC in Halifax and was designated Special Concern.

See the following links for details on the ill-fated transplantation experiment and draft recovery strategy for Mountain Caribou:

- [Media Coverage](#) of the failed Purcell Mountain Caribou transplant.
- Purcells-South caribou herd augmentation project [quarterly report](#).
- [Full results](#), including the press release, from the recent COSEWIC meeting.
- Alberta Athabasca River Rainbow Trout [Status Report](#).

[Index](#)

OF WILD THINGS

A New Season for HELS, Make Your Mark! - Mike McIvor

We are looking forward to a very productive year for observations of High Elevation Localized Species. As of early May, we already have received at least 50 reports in 2014; not surprisingly for the first part of the year, the majority are of Mountain Goats along with a few White-tailed Ptarmigan. But it won't be long before American Pikas and Hoary Marmots are active above ground, adding their presence, including their voices, to the landscape. We strongly encourage people to report any of these species when they hear or see them so that our developing data base will continue to expand. Keep in mind that we are interested in sightings from the broader mountain region, not just the national parks although no doubt, those will remain the centre of much attention. Perhaps we can expect more from the Spray and Kananaskis Valleys this



South Molar Pass. Let us know what you see out there! P. Duck Photo

year provided there is no repeat of last year's June floods that made a number of places inaccessible. Also, there now is an "OTHER" category where you can record observations of species of interest beyond the 4 we are tracking. These could include Golden-mantled Ground Squirrel from backcountry locations; Bighorn Sheep from Castle Mountain and west; Porcupine, Red Fox etc. And we will be interested to hear from you about any trends you think might be occurring. For example: last year, two experienced observers said they felt Hoary Marmots appeared to be less abundant in some areas than they had been in the past. This is the sort of thing we will try to keep an eye on and evaluate any changes.

Have a wonderful season in the high country.

To enter observations or to view past results go to the [HELS Project](#) page.

[Index](#)

A Swift Fox in the Bow Valley - Colleen Campbell

In February 2012, Karsten Heuer, then with Banff National Park, took a report about a coyote carcass, possibly a pup, on the shoulder of the TCH, east of Banff. Coyotes whelp most commonly on the cusp of April and May; it was not a coyote pup. The carcass Karsten found was a male swift fox, more than 500 kilometres as a crow could fly from the nearest known established wild population, far in the southeast corner of Alberta. It was also more than 50 kilometers through a complicated bit of geography from the Cochrane Ecological Institute that was involved with the swift foxes reintroduction to the Canadian prairies.

The body was taken to the Calgary Zoo for DNA analysis. What was discovered must be considered in a larger context of the swift fox — their typical nature and their place in the environment.



Swift Fox
Colleen Campbell Photo

Once ubiquitous where the bison roamed, swift fox vanished almost completely from their extensive range before anyone took much notice that they were even present.

“Historically these tiny canids moved freely through 1.6 million square kilometres of virgin North American prairie. In Canada their range once stretched from the foothills of southern Alberta to the Pembina Hills in Manitoba.” (Hockaday, Jill, *Coming to Our Senses on Swift Fox Recovery*)

Swift fox appear to be sensitive to disturbance; their numbers dwindled with sweeping changes in their ecosystem — loss of other native species and disturbance of their habitat: urban development, introduction of cattle and farming, resource exploration and extraction, roads and dams. The species functions best in undisturbed short-grass prairie. Swift fox numbers were negligible for fifty years and by 1980 they were declared extirpated in their Canadian range.

In both captive and wild populations, swift fox have mating and reproduction cycles similar to other wild canid species. A mated pair invests in a long courtship and pups are whelped once a year in late April or early May. The pups spend summer learning to hunt and travel with their parents, typically becoming independent during the late summer and in early autumn. They will disperse, seeking companionship with other members of their own species. Though they can breed before they are a year old — younger than is typical for coyotes and wolves — they do not usually find a mate and establish a den until they

are a bit older. Captive swift fox have lived into early teens; wild ones live much shorter lives, are “old” by eight years.

The foxes live in independent family units, each with a den area that is used all year. Though other fox species, coyotes and wolves often return to dens seasonally they abandon the site as pups mature and are able to travel and learn to hunt. Small canids, coyotes included, prey on ground squirrels, rodents and grasshoppers making them allies to farmers and ranchers. Between 1983 and 1997 there were 942 releases of swift fox in two discrete areas along the Alberta and Saskatchewan border with Montana. By 2001, 99% were considered wild-born, 100% by 2006. The two populations are considered established and genetically healthy, separated from each other by agricultural land and far north of a core population in Wyoming, Kansas, South Dakota and Nebraska. In 2012 COSEWIC gave a cautious nod to the current population stability and changed swift fox classification from endangered to threatened.

How did a swift fox arrive in the Bow Valley? Was it alone? Though never recorded in one of the many remote cameras, a single swift fox was reportedly seen in the Sawback, along the Bow Valley Parkway inside BNP. Were two foxes travelling together?

A genetic scan of 18 variable markers classes the Bow Valley specimen with only 2% probability of belonging to the established prairie populations. That renders the “find” very interesting to researchers; it is an “outlier”, a situation, data point or condition that “differs greatly from others in the same sample” (Canadian Oxford Dictionary). In that the Bow Valley swift fox is one of three (so far) outliers documented by researchers. A single swift fox was discovered near Saskatoon and a swift fox den has been confirmed near the town of Hudson Bay Saskatchewan, about 400 kilometres north and 700 kilometers NE, respectively, of the established populations,

Questions arise. Where does a 2% relative of established populations originate? Does the Cochrane Ecological Institute still have captive swift fox? Did the Bow Valley “outlier” escape from that or some other facility? Are there undiscovered population pockets east of the Bow Valley, hiding successfully from human attention? Are the other two outliers more closely related to the re-established populations than the Bow Valley fox? What is the relationship of the outliers to each other?

The swift fox is still a species of concern and research interest, surviving in limited habitat and dealing with a long list of environmental challenges (oil and gas practices, road construction, industrial noise, pesticides and herbicides, agriculture and urban sprawl). The story, however, is encouraging and analogous to stories of a few other species.

The Bow Valley swift fox has presented researchers with an intriguing puzzle. If I can find answers to the questions that arise because of the Bow Valley swift fox, I will share them in future newsletters.

[Index](#)

Follow Up from Winter Programs

In February, interpreter extraordinaire Joel Hagen charmed us with his brainy bird stories with the help of his friend “Cory”. One of the world’s most amazing migratory journeys is that of the Bar-tailed Godwit. “Recent research reveals that some individuals from the East Asia/ Australasia Flyway population made a nonstop flight of over 11,000 km, the longest continuous journey that has ever been recorded for a landbird. Joel has provided a link to that story [here](#).

Missed March’s program on [The Beaver Manifesto](#)? You can still read the book! Here’s what AWA’s Nigel Douglas has to say about it: “Beavers are the great comeback story - a keystone species that survived ice ages, major droughts, the fur trade, urbanization and near extinction... It is one of the few

species that refuses to play by our rules and continues to modify environments to meet its own needs and the betterment of so many other species, while at the same time showing humans that complete dominion over nature is not necessarily achievable....The Beaver Manifesto (Rocky Mountain Books, 2011) is a small book which tells a huge story." A quick search on your web browser will identify where you can purchase a copy or browse your local library catalogue.

Want to know more about wolverines and other weasels? April's talk by Tony Clevenger may have whetted your appetite for all things wolverine. Visit his project site WolverineWatch.org where you can also download an identification card to help you do your own research. Plus, here's a video from [another wolverine study](#) underway in northern Alberta. This is the 5th video in a series on their work. This one highlights not only wolverines but has great footage of other weasels lured to their sites.



Joel Hagan and Cory
Heather Dempsey Photo

[Index](#)

CONTACTS

Let these people know your thoughts about current issues:

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

Blake Richards MP
Richards.B@parl.gc.ca
House of Commons
Ottawa, ON 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

[Return to Top](#)