

**BOW VALLEY NATURALISTS
NEWSLETTER, WINTER 2007
BOX 1693, BANFF, AB
T1L 1B6
PHONE: 762-4160**

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

PROGRAMS/EVENTS

Wed., January 23 7:30 pm.

**Transboundary Conservation in the Purcells:
a look at the conservation threats and solutions
in one of the Kootenays' wildest mountain ranges**

with Dave Quinn.

Location: Banff Seniors Centre.

Wed., February 27 7:30 pm.

**Vampires in the Basement: lessons about
caribou, biodiversity and ecological
restoration from the wise fishes of Jasper
National Park** with Dr. Michael Sullivan.

Location: Banff Seniors Centre.

NOTE.

February 27 is the evening of our
Annual General Meeting and elections.
Anyone interested in participating on the Board of
Directors should contact Peter Duck (762-4335) or
Heather Dempsey (762-3056 - evenings), or any
member of the Board before mid-February.

REMINDER!

Memberships are now due for 2008.

Our financial year is the calendar year.

We want to keep the membership at the low cost of
\$5.00. But we should let you know the costs of renting
the hall for meetings and mailing the newsletters have
gone up. Our other major expense is the honorariums
we offer our guest speakers to cover their travel costs.
We want to remind you that you will receive a
charitable donation receipt for donations of \$5.00 or
more.

Wed., March 26 7:30 pm.

To be announced.

Location: Banff Seniors Centre.

Wed., April 23 7:30 pm.

**Travels in East Africa: birds, mammals,
Serengeti, and Kilimanjaro** with Mike Potter.

Location: Banff Seniors Centre.

2007 Christmas Bird Counts

Mike McIvor

On December 15th our largest group of participants ever helped mark the 33rd Banff-Canmore CBC. Sixty-six people enjoyed a pleasant day with cloudy skies in the morning and brief sunny breaks in the afternoon. A cool wind was encountered in places, but overall, conditions were mild enough there was little cause for complaint. An icy crust under the surface of the snow made walking more difficult than usual and made us think it must be tough traveling for wildlife at this stage of the winter.

As many of us had expected, a very heavy cone crop on Douglas fir and spruce trees seemed to be the major attraction leading to a dramatic increase in the number of individual birds compared to recent years. Our total of 47 species was only 3 above the long-term average but the total of 3808 individual birds was 1652 more than last year and 1171 above the long-term average.

Not surprisingly, we managed to establish some new records. Numbers of Rock Pigeons, the only species for which we set a record on last year's count, continue to climb with 51 more this year. Amongst native species, 17 Townsend's Solitaires were 1 more than the previous high from 1983. Another, more recent record of 80 Dark-eyed Juncos in 2004 was exceeded by 24 this year. And after 3 years when we did not find any Red Crossbills, this year's count of 214 almost tripled the previous high of 73 from 2002. At the other end of the record spectrum, 13 Gray Jays represented a significant plunge below the previous low count of 20 reported in 2000 and 1979 and was 22 fewer than last year.

Not to be outdone by its red cousin, White-winged Crossbills showed the largest increase over recent years although not attaining a record. Two and three years ago we did not have any, last year we had 6, and this year 726; the tree tops were alive with their busy feeding and chatter. Also feeding and chattering throughout our area were 202 Red-breasted Nuthatches, far more than the 14 we found last year. The woods are alive with birds this year in a way they haven't been for several years; people should make every effort to get outside and enjoy the activity.

Any time a new species is added to our list, it is a real highlight of the day. Peter Poole and Ed Whittingham packed a spotting scope and trudged from the parking lot at Lake Minnewanka up to the bridge at Stewart Canyon then back out to Sheep Point to reach some open water where they were able to confirm our first White-winged Scoter. Other notable observations include a Great Blue Heron for only the second time, thanks to Reno Sommerhalder's car - don't ask, it's a long story - around which Reno, Ed, and Peter were gathered at Minnewanka as the stately bird flew overhead. Kevin Barker and Keith Webb found a Virginia Rail, our third, at the Cave & Basin. And 7 American Robin were the first of this species in 6 years.

For more information on the olive-sided flycatchers go to:
<http://audubon2.org/watchlist/viewSpecies.jsp?id=152>
and
http://www.cosewic.gc.ca/rpts/Short_Species_Assessments_e.html

ISSUES

Review of Park Management Plans

Mike McIvor

Management plans for all 7 mountain national parks are in the process of being reviewed. For the most part, these plans are intended to have a shelf life of 15 years but must be reviewed every 5 years to ensure they remain up to date. This will be the 10 year review for the Banff plan and although plans for the other parks were completed at different times, Parks Canada has decided it will be best for all to be subject to the same schedule. So for the first time, all mountain park plans are undergoing more or less simultaneous review. A key part of this process will occur when Parks Canada determines which sections of the various plans should be amended and what those amendments might look like.

At the moment, the draft State of the Park Report (SOPR) for Banff National Park is being revised. When completed it is expected to form the template for the SOPRs of the other parks. These documents will provide essential background information for park managers and the public as consultation proceeds.

Apparently there still is some hope that consultation might begin this spring, however we know from past experience that when governments enter pre-election mode, as is the case today, their bureaucracies become very reluctant to move anywhere on anything. In other words, maybe spring, but don't count on it. But do keep watching and listening. Management plans are crucial for shaping the future of national parks and the review process is crucial for shaping the plans. Be sure to take advantage of every opportunity offered for public participation to make sure your ideas and opinions are heard.

The Species at Risk Act InAction

Dwayne Lepitzki, Ph.D.

No, that's not a typo in the title. Read on to see whether "in action" or "inaction" is more appropriate.

A "consultation workbook" recently arrived on the desk of BVN. It was from the federal Department of Fisheries and Oceans and concerned the worthiness of a wildlife species for protection under the Species at Risk Act (SARA). In 2006, COSEWIC (Committee on the Status of Endangered Wildlife in Canada), using the best scientific, community, and aboriginal knowledge available, listed the Alberta populations of the Westslope Cutthroat Trout as "threatened", one level down from "endangered" or in imminent danger of extirpation (disappearing from the wild in Canada) or extinction (disappearing from the Earth). It is "threatened" because habitat loss, over-harvesting, and introduction of

non-native species have reduced the native populations of the fish by almost 80%. In Alberta, natural populations exist in the Bow and Oldman River drainages of the South Saskatchewan River. But, it also is a popular sport fish, having been introduced into many naturally fishless lakes and rivers. The jurisdictional authority, DFO in this instance, must now consult with various stakeholders to see if this species is worthy of legal protection.

What you ask? Isn't it protected by being listed by COSEWIC?

The answer is no, and this lack of legal protection following the listing by COSEWIC was one of many concerns expressed by those trying to improve Canada's Endangered Species legislation before it became law in 2003. You see, the Government and in particular, the Federal Cabinet, not scientists, decide which species are worthy of protection by being listed under SARA because such listing could have economic or social implications. In the case of "endangered" and "threatened" species, it becomes illegal to kill, harm, harass, etc. the species, damage or destroy its "residence", and once officially delineated, damage or destroy its "critical habitat" unless, of course, a permit is issued by the responsible Minister. The clock also begins ticking for the preparation of a Recovery Strategy and then Action Plan or Plans that are required. What does this mean for a species prone to pursuit by humans?

A recent scientific paper published in Conservation Biology and co-authored by the current and previous Chairs of COSEWIC, as well as two others, offers some insights (Mooers, A.O., I.R. Prugh, M. Festa-Bianchet, and J. Hutchings. 2007. Bias in legal listing under Canadian Endangered Species Legislation. *Cons. Biol.* 21(3): 572-575.). They examined the differences between the COSEWIC and SARA lists of species from 2004 through 2006 and found that harvested fish and mammals were significantly less likely to be added to the SARA list from the COSEWIC list. Only 5 of 29 harvested mammals and fish were SARA listed, whereas 27 of 29 non harvested fish and mammals were listed under SARA. The biggest differences in the two lists were found with marine fish (almost always denied SARA listing) and northern species (none of the 10 COSEWIC listed species occurring in Nunavut were SARA listed). There was still a big difference between the proportion of freshwater fish and other flora and fauna (plants, birds, amphibians, reptiles, and invertebrates) that made the transition from the COSEWIC to the SARA list. Will the Westslope Cutthroat Trout, a species native to Banff National Park, be deemed of legal protection under SARA?

BVN will certainly be completing the "consultation workbook" for the threatened Alberta populations of Westslope Cutthroat Trout. There also may be further opportunities for BVN and the Canadian public to be involved with SARA. As we become aware of these opportunities to provide the federal government with comments on SARA, we'll be sure to pass them on. Let's help ensure "In Action" was more appropriate than "InAction".

On A Clear Day You Can See Forever - or Not

Peter Duck

Lafarge is planning to significantly expand its cement works at Exshaw. An expansion of this magnitude is likely to have a variety of effects that valley residents may wish to consider not the least of which is air quality. For example, according to the Bow Valley

Clean Air Society, green house gas emissions from the plant are projected to rise by 47% to about 1,788,039 tons of CO2 per year as a result of this expansion. A process to hear public concerns is under way with public sessions having been held in mid December.

Following these sessions the Canmore Leader reported that some MD of Bighorn Councilors expressed concerns related to noise, effectiveness of monitoring, and transportation issues such as increases in truck and rail traffic. The Bow Valley Clean Air Society has also raised concerns about greenhouse gas emissions from both the plant and from increased transportation sources as well as cumulative effects on air quality issues related to increased vehicle traffic.

The Bow Valley is a narrow but flexible atmospheric pipe and Lafarge is not the only source pumping emissions into that pipe. When the pipe diameter is large and flowing freely with the prevailing westerly winds we do not perceive a problem and we rely on the "dilution is the solution to pollution" mantra. But what happens when upslope winds cause the pipe to backup into our mountain playgrounds and ecosystems?

Dilution may not be an acceptable solution for much longer. Air emissions are now increasing due to the combined contributions of industrial and residential activity along with increased through traffic on our highways and a city of over a million people to the east. Even with state of the art emission mitigation technologies and air management practices the math remains the same in a growth based economic model. That is, more = more and sometimes cumulative effects mean more = (more)^X.

But are we now reaching a point of no return with respect to what we want for our air quality in relation to development in the valley? We are likely to see increased contaminants in our air space during calm periods or when inversions block those emissions from flowing efficiently out of the valley. While air quality may meet urban health standards during these events residents of the Bow Valley may wish to reconsider whether that is good enough given the expectations of lifestyle advertising that promotes the valley as a fresh mountain environment. Visibility is something that is often overlooked in the monitoring of air quality but it is the bread and butter of our mountain lifestyles. It is time Bow Valley residents started asking what the visibility issues will be in the coming years. Certainly many traveling from the west towards Canmore are already well aware of those calm mornings when you descend into the haze while heading down the East Gate hill. This could be natural water vapour haze or are we starting to notice the visible effects of packing more and more people and industry into a narrow mountain valley while clinging to an outdated perception of pristine views in the Rockies? Whether you work in the tourism industry, are involved in promoting pristine views from mountain homes or simply want to protect local ecosystems from air pollution impacts it may be time to take action and ensure planners know the answers.

To find out more check out these organizations and their archives:

- **Bow Valley Clean Air Society**
www.bowcleanair.org

- **Biosphere Institute of the Bow Valley**
<http://www.biosphereinstitute.org/>



The top of a layer of haze on a calm Canmore morning (Dec. 4, 2007) marks the inversion boundary between cold air trapped below warmer air above. Are such haze events increasing in frequency and being enhanced by growing pollution emissions in the lower Bow Valley?
PHOTO: P. Duck

Language Matters The Gain Game

Mike McIvor

In the world of politics, including the politics of national parks, it is essential that citizens pay very careful attention to the way language is used - or misused. Take the early stages of long range planning for the Marmot Basin Ski Area in Jasper National Park as an example. Right now, we are waiting to hear what Parks Canada has decided following its analysis of public comments on draft Site Guidelines for the ski area. (The final Site Guidelines, approved by Parks Canada CEO Alan Latourelle, will provide the context within which Marmot may put forward proposals for development.) At the same time we will learn to what extent the Agency is willing to play the "gain" game.

Here's how the game works, in a nutshell. As a government regulator and land manager, with jurisdiction over public land and public resources - let's say in national parks, for instance - you develop some sympathy towards certain business owners who have been complaining for years, if not decades, that if their operations are not permitted to expand, they will die. But you have a legislated mandate that requires you to constrain development in the interest of protecting those public lands and resources. What to do? Well, you could simply manipulate the intention and meaning of words contained in an important planning concept and triumphantly declare that by allowing new and expanded development on the ground, in exchange for moving a line - re-configuring a leasehold boundary - on a map, you will have achieved a "substantial environmental gain". Maybe this illusion will be sufficient to satisfy the landowners, the people of Canada.

Unfortunately, the paragraph above does not describe a merely hypothetical situation. This all began at a meeting in Lake Louise in January, 2005 where then Environment Minister, Stephane Dion stated that he was prepared to consider exceptions to the existing

ski area management guidelines if "*substantial environmental gain*" could be demonstrated. In fact, he insisted that given his responsibilities, he had an obligation to do so. And the conservationists in attendance said "*fair enough*". Who could argue against something that would produce an environmental gain?

A few weeks later, at a meeting in Banff to discuss ski area planning, then Executive Director, Mountain Parks, Bill Fisher presented Parks Canada's official interpretation of this concept: "*environmental gains must be substantial and address major ecological issues*". It seemed clear and straightforward. Further direction was offered in the final Management Guidelines (these provide the overall framework for Site Guidelines at individual ski areas) released by former Environment Minister Rona Ambrose in December, 2006. Here, environmental gain is defined as "*a positive change in key ecological conditions*" and several criteria - magnitude, geographic context, ecological context - are listed for consideration to determine if an ecological gain is substantial.

But somewhere along the road from Lake Louise, where the concept of "*gain*" was first articulated, to Marmot Basin where it will be tested in application, some Parks Canada officials drove this planning vehicle into the ditch. They are promoting the idea of a leasehold reduction in exchange for expansion of development as a substantial environmental gain. But the gain they are touting is completely illusory.

This idea of leasehold reduction or reconfiguration as a strategy in ski area planning has been around for a while. BVN commented on it in a letter responding to the draft Management Guidelines in May, 2006. We wrote that while, in principle, it seemed reasonable enough, we were "*concerned this will be nothing more than a paper exercise with no real on-the-ground changes in patterns of use other than an expanded footprint*". In other words, we could imagine a situation where an ecologically significant area within a leasehold was being damaged, or sensitive wildlife disturbed, or vital habitat alienated, and by reconfiguring the boundary and re-locating the activity causing the problem to a less significant site, a positive change in key ecological conditions could occur. But we were concerned about the gain game. We must have had some inkling of what was coming.

In the draft Site Guidelines for Marmot Basin presented by Parks Canada for public review, some exceptions to the Management Guidelines are proposed; in exchange, the boundary of the ski area leasehold would be reduced. There is no question the area that would be removed from the leasehold is ecologically significant. **However** - and this is key to understanding the gain game - this area has not been developed in any way and receives very little use. Furthermore, even if it remains within the leasehold, full authority over how it is managed in the future, rests with the land manager and regulator, Parks Canada. And Parks Canada is not under any obligation to approve any development or increase in use. The only reason current ecological conditions would not be protected in perpetuity would be if Parks Canada shirked its legislated mandate for maintaining or restoring ecological integrity. Moving the leasehold boundary line on a map will do absolutely nothing to produce "*a positive change in key ecological conditions*".

So, where is the "*substantial environmental gain*" heralded by apologists for the draft Site Guidelines? On paper! In a literary form commonly referred to as fiction. Parks Canada's stated primary goal for management of ski areas is "*to achieve long term land use certainty*" yet the only certainty with respect to Marmot is

that if proposals for additional development are approved, there will be an expanded footprint and negative changes to ecological conditions.

The outcome of the Marmot process is extremely important. Three ski areas in Banff are watching closely and will demand equivalent concessions as a minimum. We must encourage Parks Canada to pull this planning vehicle out of the ditch. Because the losers in the gain game will be the integrity of national parks and the integrity of language.

COYOTES & WOLVES WOLVES & COYOTES

Colleen Campbell

Coyotes and wolves have many similarities, both physically and socially. They both are wild canids.... dogs! Each species lives most typically in family groups, in which a dominant or alpha pair reproduces once a year. Established alpha pairs and new couples court during early winter until breeding season in February. Pups are born in seasonally used dens in late April or early May and emerge from the dens when they are about three weeks old. Each species will move their pups if den sites are disturbed.

While dominant animals of the pack leave to hunt, others members protect the den area and guard the puppies. As the pups grow, the whole pack starts to travel together. Though fully grown before the first year is passed, in a stable population coyotes or wolves will not likely breed until they are a few years old. It takes time to either assume dominance in their natal pack or disperse and establish or join another pack successfully. The alphas in a pack tend to be faithful to each other as long as they are both alive and healthy.

Each species deserves our respect. They each have important and very different roles within the ecosystems they occupy.

Though they will hunt larger prey animals such as deer, *coyotes* are omnivorous and survive well on smaller 'bits' of food, including rodents, grain, fruit and vegetables, and insects. They consume an amazing number of rodents during a year — research estimates 15 to 20 a day or up to 7500 little critters a year in Alberta. Grain farms and cattle ranches could benefit from the foraging activity of coyotes. As opportunists, coyotes commonly live amongst people and in some cities are known to maintain hunting pressure on urban rodent, goose, and raccoon populations.

Wolves are carnivores and tend to hunt larger prey, especially elk and deer. They have, on occasion, killed cougars, both species of bear, and occasionally another wolf or a coyote. However, hunting is a dangerous activity and it is not in the interest of any species for its members to die in competition or during a hunt for food. Serious fighting amongst themselves or with other species is uncommon. During research in Banff National Park, Dr. Paul Paquet documented 27 other mammal and bird species, including coyotes, all of which benefit from wolf kills. Wolves typically stay out of our communities.

Coyotes, wolves, and red foxes all live in the Bow Valley. You may see any of them while traveling on trails or roadways. Their interrelationship is dynamic, linked to the abundance of key prey species, pup survival, and to disease. When the local wolf population increases, the coyote population decreases and as the

coyote population shrinks, red foxes become a bit more numerous. Competition between wolves and foxes is less direct than between coyotes and either of the other two wild canid species in the region.

Most people can readily identify foxes, unless a red fox happens to have a grey pelt. Though weighing only a few kilograms, a fox with a grey coat is occasionally misidentified as a coyote.

However, wolves and coyotes are *often* confused, likely for a couple of reasons. Some wolves and all coyotes may be very similar in colour — grey-brown with some saddle marking and variation of colour on the face, ears and shoulders. And emotionally, most of us prefer to think we have seen a more exotic wolf rather than a common little coyote.



photo: D. Lepitzki

Distance, play of light and shadow, and the way an animal is standing or moving may cause questions while distinguishing a wolf from a coyote. With binoculars, recollection of a few key points, and a moment or two of observation, one should be able to identify coyotes and wolves accurately.

Watch behaviour. If a coyote is hunting it will cock its head from side to side, listening (with its large and useful ears) for the rustling movements of some small creature in the undercover. Though wolves will occasionally hunt in a similar manner, if you detect such behaviour, it is likely a coyote. Wolves will likely turn their head, watching more with their eyes for distant prey. We should be thrilled to see wolves and coyotes in our landscape. It is even more rewarding when we are able to identify them accurately.



photo: M. Shuster

COYOTES	
General	Smaller than wolves, though a growing wolf pup may appear as a fully-grown coyote. Coyotes are generally fine-boned in appearance.
Weight / size	In this area coyotes tend to be a little larger than on the prairies. Coyotes range from 13 – 19 kilograms, about the size of a Border collie dog.
Colour	Grey, with reddish ears, snout and other features, black tip on the tail, and usually a saddle stripe across the shoulders or back.
Ears	Big and pointy, erect and obviously large compared to their heads – they are always <i>listening</i> for the noise of their smaller prey, animals rustling about in the underbrush.
Nose	Pointed, small, usually a bit rust coloured
Tail	About 35 cm (just over a foot) long with a black tip on the end.

WOLVES	
General	Larger and more robust than coyotes. The full winter coat of each species will make them all appear larger than they are.
Weight / size	Wolves are taller and longer-limbed than coyotes, up to a metre (3 feet+) at the shoulders. They weigh in the range of 30-60 kilograms and will be similar in size and appearance to a variety of Husky breeds of dog.
Colour	Grey, black tip on the tail, saddle mark across the shoulders or back – <i>or black or white, or dark grey, or brownish.</i>
Ears	Ears are smaller, relative to head, and though wolves have great hearing, they constantly survey the landscape for larger prey animals, watching with their eyes.
Nose	Longer and a bit blunt at the end.
Tail	Tail is long, at 45 cm (about a foot and a half) with a black tip on the end that may not be visible if the wolf is dark in colour.