

**BOW VALLEY NATURALISTS
NEWSLETTER, WINTER 2006
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PROGRAMS/EVENTS

Wed., January 25 7:30 pm.

A Simplified Approach to the Climate

Change Controversy: with Dr. James White.

Location: Banff Seniors Centre.

Wed., February 22 7:30 pm.

**Tracking Wolves in the Rockies Using DNA:
where did they come from and where are they going?**

with Conrad Thiessen.

Location: Banff Seniors Centre.

NOTE.

February 22 is the evening of our **Annual General Meeting and elections**. Anyone interested in participating on the Board of Directors should contact Heather Dempsey (762-3056) or any member of the Board before mid-February.

REMINDER!

Memberships are now due.

Our financial year is the calendar year. Memberships, still at a low cost of **\$5.00** are now due for year 2006.

Wed., March 22 7:30 pm.

To be announced.

Location: Banff Seniors Centre.

Wed., April 26 7:30 pm.

Caribou and Wolves in the Columbia

Mountains: with Shannon Stotyn.

Location: Banff Seniors Centre.

2005 Christmas Bird Counts

Mike McIvor

"The Banff-Canmore CBC and the Bow Summit CBC both confirmed what many people had been noticing throughout the late fall and early winter: the woods are quiet this year." If people think this introduction to the summary of results from this year's Christmas counts sounds vaguely familiar, it probably is, because

this is the way I began the report for 2004. But if anything, the woods are even more quiet this year. On the **Banff-Canmore** count – our 31st – we found 42 species, 2 fewer than last year and approximately 2 below the long term average. The number of individual birds was almost 250 fewer than last year and more than 960 below the long term average.

- The count, on December 17th, a bright, spectacular winter day, attracted 45 participants. With the official Environment Canada temperature for Banff bottoming-out at -28 in the morning, I must admit it began with somewhat cool conditions; fog drifting over open water made viewing difficult in places, especially at the Cave and Basin and along the river. However, most people simply bundled-up in warm clothing and carried on. It was not until our treasurer stomped into the Banff Seniors Centre for our evening potluck dinner that the Whining Index (WI) took a dramatic spike upward. Not smart enough or quick enough to hide, I immediately became the object of her fulminations as she dissected my deeply flawed character, chastised me for encouraging her to take part in an activity fit only for extreme-cold-loving lunatics, and finally, in a loud voice drenched with sarcasm, congratulated me for – Once Again! – Deliberately! – having scheduled a bird count for The Coldest Day of All Time!

Clinging pathetically to some remote hope for redemption, I made my escape, thinking I had detected a partial – perhaps completely unintended – compliment in the last part of this harangue, but worried that the Bow Summit count might be colder still, inciting a rhetorical onslaught that could push the WI to new heights.

For the second year in a row, winter finches (crossbills, redpolls, pine grosbeaks, siskins) were almost non-existent. And numbers were down for many of our common, resident species, including Gray Jay, Clark's Nutcracker, Black-billed Magpie, Common Raven, Black-capped and Boreal Chickadee, and Red-breasted Nuthatch, the last 3 appearing at the lowest level since 1986. While Downy Woodpecker (3) was the lowest since 1977, and Hairy Woodpecker (2), with the exception of the same number in 2003, was the lowest since the first year of the count – 1975 – we tallied a record 14 American Three-toed Woodpecker.

After reports of a Northern Hawk Owl during count week but not on count day the previous 2 years, it was good to record one this year; the only other time we have done so was in 1980. This also was only the second time we have recorded an American Wigeon; the other was in 1995.

But, as everyone knows by now, the outstanding highlight of this year's count was a King Eider, a first winter male, discovered at Lake Minnewanka. In fact though, by the time we had finished compiling results in the evening, the identity of this bird was still a mystery. Peter Poole and Reno Sommerhalder had trekked out to the tip of Sheep Point to get a look at some ducks in the only patch of open water on the lake. At the potluck, they reported seeing over 60 Common Goldeneye but also talked about another diving duck, noticeably larger than the goldeneyes, with a distinctive yellow/orange bill. Unfortunately no prompting question, or poring over a variety of field guides was able to lead them to a conclusive identification with which they could be comfortable. All they could be sure about was that they had seen something unusual, something they never had seen before.

It was Jason Rogers who made the initial determination 2 days later. Actually at the potluck, when he and I were "grilling" Peter and Reno about their mystery duck, Jason had mused aloud about the possibility of a King Eider, based on stories of some recent, unusual occurrences of this species on the west coast. (Of course, as your humble(d) – and ever skeptical – compiler, I rejected the

suggestion out of hand.) Late in the afternoon the day after the count, he drove out to Minnewanka to use his scope from the picnic area but realized he would have to get much closer. So Monday morning, he returned to the lake, made his way out to Sheep Point and confirmed that Peter and Reno indeed had seen something unusual. He raced back to town, eager to spread the word about the remarkable visitor.

Flocks of birders descended on Lake Minnewanka in the following days, traveling from various locations throughout the province, all anxious to see the King Eider, a species known to have occurred in Alberta only once before, when a single bird was shot near Calgary in 1894. From the parking lot they tromped up the trail to cross the bridge over Stewart Canyon, then along the ridge above the shore to Sheep Point. All the pilgrims were armed with binoculars and many were packing scopes and cameras, some with lenses half the size of our car.

The flow of migrant birdwatchers came to an abrupt halt a few days later after Doug and Donna McKown photographed the remains of the young duck on the ice near the open water, its body partially consumed, a victim of predation. Reports of an adult Bald Eagle swooping low over the eider a day or so earlier, suggest the probable cause of death. We were left with the knowledge that when an individual bird finds itself so far from its normal range, its life isn't going to be easy and maybe not long.

Banff-Canmore Count:

American Wigeon	1	Blue Jay	11
Mallard	586	Clark's Nutcracker	76
Green-winged Teal	3	Black-billed Magpie	177
King Eider	1	American Crow	13
Common Goldeneye	71	Common Raven	225
<i>goldeneye sp.</i>	5	Common Raven	141
Common Merganser	7	Black-capped Chickadee	97
Bald Eagle <i>imm.</i>	1	Mountain Chickadee	121
Killdeer	4	Boreal Chickadee	39
Wilson's Snipe	1	<i>chickadee sp.</i>	48
Rock Pigeon	22	Red-breasted Nuthatch	19
Northern Hawk-owl	1	White-breasted Nuthatch	1
Northern Pygmy-owl	1	Brown Creeper	5
Great Gray Owl	CW	American Dipper	16
Belted Kingfisher	1	Townsend's Solitaire	8
Downy Woodpecker	3	American Robin	CW
Hairy Woodpecker	2	European Starling	2
A. Three-toed Woodpecker	14	Bohemian Waxwing	81
Black-backed Woodpecker	1	Harris' Sparrow	1
Pileated Woodpecker	2	White-crowned Sparrow	2
<i>woodpecker sp.</i>	1	Snow Bunting	2
Gray Jay	27	Rusty Blackbird	1
Blue Jay	9	Pine Grosbeak	18
Clark's Nutcracker	49	Pine Siskin	3
Black-billed Magpie	106	Evening Grosbeak	23
American Crow	11	House Sparrow	188

CW: reported count week

TOTAL SPECIES: 42

TOTAL INDIVIDUALS: 1715

The Bow Summit CBC – our 28th - took place on December 28th, a fine, relatively mild day with clouds lying low over the peaks. In fact it was such a pleasant day I am delighted to be able to report the WI was rated Very Low. Of course I had received some threatening phone calls from our treasurer in advance, but the day itself provoked no further admonitions.

We found 10 species, 3 fewer than the previous year and just slightly above the long term average. Individual birds numbered 107, 11 below the long term average and 40 more than last year. However, 39 of those birds were in a single flock of Bohemian Waxwing that swept overhead as 5 of us stood at the side of the highway comparing notes before heading home. It was a good way to end the day, with a species new to this count.

The small areas of open water at the outlets of Bow and Hector Lakes that occasionally have had ducks in past years, and more frequently, American Dipper, were beautiful as always, but birdless. Diane McIvor watched from a ringside seat as 2 Gray Jay harassed a Northern Pygmy Owl, their bulky shapes making it seem tiny.

A skier in the backcountry saw 1 White-tailed Ptarmigan flush from its snowy cover just before an avalanche came down in the vicinity. This was our only sighting of the signature species for this count; interestingly, the extensive willow areas in the valley bottom that most years are laced with tracks, showed no signs of ptarmigan activity. Perhaps the low snow depth meant they could continue to feed at higher elevations. Regardless of birds seen or missed, the Top of the Bow is a wonderful place to spend a winter day.

Bow Summit Count:

White-tailed Ptarmigan	1	Common Raven	8
Northern Pygmy Owl	1	Boreal Chickadee	25
A. Three-toed Wood pecker	2	<i>chickadee sp.</i>	5
Pileated Woodpecker	1	Bohemian Waxwing	39
Gray Jay	7	White-winged Crossbill	2
Clark's Nutcracker	16		

TOTAL SPECIES: 10

TOTAL INDIVIDUALS: 107

Count results from 1900 to the present are available through the web site:

<http://www.audubon.org/bird/cbc>

Birds out of Place?

Mike McIvor

How "weird" was it for a King Eider to show up at lake Minnewanka a few days before Christmas? A Black-necked Stilt at a wetland near Moose Meadows in the spring? The Winter 2005 edition of Edmonton Nature News, the publication of the Edmonton Nature Club contained a short article about observations of Great Egrets in a wetlands area near St. Albert, just north of Edmonton. Unlike our King Eider, this was not an enterprising, or misguided, straggler, but a pair of birds that nested and successfully fledged four young. Yet this species is rarely seen in Alberta and the closest established breeding populations are south of the Great Lakes area in the east and in northern California in the west. Obviously, the annals of birdwatching are riddled with tales of rare occurrences. (Sometimes these attract far more attention from hard core birders than the existence – even the plight – of species that are part of the ecosystem in which the stranger has landed.) With a warming climate, can we expect more of these aberrations?

THE JOY OF RAVENS

Peter Duck

The recent stretch without snowfall had every one hoping for some replenishment. As the first snow of the new year fell on the town January 9th there seemed to be that familiar collective joy in nature; every one you passed shared a word or two about the white stuff.

That day, I watched the flakes fall during lunch in a local establishment. And there, on a roof across the alley, I saw the plainest proof that the pleasure of nature's events was even more universal. The aerial antics of ravens are familiar to most of us: I frequently delight in watching them surf, twist and roll in the updrafts as the Chinook winds whip the crest of the Hoodoos ridge. But this display was completely unexpected.

Two of these black characters alighted on the crest of a sloped roof. There was a bit of mutual head bobbing and then they commenced rolling in the snow down the snowy pitch for two to three revolutions. A bit of pecking at the snow, a few more shared head bobs and then another few rolls. This went on for several moments before they flew off. If only I had my binos I'm sure I would have seen them trying to catch snowflakes in their bills as they went!

A QUICK TRIBUTE TO THE CANYON

Peter Duck

I have had a bit of a discussion with local Parks Canada officials about ending ice climbing in Johnston Canyon. What was I thinking? It seems maintaining the opportunity to climb the ice in the Canyon is essential if climbers are to be able to indulge in their sport free of the threat of avalanche. Other such opportunities supposedly are limited in the climbing repertoire of the park so the magnificent ice sculptures and sensuous snows of the Canyon will continue to be trampled and broken or turned into that Swiss cheese look.

After all it's just Johnston Canyon - another over-worked local attraction. Or is it more? My frustration in trying to protect these symbols of Canadian winter from the adverse effects of adventure tourism got me wondering about what is so outstanding about this place. Here's my initial list of what is special about this particular slot in the limestone lest we locals take it for granted and allow this jewel to lose its lustre.

Physical

What makes this break in the limestone different from many in this area of the Rockies is that it is less of a slot than others such as Maligne or Marble or Mistaya canyons. Narrow enough to create its own world but open enough to allow some sunlight into this land of spray, the configuration of its vertical walls and ledges make Johnston Canyon a unique feature in these mountains.

The canyon contains the region's best examples of active travertine drapes or "flow stone" formed by ground water seepage and precipitation of calcium carbonate over the canyon walls.

Here are wonderful examples of active and relic solution and abrasion forms in limestone including plunge pools and abandoned waterfall impressions. Common interpretation is that these formations were created starting about 8,000 years ago following deglaciation. A variety of other theories and evidence suggests these canyons could be much older. One theory proposes that they

were formed by subglacial meltwater streams and thus predate the final days of ice cover. Another very plausible theory argues that canyons such as this are very ancient cave systems that predate the ice age and the only role glaciers played was in shaving the roof off the cave system leaving a canyon or grotto formation. Cavers are very familiar with these underground slots; the most famous is Canada's longest known cave - the Castleguard system in northern Banff Park. If the latter theory applies to Johnston it could be many millions of years old rather than thousands. Remember that about 45 million years of liquid water erosion intervened after the Rockies were raised before the ice of the Pleistocene age worked its surficial wonders on this landscape.

Close up views of frost shattering formations in limestone including frost pockets.

Eye level views of horn corals (~275 million years ago) reminding us that the Canadian Rockies and their fossils span 1.5 billion years of life on this planet.

In winter, some of the most accessible and spectacular hanging ice formations found anywhere in the region contrasted with the most minute and delicate wonders of water in its frozen form. The winter patterns of freezing, thawing and refreezing allow these features to evolve all winter long before our eyes.

One of the best developed local katabatic (cold, down slope) wind patterns in the area.

Wildlife

There is no doubt the Canyon has a special collection of resident and visiting wildlife that is different than the surrounding landscape. Notable fauna range from the occasional nesting Great Horned Owl and the American marten that patrol the canyon floor in winter to the secretive wood rats and a pair of Ravens that call this home territory.

The nesting sites of the rarely seen (unless you are a caver) Bushy-tailed Wood Rat are common in the canyon and often revealed by the orange and yellow lichen patches on the rock walls. There are also pockets of orangy-brown excrement packed into the crevices. In the deserts of the US Southwest wood rat latrines have been studied for fossil pollen trapped in these resinous deposits. What could we learn from our own rat biffies?

Nesting sites for the Black Swift. While common in western North America this is the only known breeding site in Banff National Park. They raise only one young per pair each year - and we thought grizzly bears had marginal reproductive rates!

American Dippers nest in the Canyon and are one of our first signs of spring as they begin to declare their territory along the canyon with their wren-like melodies in mid to late March.

This is one of the most consistently productive fish watching areas in the park where Brook Trout can be seen hanging out in the pools from fall to spring.

Vegetation

The Canyon contains some great patches of small but fascinating plants such as liverworts, lichens and mosses at eye level on the canyon walls. While local warm springs constantly amaze us with their unique vegetation communities I wonder what a detailed survey of plants in the canyon would turn up at the opposite end of the average temperature range?

If the age of individual cedars on the cooler cliffs of the Niagara Escarpment are any indication, Johnston Canyon may be the place to look for Banff's oldest trees. If so, what messages of climate change are held in the rings of these specimens?

The most wonderful thing about JC (no pun or disrespect intended) is that it is so accessible to ourselves and to visitors from around the world. We locals may have alternative areas where we go to see the wonders of water in the absence of crowds. But Johnston Canyon is the shrine. This is where we take our visitors to show them one of the best of the special places in this magnificent landscape. I could go on and I'm sure that many of you have your own human and nature based stories that make Johnston Canyon unique. I would like to hear them. Please send your notes and knowledge of Johnston Canyon to the editor at Box 1693 T1L 1B6. We'll include them in the next newsletter.

And just to test or build your canyon lexicon find the meaning of these words - vadose, vug and frazil ice.

YOHO?

Peter Duck

The common explanation of the name for Yoho National Park is that Yoho is a Cree expression of wonderment. But now I wonder. Recently while reading Dicken's Barnaby Rudge I came across the word as a 19th century English expression of wonderment. I wonder whose wonder was really applied to Yoho?

Getting the jump on spring

Brenda Lepitzki

I never expected to be recording amphibian activity on the 12th of January, but that is now the official date of the beginning of the 2006 amphibian data year.

I had been wondering about the effects of the recent mild weather on the plants and animals, thinking mostly of birds and bears. It wouldn't be too much to expect a robin sighting soon. Much to my surprise as I was looking in the marsh by the fish viewing platform at the Cave and Basin, I saw another harbinger of spring - a live adult wood frog. (see photo)

Normally wood frogs awaken and become active around late April, even when ice and snow are still on the water. This wood frog was sitting in water much warmer than that, but where did it come from? Why did it wake so soon? Wood frogs hibernate under litter and humus. Perhaps the frost has come out of the ground near the marsh. Or the water course could have changed and flooded the hibernation site. Was this the only frog waking up, or are there more? Is this an unusual event, or have we just not noticed this before?



photo: Brenda Lepitzki

Unfortunately the next day I found the same frog dead only a few centimetres away, the body already decomposing in the warm water. This was its certain fate, and for the sake of the health of the local amphibian populations, I really hope not to see any more of them until true spring has arrived.

Winter world

Colleen Campbell

Compared to warmer seasons, winter appears to be a quiet time. However, a walk or a ski in a winter landscape may tell of a busy world.

A few creatures hibernate during the cold and less-productive months; many others do not. We ignore the "small things", such as voles and mice in summer. In winter, their tracks tell us stories even though they are still out of sight, they are active in the sub-nivean layer, sleeping, eating and staying warm. The sub-nivean layer also hosts surprising invertebrate activity.

All the plants are resting, with roots maintaining all their systems in anticipation of the warming spring, when they will extend new shoots, gather nutrients and water and awaken from seasonal dormancy. Close scrutiny of many shrubs will reveal buds already set, ready to open as soon as nutrients reach them with longer daylight hours and the warming air of spring.

Successfully mated bears are giving birth in their dens. Coyotes and wolves have been engaged in 'canid courtship' since November, establishing a socially ordered family before mating; the family, thus established, will share rearing pups born in early May.

Red squirrels are using the food carefully stored earlier in the year and using all their squirrel strategies to stay out of the teeth of American marten, seldom seen in summer or winter. Pika in the high country are also depleting food gathered during summer daylight.



American marten

photo: Doug McKown

A walk in the snowy woods will yield evidence of lots of activity. The tracks of a moose and calf might cross your ski trail. Nibbled branches and tell-tale bounding tracks of the snowshoe hare may be closely associated with the floating hairy prints of a lynx. The two-by-two tracks of the marten will take you from tree to tree, along logs and into cavities under rocks and roots, revealing regular night-time searches for prey.

The steady track of a cougar through the woods may follow those of a deer, icy beds will reveal the resting places of a herd of elk, the single straight track of a fox across a meadow might reveal its return to a resting place in the woods after nocturnal hunting. A single wolf track may tell of a lone traveller or of a leader breaking trail and followed with relative precision by others in the same track.



Wolf track.

photo: D. McIvor

A walk along a stream will surely bring the sighting of a resident American dipper, searching the cold water for food. A few ducks may be resting in the still water of an eddy or where the stream flows into a pond or lake.

The winter world reveals complex stories, though ‘reading’ them is sometimes a challenge. Your own winter world, small or grand, will be much enriched if you take time to learn to interpret the signs presented in the winter landscape.

ISSUES

Explosions: sounds and lights after dark

Dungbeetle

It happens at least 3 times a year: July 1, Halloween, and New Years; 2005 was an exception with an additional bombardment occurring for Alberta’s centennial celebration. A few questions always come to mind as I hear, see, and smell gunpowder and chemicals and later view the debris resulting from the 15 or so minutes of explosions. I don’t like being a kill-joy but these questions need to be asked.

- Is this an appropriate activity within a national park given that this same activity occurs in municipalities elsewhere?
- How does it contribute to “Heritage Tourism” other than giving the visitors and residences an opportunity for a few “aahhs” and “oohhs”?
- Is a permit required? If so, who issues the permit?
- How is the permit request assessed?
- Has an environmental assessment ever been done to determine the effects of the explosions, noises, and bursts of light on wildlife such as birds and elk? I’ve been told that in the past when there were large numbers of elk living within the town, there were incidents of the herd stampeding through neighbourhoods.
- Has anyone ever studied the environmental effects of fireworks?

Why is the town allowed to litter when this activity is typically against the law? Don’t believe me - take a walk across the playing field at the recreation ground or along Tunnel Mountain Drive. See for yourself the pieces of plastic, wires, and charred cardboard - an absolute disgrace - covering the ground.

A few years back, an enlightened bunch of residents tried to do something different during First Night - an alcohol-free New Years celebration. Instead of fireworks, they tried laser beams directed into the sky. The experiment was short lived and the more typical celebrations, including fireworks, soon returned.

Isn’t it time the appropriateness of fireworks in Banff National Park was examined?

Searching for treasure in modern times

Dwayne Leptizki

The issue of geocaching first appeared on BVN's radar screen when someone flipped through the fall 2005 community class catalogue and noticed a new course. Several members of the executive had never even heard of the activity: using a handheld GPS (Global Positioning Satellite) receiver to direct a searcher to a "cache". The searcher finds out about the geocache by checking out a website where the coordinates, such as latitude and longitude, and description of the cache had been placed by someone else. Depending on the type of cache, the searcher might add a trinket to the cache after removing one, add his/her name to the list in the cache, or just enjoy the satisfaction of adding another notch to his/her geocache list. The searcher can then go back to the website and add his/her comments about the geocache for all to see.

We began doing some research into the issue, beginning with a web search. Yes, the activity was occurring in Banff National Park with caches located inside the townsites as well as within the park. A new language was even used, some of which is based on Harry Potter e.g. "muggles" are "non-geocachers".

One description by a searcher, "Kaslo & the GeoMice" (172 ticks on their list as of November 2005), who found the Vermillion Lakes Cache was particularly intriguing: "It is nice to still be able to find a cache in a National Park (Parks Canada has operated with Nazi-like efficiency in removing caches from Jasper Park since the geo-moratorium came into effect)."

Contact was made with some friends who kindly sent an article from their local Jasper paper. The 28 Sept 2005 article said that Parks Canada was soliciting public comments on the activity of geocaching, the comment period ending on 31 Dec 2005. Interestingly, the official notice about the public comment period on the Parks Canada website was dated 20 June 2005.

With the clock ticking, BVN did manage to get our comments in by the deadline.

The whole situation begs the questions:

Did Banff National Park, supposedly the flagship of the entire protected-areas system, even know about the public comment solicitation?

How is the public supposed to comment when they don't even know that public input is being requested?

Plans and More Plans

Mike McIvor

All the jurisdictions in our region are in the midst of preparing, revising, or implementing plans that will affect the future of the Bow Valley. BVN members should take advantage of every opportunity for public participation to stand up firmly for conservation values. Watch for your chance to contribute your thoughts on:

- National Park Ski Areas Long Range Plans
- Lands Adjacent to the Town of Banff (LATB)
- The Town of Banff Community Plan
- The Town of Canmore Mining the Future visioning process

- and an on-going flood of projects subject to public hearings in Canmore and the M.D.

Your concerns will be heard only if you speak.

Language Matters

Mike McIvor

An extremely important event in the history of Canada's national parks was the publication in 2000 of the report from the Panel on the Ecological Integrity of Canada's National Parks (the EI Panel). Titled: "**Unimpaired for Future Generations? Conserving Ecological Integrity with Canada's National Parks**", the report is in 2 volumes and deserves to be widely read.

Volume II, **Setting a New Direction for Canada's National Parks** devotes an entire section to examining Parks Canada as an organization, providing its analysis and recommendations under the heading: **Toward a Culture of Conservation**.

In the first edition of *Language Matters*, one of the things I noted was the way the corporate model has been imposed on organizations of all stripes. Language is an essential component of the imposition. This time, rather than continue my personal crusade – although it is far from over – I thought you should hear what the EI Panel had to say.

The Language of Business

Currently the language of Parks Canada is oriented toward business and development. The adoption of business language within Parks Canada (terms such as "CEO", "clients", "business plans," "revenue") and resource-harvesting language (terms such as "resource management") while perhaps perceived as only a semantic issue, clashes with the values of a conservation-based organization and symbolizes the importance of the revenue and development themes. We propose for example, to change "CEO" to "Commissioner" – a term that reflects the history of Canada's national parks. p.2-6

The Panel stated specifically: "*We recommend that within six months Parks Canada begin a process to move away from the language of business and adopt a language that emphasizes ecological integrity and conservation*". p. 2-8

Unfortunately, but not surprisingly, senior managers with Parks Canada have not completely embraced the wisdom in the E.I. Panel's report. This recommendation has been steadfastly ignored. And so, the struggle must continue.