

**BOW VALLEY NATURALISTS
NEWSLETTER, SPRING 2013
BOX 1693, BANFF, AB
T1L 1B6
PHONE: 762-4160**

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

OUTINGS

MAY SPECIES COUNT

Saturday and Sunday, May 25th and 26th

The May Species Count, a province-wide event coordinated by the Federation of Alberta Naturalists, is an annual survey of species of birds and plants in flower conducted at various locations throughout Alberta. The aim of the May Species Count is to record accurately and in a standard way what species are in flower, using phenology codes, for the purpose of scientific comparison from year to year. For birds it is a way of tracking the occurrence of species that are residents or migrants passing through or that have arrived at their breeding destination. The challenge is for participants to improve their level of knowledge and broaden their coverage of localities making both as complete and consistent as possible so that variations in the number of species in flower from year to year reflect only local and regional weather differences (e.g. early and late springs). The bird tally, like other surveys such as the North American-wide Christmas Bird Count, if it is done consistently, can indicate a decline in species, an increase in numbers, or changes in migration patterns. The count is always held on the last complete weekend in May. The Bow Valley Naturalists have been conducting the May Species Count since its inception in 1976 in the Yamnuska, Banff, and Canmore areas. **This year, the Yamnuska count will be held on May 25th. Our usual meeting times and places will apply. The Banff count will be held on May 26th.** We are not organizing any formal group outings for Banff 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.

Flowering plants reported:

Yamnuska: 58 species in 2012, 32 species in 2011.

Banff: 70 species in 2012, 64 species in 2011.

The bird numbers:

Yamnuska: 56 species in 2012, 54 species in 2011.

Banff: 92 species in 2012, 85 species in 2011.



Early Blue Violet

photo: D.McIvor

For more information and to find out how to participate in the Yamnuska count contact: **Diane & Mike McIvor at 403-762-4160.**

To contribute results from the Banff count contact **Brenda Lepitzki at 403-762-0864. Please call before 8:00 pm in the evening.**

Banff Community Bird Walks

For more information on the bird walks see schedule below or contact Jason Rogers at banffcommunitybirdwalk@hotmail.com

2013 Walk Schedule

Saturday, April 20 | 8:15 a.m.

Celebrate Earth Day in Banff!

Monday, April 22 | 7:00 a.m.
Animals include Wood Duck, Cinnamon Teal, Tree Swallow, Yellow-rumped Warbler, Savannah Sparrow, and White-rumped Sparrow.

Saturday, April 27 | 8:15 a.m.

Monday, April 29 | 7:00 a.m.

Animals include Blue-winged Teal, Solitary Sandpiper, Red-capped Sapsucker, Northern Rough-winged Swallow, Orange-crowned Warbler, Chipping Sparrow, and Lincoln's Sparrow.

Saturday, May 4 | 8:15 a.m.

Monday, May 6 | 7:00 a.m.

Buffhead, Violet-green Swallow, and Red-winged Blackbird increase in numbers.

Saturday, May 11 | 8:15 a.m.

Monday, May 13 | 7:00 a.m.

Animals include Sora, Rufous Hummingbird, Western Wood Pewee, Warbling Vireo, Northern Waterthrush, Common Yellowthroat, American Redstart, Yellow Warbler, and Wilson's Warbler.

Saturday, May 18 | 8:15 a.m.

Monday, May 20 | 7:00 a.m.

Animals include Least Flycatcher, Eastern Kingbird, Swainson's Thrush, Blackpoll Warbler, and Clay-colored Sparrow.

Saturday, May 25 | 8:15 a.m.

Monday, May 27 | 7:00 a.m.

Watch out for rare birds!

Saturday, June 1 | 8:15 a.m.

Monday, June 3 | 7:00 a.m.

Animals include Wilson's Flycatcher, Cedar Waxwing, and Le Conte's Sparrow.

Saturday, June 8 | 8:15 a.m.

Monday, June 10 | 7:00 a.m.

Keep your fingers crossed for a Lazul Bunting!



We meet on Sandstone Road near the corner of Cowe Road by the Buff Recreation Grounds (see star on this map).



Staring with Mom
Anush Yada

For more information contact
Jason Rogers at
banffcommunitybirdwalk@hotmail.com



MAPS 2013

Science and Friendship In The Mountain Morning

Cyndi Smith and Peter Duck

Once again BVN will be coordinating the Ranger Creek MAPS Project and we invite anyone who enjoys the freshness of a mountain morning to join us. The Monitoring Avian Productivity and Survivorship (MAPS) program was established in 1989 by The Institute for Bird Populations (IBP), based at Point Reyes Bird Observatory in California. Its goal is to provide long-term demographic data on landbirds as an aid in identifying the causal factors driving population trends documented by other avian monitoring programs such as the North American Breeding Bird Survey and Christmas Bird Counts (DeSante and Nott 2001). It is a cooperative effort among public agencies, private organizations, and individual bird banders in North America to operate a continent-wide network of constant-effort mist-netting stations during the breeding season.

The Monitoring Avian Productivity and Survivorship (MAPS) program targets resident breeding birds, so the goal is to operate for one day during each 10-day period between June 10 and August 8 yearly. Ten mist nets are operated in fixed locations for 6 hours each day, opening at sunrise. Each net is checked every 15-30 minutes, and captured birds are removed – this is called a “net run.” The Bander-in-Charge is trained and licensed to band birds, and is assisted by 3-5 volunteers during each outing.

Each bird is placed in a cotton bag, which is securely tied to prevent escape. A clothespin is attached to the bag to indicate which net the bird came from. Birds are then taken back to a central banding site and processed in order of net run.

The first step in processing a bird is to identify what species it is – if the bird cannot be identified then it has to be released. In the spring identification is usually fairly easy, but later in the summer, juveniles and moulting adults make this much more challenging! Once the bird is identified, the next step is to place an aluminum

identification band on its leg. Bands are of different sizes for different species, but each has a unique number in North America.

The bird is then sexed: females have a brood patch (area of bare skin on the belly for incubating eggs), while males have a cloacal protuberance. The amount of fat that the bird has is assessed by exposing the skin at the base of the neck (the furcular hollow), parting the feathers by blowing on them. The yellow fat is visible beneath the skin. Body and wing feather moult condition is recorded, as well as flight feather wear.

The most challenging part of the process is assigning an age to the bird. This can be done since each bird undergoes feather moult on a regular pattern, with juvenile feathers looking different than adult feathers, enabling banders to determine age. Some woodpeckers can be aged into their fourth year. Colour of non-feathered body parts (e.g., eyes) and measurements such as wing length and culmen (beak from nostrils to tip), are also diagnostic for some species. Banders use manuals and books written specifically for this purpose, and are constantly refining their skills.

A bird that was hatched in the summer is called a “hatch year” (HY) until December 31st, and on January 1st it becomes a “second year” (SY) bird. The next January 1st, it becomes a “third year” (TY) bird, and so on. If you know that the bird is not a HY, but you aren’t sure how old it is, then it is aged as “after hatch year” (AHY). If you know that it is also not SY, then it is aged as “after second year” (ASY). Some woodpeckers can be aged into their fourth year. The final step is to weigh the bird and release it.



photo: Cyndi Smith

Anyone wishing to come out and help in this valuable long term monitoring project can contact Peter.Duck@Shaw.ca.

BVN HELS Project

Our site is ready for your 2013 observations. Thanks to Ben Dorsey for constructing it originally and to Jon Ball who is managing it for us now and prepared this summary. Please keep in mind whether you have many sightings or only a very few and whether the sightings are from Banff and other nearby national parks or nearby provincial areas including the Kananaskis, all reports contribute to our knowledge of these species.

To report your sightings please go to <http://www.bowvalleynaturalists.org/hels>

High Elevation Localized Species Sightings 2012

In May of 2010, the HELS Project began online operations, with members of the Bow Valley Naturalists and the general public contributing observations and counts of four High Elevation

Localized Species – goat, marmot, pika and ptarmigan. That first (partial) year saw 22 observers contribute 207 observations of an estimated 678 individual HELS. 2011 was the first full year of the project and 32 registered users reported 433 HELS observations of an estimated 1225 individual HELS. In 2012, similar figures were obtained with 29 users reporting 414 HELS observations of an estimated 1417 individual HELS (figure 1).

On average, during 2012, about 14 sightings were reported by each contributor, with 1 individual reporting 89 sightings. Three users reported almost 50% of all records (n=204), whilst ten users accounted for more than 90% of all records (n=375). A few users reported only one (n=11) or two (n=1) sightings each.

SPECIES	SIGHTINGS	INDIVIDUALS REPORTED	AVERAGE GROUP SIZE
GOAT	76	502	6.61
MARMOT	109	217	1.99
PIKA	197	576	2.92
PTARMIGAN	32	122	3.81

Table 1: High Elevation Localized Species reported in 2012

In 2012, a total of 217 marmot, 576 pika, 502 mountain goat, and 122 white-tailed ptarmigan were reported and mapped (Table 1). Group sizes differed by species. On average 2 marmots were reported per sighting record, 3 pika, 7 goats, and 4 ptarmigan. The largest group reported was a gathering of 42 goats on Mt Bourgeau. The second largest group was an observation of 40 pika near Saddleback Pass. The distribution of the sightings also varied by species.

The busiest month for observations in 2012 was September (n=131 which is about 31% of all observations); August was almost as busy with 30% (n=123) of observations being made at that time.

August also saw the greatest number of HELS individuals reported (n=419 which is about 30% of all individuals), although June was the busiest month for individual goat sightings (n=134).

We thank all registered observers for their contributions in 2012 and look forward to another successful year in 2013.

The full HELS 2012 numerical summary prepared by Jon Ball is on the BVN website.

Treasurer’s Report

Shelley Mardiros

In 2012, Bow Valley Naturalists received \$750 in membership fees from our 150 members, and our generous supporters made donations of \$2532. Parks Canada contracted BVN to once again oversee the continuing Ranger Creek bird breeding research project, called MAPS. We received a grant of \$7227 from Alberta’s Community Spirit Program to match 58% of the donations that BVN received in 2010. I’d like to mention that the very high level of donations in 2010 was due to an outpouring of contributions to the André Gareau Memorial Fund by the many friends, family, and admirers of André, and the delayed partial matching by the ACS program amplifies the effect of this injection of funds. Our total income in 2012 was \$13,905.

In 2012, BVN spent \$2809 on operations, including room rental, speaker expenses, website maintenance, newsletter and postage costs. We also purchased a new projector for \$982. We spent \$3792 on various research projects, which included the Parks-funded MAPS survey at Ranger Creek, as well as management and analysis of observer reports of four High Elevation Localized Species (HELS) – mountain goats, hoary marmots, pikas, and white-tailed ptarmigan – on our HELS interactive website. We contributed \$5,000 to support wolverine research in Banff National

Park, channeling the donation through the Miistakis Institute, and we gave \$500 to Bird Studies Canada towards coordination and data analysis of the Christmas Bird Count. Our outlays in 2012 totalled \$13,304, so our net income was \$601.

In summary, our little organization of 150 members, through generous donations to the Bow Valley Fund, the André Gareau Memorial Fund, regular donations at the door and through the mail, and a grant from the province, supports wolverine research, high elevation species observational research, bird studies, public education through our excellent and informative website, and an extraordinary lecture series with speakers like Doug Chadwick and Andrew Nikiforuk as well as speakers from our community's pool of outstanding local experts.

**André Gareau:
He Meant the World To Us**

Shelley Mardiros

After André's untimely death in 2010, Mary Dumka and the family requested that friends and family direct any memorial donations to Bow Valley Naturalists. The resulting André Gareau Memorial Fund financed a special series of presentations on HELS (high elevation localized species) and allowed us to bring in experts to report their latest research and understanding of wolverines, mountain goats, white-tailed ptarmigan, pikas and marmots.

We also wanted to set in place in the Bow Valley some tangible memorial to André and, in discussion with Banff head librarian Denise Drury, hit upon the perfect answer: a high-quality terrestrial globe to be presented to each of the upper Bow Valley public libraries: Banff, Canmore and Exshaw. Not only does a globe represent our punster-friend's "world" of interests, from hiking, canoeing, observation of nature and the vast skies above, but it encourages users to see the Earth as a finite place to be studied, loved and protected, as André did.

Best yet, the first globe presentation was on Earth Day, 2013, to the newly located Canmore Public Library. BVN VP Colleen Campbell spoke about André's legacy, as did Mary Dumka, and Mayor John Borrowman. Globes have also been presented to the public libraries in Banff and Exshaw to great enthusiasm and gratitude.

Each globe bears a plaque, reading: "In memory of André Gareau and his deep appreciation of the Bow Valley, the Earth, and the Universe."



Mary Dumka – Canmore Library

ISSUES

Three Sisters Area Structure Plan

Karsten Heuer

The Bow Valley Naturalists have been working with a coalition of conservation groups (Y2Y, CPAWS, Wild Canada Conservation Alliance) and concerned Canmore citizens to push for a functional wildlife corridor across the remaining Three Sisters lands. As many people know, these lands went into receivership in 2009. Now PricewaterhouseCoopers (the Receiver) is acting on behalf of HSBC Bank to package the remaining developable lands so they can be sold at maximum value. Predictably, they are trying to scrimp on the wildlife corridor.

There are two areas of concern: the unfinished Three Sisters Golf Course (which was designated as a buffer to the 635-metre-wide corridor in 2004 but which PwC is now proposing for housing) and the area beneath Wind Ridge (Sites 7 and 8), where a 350m-wide corridor has been allocated, much of it on very steep slopes (>25°).

Our coalition requests two things: 1) that the past agreement for the corridor buffer remain free of houses at the Three Sisters Golf Course; and 2) the corridor at Sites 7 and 8 be of the same standard set to the west in 2002 (600m wide and on shallow slopes).

After seven months of letter writing and meeting with Councillors our request is beginning to sink in. Last week Canmore Town Council unanimously decided not to table PwC's proposed Area Structure Plan because "it falls so short of what the community needs." A few days later, PwC asked that the public hearing, originally scheduled for May 15, be delayed. We only hope it is so they can make the required changes.

We will update members once the new development plans are released and a new date for a public hearing is announced. This is the final piece of a wildlife corridor we and others (especially BowCORD) have been working on for 20 years. If it's lost or seriously compromised then our efforts will have been in vain. Please stay tuned and get involved.

Every Dog Should Have A Very Nice Leash

Colleen Campbell

I confess: this article is stimulated by reading in a recent EIS that people with off-leash dogs often walk in at least *some* of the wildlife corridors around Canmore. I think that most people, given an opportunity to understand why they should not follow through with some activities (such as letting one's dog run loose in wildlife corridors or habitat), do pay attention and change their patterns.

And – I know that I am “preaching to the choir”. I hope that a few readers will share this with a friend and perhaps a few other readers are random visitors to the BVN web-site. The content is not exclusively important to the Bow Valley – it applies everywhere.

Most people do not intentionally set out to damage or harm anything – though sometimes we are disconnected from our habits for any number of reasons. As I consider this piece, I think of individual actions - tossing a cigarette butt or a small bit of garbage on the ground, “poaching” a trail on a mountain bike, stopping beside a bear, especially if we think that there appears to be no witness. Though not clearly damaging in the moment, when tallied with many, many other similar small “no-one-will-know-or-notice” acts, impacts accumulate to become insistent problematic.

We are lucky people – those of us who live in or visit the Bow Valley, anywhere from Yamnuska Wild Lands to Bow Summit. Most of us are attracted by the intrinsic qualities of the geography, environment and wildlife and what that combination affords us as personal pleasure: recreational activities, aesthetic pleasure and spiritual well-being. Even if we choose to attend a conference, participate in a workshop or move here for seasonal employment, our choice includes consideration of place. The boundary of Banff National Park is irrelevant when considering the valley. The environment is what it is because of the mountains and *all the wild creatures* that live here. This region would lose a great deal of allure were it to lose any of the other-than-human species.

Back to my intent – to outline a few reasons why every dog (yes, I have one) should *be* on-leash unless in a designated off-leash area. Your safety, your dog's safety and especially the safety of wildlife are all in the balance.

- **Your dog might be wonderfully obedient in familiar places, but when in unknown turf it may be quite undone by the unfamiliarity. What you interpret as excitement may be a display of anxiety. It can be challenging to tell the difference.**
- **Dogs, small and large, have been injured or killed by coyotes, elk, or beaver. Dogs, large and small, have been killed by bear or cougar. Even a frightened squirrel or an angry goose is capable of delivering serious injury to your pet.**
- **Some wild species are excellent urban hunters. Especially during darkness, you may pass a coyote or a cougar in your own neighbourhood without ever realizing its presence. Your safety and that of your dog is greatly improved with your “very nice leash”.**
- **When you don't see wildlife, don't assume there are no wild animals nearby. Most species are experts at staying out of sight. An off-leash dog may unintentionally disturb a coyote, cougar or bear. If your dog is not injured in the encounter, a chase may ensue; your dog with wild animal in pursuit may come directly back to you or towards some other (unsuspecting) person. Though a leash is not a**

guarantee, you and your dog are predictably much safer when joined by a leash.

- **Lastly and perhaps the most important point, dogs are dangerous to wildlife. Some dogs have a very strong chase impulse and will chase anything from feral rabbits and squirrels to deer, moose, elk or birds. Even if a dog fails to catch its prey, the wild animal may injure itself trying to escape, perhaps be separated from its young or driven into unfamiliar territory, and it will definitely burn energy unnecessarily. Wild animals work persistently to find enough resources to flourish and to find safe places to rest. Continued living depends on focusing energy to grow and stay healthy, travel, mate, and to protect their young and themselves. When your dog has tired, it returns to you, panting and wagging its tail. You take it home, to food, water and safety. The wild creature it was harassing has been compromised; no matter the season, being chased by a dog can tip the balance between survival and death for a wild creature.**

Every dog benefits physically and mentally from exercise and an opportunity to explore, nose to the ground. Though a human may become bored with the “same old walk or run”, dogs usually are not. Even in their own yards, a dog will discover new and interesting scents. Take the dog for a walk where it is safe for everyone – human, dog and wild animals.

Leave space for wild animals to live without surprise visits from our dogs. It is one of those small things – *exercising consistent responsibility with and for your dog* - and one of a hundred small ways that we can care well for the Bow Valley and all the places where we live, visit and play.

COSEWIC Assesses a Few More Pieces of Canada's Biodiversity Puzzle

By Dwayne Lepitzki, Ph.D. (member of COSEWIC, pending ministerial appointment)

The mandate of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), as defined by the Species at Risk Act, is to assess the chances of Canadian species going extinct (gone from the face of the earth) or becoming extirpated (gone from Canada but exists elsewhere). This mandate extends to all living organisms except bacteria and viruses. At the recent Wildlife Species Assessment Meeting held in Winnipeg from 28 April through 3 May, COSEWIC discussed the status of a few more pieces of Canada's magnificent biodiversity puzzle, and increased the length of the list of species already gone or at risk of going to 691.

The 29 species discussed at the Winnipeg meeting ranged from the 19 tonne - 15 metre long Sei Whale to the 1-2 cm long Haida Gwaii Slug. The Pacific Population of Sei Whale retained a status of Endangered because it still has not recovered from the effects of whaling; fewer than 250 mature individuals are estimated to swim along the coast of British Columbia. The Haida Gwaii Slug only became known to science 10 years ago and is confined to unglaciated Haida Gwaii (formerly the Queen Charlotte Islands) and Brooks Peninsula on the northwestern edge of Vancouver Island. It was assessed as Special Concern because of the anticipated effects of climate change and introduced non-native deer.

The Oregon Forestsnail, a large land snail with a shell up to 3.5 cm in diameter, retained its status of Endangered; it is trying to live in the most densely populated and highly fragmented landscape in British Columbia – the Lower Fraser Valley. Long-time residents who have recently returned to visit the lower mainland can barely recognize the area. The Puget Oregonian, another large land snail, was last seen in the lower mainland, where the Oregon Forestsnail still tries to survive, and the southern tip of Vancouver Island in 1905 – it too remains Extirpated. Some remnant populations still exist south of the Canadian border where a decision to list it under the US Endangered Species Act is pending.



Photo: The Endangered Oregon Forestsnail, *Allogona townsendiana*, confined mostly to the Lower Fraser Valley of British Columbia (photo by Jenny Heron).

Six vascular plants, including one that only grows on Cape Bathurst on Canada's Arctic Coast, were discussed in Winnipeg. This plant, the Hairy Braya, is also a Canadian endemic - like the Haida Gwaii Slug, and lives nowhere else in the world except in Canada. As such, the global responsibility to maintain the slug and this plant rests on the shoulders of Canada.

Closer to the Bow Valley, the Soapweed Yucca plant, confined to three populations in southern Alberta and Saskatchewan, was assessed as Threatened. The plant's sole Canadian pollinator, the Yucca Moth, was assessed as Endangered. The intricate and intimate mutualistic relationship between the moth and the plant, where both species benefit and are dependent on one another, extends even beyond these two principal species. Two other moths, the Non-pollinating Yucca Moth and Five-spotted Yucca Moth, depend on the production of seeds of Soapweed Yucca that is itself dependent on the Yucca Moth; these two other moths also were assessed as Endangered.

Why should we care or why does it matter if some of these more obscure species disappear?

It all comes down to biodiversity and how every living thing is important in the vast web of life. Pull a species out of the mix or pull on one strand in the web, and the mix and web changes with the potential for unforeseen and drastic consequences. Lose honey bees, the pollinators of many human foods, and crops from canola oil to apples could fail. Remove bats, and insects could swarm. Remove predators, and populations of their prey could increase out of control.

Back in 1953, Aldo Leopold wrote the following, which still resonates today:

"If the biota, in the course of eons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering."

Of Wild Things & Wild Places

Watching the Watchers

Mike McIvor



photo: D. McIvor

Diane and I had taken a break from watching mountain goats on Mt. Oke in Kootenay National Park when we realized we were under surveillance. We were sitting in our car in the Marble Canyon parking lot in early February enjoying a snack and a cup of tea when this Gray Jay decided we warranted further investigation. Needless to say it didn't receive any food from us so after a little while it moved on, either because its investigation was complete or because it was frustrated by our unwillingness to share.

Fairies in Banff

Brenda Lepitzki

Spring is the time to renew old friendships, and in particular I like to head out to the wetlands to see my aquatic friends springing back to life. It is especially fun for me to see creatures that can only be found at this time of year. Some invertebrates will complete their aquatic stage of life before summer and change into aerial forms, and some, like fairy shrimp, will live as adults for a very short time only to lay eggs which will patiently wait until next spring to hatch.

Fairy shrimp or Anostracans, are freshwater crustaceans, but I don't know if they taste like the shrimp we humans enjoy! Interestingly, they can be a pinkish-orange colour, which may mean they have hemoglobin to assist with oxygenation of their tissues. Oxygen can be very low in ponds where there is a lot of decaying vegetation.

There are five genera with 13 species of fairy shrimp known in Alberta. This province is home to the largest known species of fairy shrimp, reaching about 10 cm in length! Also found in Alberta is perhaps the best known fairy shrimp, the brine shrimp *Artemia*, which is commercially sold as fish food and was also marketed as the pet known as "Sea Monkeys".

Fairy shrimp seem to have a very small distribution in Banff National Park. At least, that has been my experience. They are more typically found in lower elevations in Alberta, usually restricted to temporary wetlands that dry for most of the year. You won't be seeing them anywhere that supports a permanent fish population, as they'd be easy prey. Even waterfowl and other aquatic feeding birds can decimate fairy shrimp populations. As well, temporary wetlands enable the eggs of these invertebrates to dry which they require for development.



Fairy shrimp and mosquito larva. photo: Brenda Lepitzki

Fairy shrimp have several molts before reaching adulthood. The ones I have seen in early May this year have mostly been quite small, but in previous years I've seen adults reach about 1 cm in length.

These wonderful invertebrates live in the small ditch near the tennis courts at the Banff recreation grounds, and in the long pond from the stables towards the bike park. As well we've seen them in a wetland near the Vermilion lakes, but so far nowhere else in Banff National Park. It's pretty amazing to find them here, considering these areas were targeted in years past for mosquito control with some very toxic substances. I'd appreciate hearing about other locations, to help increase our understanding of their biogeography. They are certainly an extremely important part of the ecology of the montane ecozone, and I suspect a very important part of the food web supporting so many other creatures that call Banff home. If you find any more populations, take a picture and then please contact me through B.V.N. at: fairyshrimp@bowvalleynaturalists.org

in the 1980s that takes you to three bird blinds (park at the west-bound pull-off at picnic table island), and going on exploratory walks along the west shore. Yes, there's the grind of the nearby cement plant, and yes the bush is a little dusty, but in the company of so many ospreys, herons, eagles, elk and waterfowl, those are things I can ignore. In some ways I'm heartened by them, for they show how nature and humanity can coexist, so long as we give wildness the room it needs.

Would Lac des Arcs be even more impressive without the cement plants and the roar of the Trans Canada Highway? Certainly. Nonetheless, it's an inspiring and overlooked spot, a reminder of nature striving to be what it must be.



Tundra Swan at Lac des Arcs photo: Karsten Heuer

Lac des Arcs

Karsten Heuer

I was lucky enough to grow up in Calgary with parents who packed up the family every weekend and headed for the mountains to hike, fish, camp and ski. I don't know how many times we drove the Trans Canada Highway but I'll never forget the laments that drifted into the backseat as we rounded the corner at Camp Chief Hector and sped down the hill: "Criminal!" said my dad as the smoke stacks came into view. "Such a shame," my mother echoed. It was only after the lights of the cement plant at Lac des Arcs disappeared behind us that we collectively breathed a sigh of relief.

My parents' sentiments stuck with me for a long time. Like most people, I wrote off Lac des Arcs, never stopping on countless trips to Calgary over the last 30 years. All that changed a couple of years ago when my son did a project on swans. Next thing I knew we were going to "the Lac" to admire the big white birds as they stopped to feed on their journeys north or south, along with rafts of coots, widgeons, mallards, ring-necked ducks and other waterfowl in flocks as big as I've ever seen.

My son's project is long over but this spring I found myself going to Lac des Arcs more than ever, walking the little-known trail built

Caprimania: Addiction or Contagious Condition? A Case Report

Shelley Mardiros

At least one member of the Bow Valley Naturalists has developed a case of fulminant caprimania – and it may be contagious. The patient – let us call him "O.G.", the initials of the pseudonym "Old Goat" – has a predisposition to mountain goat fever, having been born in the Year of the Goat. What started as a generalized interest in nature **many** years ago was no doubt aggravated by constant exposure to the natural world and a tendency to make close observations of same. The patient admits to an early fascination with mountain goats, exacerbated by reading Doug Chadwick's narrative about mountain goat research, "A Beast the Color of Winter", published in 1983.

The prodromal phase of O.G.'s condition continued with manageable symptoms (an urge to observe, count and record sightings of mountain goats) for several decades but accelerated precipitously at about the time that BVN introduced the HELS reporting project on its website, for contributors to report their observation of 4 high-elevation localized species: pika, hoary marmot, white-tailed ptarmigan and mountain goat.

Since then, O.G. – often accompanied by his partner (let us call her Bique) – has compulsively pointed his telescope at all the Park's slopes that might prove to be goat habitat. And lo! He finds goats! And not just in summer: this winter, on a daily basis, O.G. has scoped mountain goats while standing in the Banff Hot Springs parking lot, from his car at Marble Canyon, at the Backswamp pullover, on the Bow Valley Parkway beside Muleshoe, along the Minnewanka road, and even from his own front yard in Middle Springs. Sometimes he spots a couple of goats, cream-coloured

against the white snow or windswept rock, sometimes dozens!

It is reported that close contacts of O.G. have also developed symptoms of caprimania after looking through O.G.'s scope. One infected party reports: "Now, whenever I look at the mountains, I don't see scenic beauty. I see goat habitat!"

There is some concern that the HELS project may also have prompted outbreaks of ochotonamania, marmotamania and lagopusamania, possibly in the same households as caprimanics. However, the first two conditions have been seasonal (summer) outbreaks, allowing for a recovery period between bouts. Users of the HELS website and/or telescopes are advised to use caution.



Mtn. Goats on Mt. Rundle through scope – Winter 2013. photo: Old Goat

Silver-haired Bat in Canmore

Rosemary Power

I've considered "the importance of knowing where you stand" as a metaphor, but rarely considered its literal meaning. If, however, I had not stood countless times beside the tree in my backyard I would never have considered the small dark shape in a furrow at the base of this pine tree as somehow out of place. The colour and shape, about 6 cm long, resembled a small knot or lump of dried pitch but I couldn't recall ever seeing a knot there so I bent to look. Tucked into the crevice about 30 cm above the ground was a small silver-haired bat (*Lasiurus noctivagans*). It was early-mid October and we had just come through an unseasonal spell of particularly cold and snowy weather, dropping to about -8C. Silver-haired bats are not common in Alberta and the records we have suggest that the last of the migrants should be heading south in early October.

I will never know why this bat chose to roost on that tree but a probable explanation is that it had been forced to take shelter during a snowstorm. In order to conserve energy when encountering cold snaps, silver-haired bats are known to lower their body temperature and become torpid. The sudden cold snap may have forced this bat to take refuge in a sub-optimal roost. Apparently, silver-haired bats prefer to roost alone or in very small groups, at least 3 meters above the ground and under loose bark or in deep crevices located in rough-barked tree species such as ponderosa pine.

Silver-haired Bat roosts are estimated to be 10 times more abundant in old-growth forests than in disturbed habitat. Logging and destruction of roost trees is seen as the primary threat to silver-haired bats. Records of silver-haired bats in Alberta are most frequent from the northern Rockies as well as the Lethbridge area. Males and females utilize different summer ranges with pregnant

females migrating north from the central and southern USA in May and early June. Most male silver-haired bats found in Alberta are juveniles who were born here.

This species breeds in late September but fertilization is delayed until early May when the females ovulate with 1 or 2 young born 50 to 60 days later. The young are born hairless, eyes closed, weighing approximately 2 g each. They are able to fly in about 3 weeks and can live up to 12 years. While some bat species such as Hoary bats will emerge from their roosts before sunset, silver-haired bats do not generally emerge to feed until several hours after dark, hunting for flying insects over bodies of water as well as in forested areas, particularly coniferous forests. They search for food in individual hunting territories using echolocation calls ideally suited for detection of small insects at short distances. Silver-haired bats are highly maneuverable flyers, with a 30 cm wingspan and a relatively slow wing beat, frequently flying low above the ground.

The name silver-haired bat comes from their dark, grizzled, silver-tipped fur. The fur on the individual I spotted blended beautifully with brown and silver of the pine bark on which it was roosting (see photo). Taking my photos, I evidently disturbed this bat as it suddenly and dramatically puffed up its body and let out a very loud hiss closely resembling that of a snake. This strategy was so effective I would have dropped my camera if the strap had not been around my neck. Despite a return to seasonal temperatures, rising as high as 14C, the bat showed no evidence of activity other than the hiss. Silver-haired bats require very high humidity and warm temperatures in order to survive the winter so it was not surprising that this bat did not survive. Examination of the body showed that it was a male, most likely born about 3 months before, somewhere in an old-growth forest in Alberta.



photo: Rosemary Power

Bats in Banff – the Four W's

Greg Horne

Banff National Park is collecting as much information as possible about all species of bats within its boundaries during the next few months. This project is being spurred by the unfortunate reality that White Nose Syndrome (WNS) may make its way to western North America in the future. It has been estimated that at least 5.5 million bats have died in Eastern Canada and the USA since 2006 because of WNS. Wildlife management officials in the east regret they had not studied the previously so-called “common” species of bats such as the Little Brown Bat (*Myotis lucifugus*) to a much greater extent before its populations were decimated by WNS.

Therefore, Banff is completing a review of scientific journals, published books, park wildlife observation records, internet postings and interviews with bat researchers and park staff. Members of the Bow Valley Naturalists may have important knowledge about bats in the Banff area. So far, the amount of direct information about bats in Banff has been sparse. Observations of flying or roosting bats, summer or winter, any close-up encounters or bones found are all important pieces of information. Any information near Banff but outside its boundaries is also significant from K-Country to Nordegg to Golden.

Please report any details about bats in Banff to Jesse Whittington, Carnivore Specialist for Banff National Park at Jesse.Whittington@pc.gc.ca or phone 403-763-8865.

Which species (if known), **what** was it doing, **where**, and **when**. It can be as simple as “I was hiking the Great Divide Trail for three days and in the evening saw lots of bats flying at dusk by Mountain Lake in August 1998 or 2000”.

(Editor’s note: Greg has compiled current knowledge of bats in Banff in a very interesting report that can be found on the Park Science page on the BVN website.)



Little Brown Bat with White Nose Syndrome University of Delaware

Unit has indicated an interest in learning more about the distribution of Bighorn Sheep - not to be mistaken for Mountain Goats - and Golden-mantled Ground Squirrel - not to be mistaken for chipmunks that are smaller, with distinct white lines on the face - in that area.

There are places north and west of Castle Mountain they know bighorn sheep occur but observations are rarely reported. And other areas seem to provide good likelihood of occurrence but little or nothing is known.



Female and young Bighorn Sheep photo: M. Shuster

For golden-mantled ground squirrels, Alan sees two main knowledge gaps: one is general distribution of the species within the 3 parks, since there is such a dearth of observations in their database. The other is to do with the timing of emergence from and entry to winter burrows, because this information can be useful in timing project work that might impact squirrels or their burrows.



Golden-mantled Ground Squirrel photo: D. McIvor

Coming Soon: Another Reporting Opportunity

This is simply advance notice that very soon we hope to be set up so that observations of species other than HELS can be reported. In particular, Alan Dibb, Wildlife Specialist with Parks Canada’s Kootenay. Yoho, Lake Louise Field

In both cases, those who appreciate getting out into the mountains can be on the watch even more for signs of life. We want to make it as easy as possible to contribute and will let you know when we are ready to go and provide more detail about how and what to report.