

**BOW VALLEY NATURALISTS
NEWSLETTER, Fall 2008
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Web site:

<http://www.bowvalleynaturalists.org>

PROGRAMS/EVENTS

**BVN meetings:
7:30 pm., Banff Seniors Centre.**

**Wednesday, OCTOBER 22
Icefield Bunnies, Gullible Bees and Why the
Biggest Mountain in the Rockies is Not the
Highest: The Quirky Natural History of the
Canadian Rocky Mountains with Ben Gadd**

**Wednesday, NOVEMBER 26
To be announced.**

**Banff-Canmore Christmas Bird Count
Saturday, December 20**

Potluck supper and compiling of results will follow at 6:00 p.m. in
the Banff Seniors Centre
For details, contact Diane or Mike McIvor at
762-4160

BANFF NATIONAL PARK PLANNING FORUM

**THURSDAY, NOVEMBER 20
FRIDAY, NOVEMBER 21
Banff Rocky Mountain Resort**

The agenda is not confirmed but it looks as if the key focus for the
first day will be special events. The second day will include
updates on planning for the Icefields Parkway and the status of the
mountain parks management plans review. Be sure to attend to
learn more and to state your opinions.

ISSUES

And By the Way

Mike McIvor

Senior managers in the Parks Canada Agency are convinced that political support, and therefore funding, is tied directly to numbers of visitors, and by extension, numbers of tourist dollars spent. In what appears to be an increasingly desperate attempt to attract more visitors to national parks, Parks Canada is exploring the role of special events and new activities as bait. With so-called "visitor experience" shouldering its way to the forefront of the Agency's mandate, national park policy and legislation notwithstanding, a new form of self-serving rhetoric is emerging.

Tourism boosters and event promoters - often the same people - have quickly learned what vague objectives should be parroted so that the right buttons are pushed and approvals are forthcoming. In fact when you hear the oft-repeated catch-phrase about how "meaningful park experiences" will result from whatever is being proposed, you can never be sure of the source - Parks Canada or one of its tourism-boosting partners.

For example: The justification and rationale for the Bike Festival that took place in Banff this spring was outlined in the environmental assessment (EA) prepared by the event's promoters:

"to support Banff Lake Louise Tourism's mission to encourage visitation and generate revenue..."

Oh, and by the way

"The Bike Fest will connect Canadians with Banff National Park by engaging people through meaningful park experiences".

Similarly, a short time later, the EA for Banff Lake Louise Tourism's Dragon Boat Festival held at Lake Minnewanka this August that, incidentally, clumsily managed to displace significant numbers of other park users, stated the purpose of the event was:

*"to encourage visitation and generate revenue",
"to drive visitation in late August",*

and if it becomes an annual event

"to increase visitation in years to come".

Oh, and by the way...well, you know what came next: the obligatory spiel about providing

"meaningful park experiences".

Sometimes the enthusiasm for "connecting Canadians" with the park can be stretched to the truly bizarre. This is from an internal memo circulated to Park staff:

"This event presents a unique opportunity to demonstrate Parks Canada's relevancy to a non-traditional user group."

You have to wonder how that "relevancy" was demonstrated when you realize the event in question was the street party on Banff Avenue.

But, of course, these things don't reach out to park visitors to engage them as participants in learning about and appreciating the ecosystem of this special place and by extension, the planet. They target potential visitors as spectators and consumers for whom the living landscape is a scenic but largely irrelevant backdrop.

Banff Field Unit Superintendent Kevin Van Tighem has indicated his desire to have a wide ranging discussion of these issues this winter with a view to formulating a coherent, transparent, and defensible process for judging the "appropriateness" of proposed events. We'll keep you posted.

Alberta Parks and Protected Areas

Mike McIvor

The provincial government is in the process of developing a Parks Planning Framework to apply to our system of parks and protected areas. A draft of this document has been out for public review; very recently BVN joined a number of other conservation groups in the province in signing a letter prepared by several of our colleagues to express our interests and concerns to the Premier and the relevant Ministers. It is primarily a statement of principles that should guide future planning and management. Indeed, it would be worthwhile to fully implement the current vision, mission and goals for the system, including the purpose statements in the Alberta Parks Act:

"Parks are established, and are to be maintained,

- (a) for the preservation of Alberta's natural heritage,
- (b) for the conservation and management of flora and fauna,
- (c) for the preservation of specified areas, landscapes and natural features and objects in them that are of geological, cultural, historical, archaeological, anthropological, paleontological, ethnological, ecological or other scientific interest or importance,
- (d) to facilitate their use and enjoyment for outdoor recreation, education and the appreciation and experiencing of Alberta's natural heritage, and
- (e) to ensure their lasting protection for the benefit of present and future generations."

The groups went on to identify what they felt must be central in all guiding documents, policies and procedures in order to reflect this mandate:

1. A primary focus on ecological integrity
2. Inclusion of the role of parks and protected areas in environmental streams within the Land Use Framework
3. A commitment to creating new parks and protected areas

If you agree this is a sound approach to incorporate in the Parks Planning Framework, please consider writing the Premier and Ministers and our MLA (addresses at the end of the newsletter) encouraging them to adopt it.

Of Wild Things...

Bird Migration

Shelley Mardiros

As the days grow shorter and snow whitens our surrounding peaks, alert naturalists appreciate not only the brilliant fall colours of aspen, larch and fireweed, but the subtle colours of migrating birds in fall plumage.

Common mergansers are, as I write, hanging out below Bow Falls alongside the ring-billed gulls, taking advantage of an apparent abundance of fish in a pre-trip feed-a-thon. In the spring, my friend Heather Dempsey calls female mergansers "Lucy", as their fly-away red "hair" suggests a scatter-brained Lucille Ball; she calls the drakes "Clark" (a la Gable) for their smooth dark-headed suave looks. But these days Clark is in eclipse plumage, looking a lot like Lucy. Like that other Clark (Kent), he puts on his handsome Superduck suit for spring courting, then moults into blend-in feathers for the off-season.

In recent days, Bow Valley waterfowl watchers have reported common loons and a wood duck on the river, surf and white-winged scoters as well as ring-necked ducks and western grebes on Lake Minnewanka, and green-winged teal and hooded mergansers at Vermilion lakes.

Warblers and kinglets and all the usual suspects are heading south. My tiny backyard has hosted, briefly, a northern waterthrush, varied thrushes, and a hermit thrush.



Hermit Thrush

photo: M. Shuster

The raptor migration is in full flight and may be seen from the Mount Lorette site in nearby Kananaskis country or the South Livingstone site in the Frank Slide area. Go to www.eaglewatch.ca <<http://www.eaglewatch.ca>> for a map and details.

LARGE SMALL CARNIVORE CORRIDOR¹

Peter Duck

Looking out the Buchmann-Duck kitchen window often brings surprises. After all, we look out on the Middle Springs large carnivore corridor. Passing bears, coyotes, and hints of cougar travel are to be expected now and again. Even that Mulie buck (*Odocoileus eatallinmunicipalis*) that tap-danced on the deck last week goes with the territory. But there were some notable events this past summer that punctuated the season. Some of these events have me wondering about the term "large carnivore" corridor.

Most notable this season was the number of times I would arrive home to see Parks staff wandering about with large weapons in their hands as they sought to ensure the latest passing ursine would not threaten the neighbourhood. The saddest of these events was to witness the initial "processing" of Black bear 133 (*Ursus inevitable fatea*). One of the more uplifting and repeated encounters was eating a snack on the deck and occasionally catching a glimpse of a passing Andrea Kortello (*Naturalist seeneverywhereius*) with her net looking for Vivid Dancers (*Argia vivida*). Hope she managed to find a few of these damsels in the corridor. Those darting damsels that passed along the corridor by my lunch chair would hardly hold still enough for identification by my failing amateur eyes. As they paused briefly on the flowerpots they would attract my interest and then dart off after another mosquito before I could fumble for my glasses. Perhaps *Argia lessvividviewia* would be a better name.

We really have no idea what was growing in our back deck flowerpots this year. Just a sprinkling of commercial wildflower seeds that we found in the garage. But it was fun watching the myriad of insects that passed by the pots to sample the floral wares. An iridescent green thing that landed regularly on a purple bloom and competed with moths for space fascinated me. Just one individual. There was never two or more at a time. It would arrive, land and fiddle about in the flower and then leave after about two minutes. Five or ten minutes later it would return and repeat the dance. This went on for an amazingly long period, far longer than I would have thought would be a reasonable life cycle for such a small critter. At one point I swore I would make a research project of trying to identify this little green delight but soon dropped the idea. At my ripe old age the word of my grad school philosopher colleague keeps ringing in my ear - "You know, one day you science types just have to stop studying things and enjoy the wonder".

The parade of diverse insects on the flowers entertained me all summer until the cool nights began to slow things down. But in late September when one would think the winged and leggy corridor companions of summer were done for the year, another surprise. As I came down the path towards the streetlight from one of my late night wanders in the forest - buzz, flap, splat. This large thing did a strobe light swirl in the brightness and plunged to earth. Like some failed human 19th century experiment in flight this fat bug landed at my feet and continued to sputter about on the ground. It was determined to defy gravity and the laws of predator avoidance. This was something even I could catch without Andrea's net. When I described my sighting to BVN's go-to family for things smaller than a hockey puck, Dwayne Lepitzki matter-of-factly said "Oh, giant water bug on dispersal flight". Further reading of course confirmed Dwayne's assessment. Yes, yet another large carnivore had used the corridor route from the Cave and Basin Marsh area to find its way into the edges of town. Did I say large carnivore? Well in the world of aquatic insects these things are one of the larger predators of the realm. Let's call them *Submarinus panzerii* since I

did not take the time to get a true species ID and have enjoyed the wonder ever since.

So here we have in the Middle Springs large carnivore corridor, far from water, a dispersing carnivorous water bug. While it was surprising for me to find this aquatic insect so far from water more experienced naturalists are not surprised to find them as adults wandering the countryside looking for new homes. Apparently the adult form of these aquatic insects are quite good flyers and can emerge from water to use the stars to navigate on their dispersal flights. This wanderer was released to continue dispersing along with my summer memories in the darkness of the corridor, leaving behind an admiration for carnivores of all sizes. We now wonder what will pass with winter beyond our kitchen window.

¹ Scientific nomenclature in this article may not be precise in order to protect the wonder.



Corridor passings in early September

photo: P. Duck

Bigfoot Captured in Harvie Heights

Dwayne Lepitzki

It's funny how an animal can send shivers up someone's spine and elicit words like "Ewww!" (even from Bow Valley Naturalists) while others use the words "Cool, Wow, and Neat", or some of the more modern expressions of fascination. This was the case in a little adventure that unfolded a short while ago.

One contact made another contact who made another before the final parties met. Leslie, a Harvie Heights resident, was out walking her dog after the August snowfall and came across a dark pile, which at first looked like someone else had not cleaned up after their dog. It must have been a big dog! Then the pile moved.

It was black and it was big. But instead of glistening fur, there were dark ridges and grooves down its back. When moist and if the sun caught it just right, it would glow like wet, black velvet. It then began to rock, slowly, side to side. Knowing that she had seen nothing like it before in Alberta (a later look through the scientific literature confirmed this fact), she captured the first Albertan bigfoot - as it was later christened - aka Odo, for its shape-shifting ability.

This was the first Chocolate Arion (*Arion rufus*) known from Alberta. This slug, which can reach 18 cm long, is now common in

southern British Columbia (including around Revelstoke and the Kootenays) and many other places around the world. Like many of us, it is an emigrant from western and central Europe.



Bigfoot, a Chocolate Arion, captured in Harvie Heights, September 2008. The plastic lid is 14.5 cm long. Bigfoot has since grown. Photo: D. Lepitzki

There is only supposed to be one native slug in Alberta: a diminutive black fellow, the Meadow Slug (*Deroceras laeve*), that only gets to 2.5 cm long. Some of us also have observed and photographed the Grey Fieldslug (*Deroceras reticulatum*) locally, another alien from western Europe.

How did Bigfoot, and other alien molluscs get here? Through agricultural products and soil. Robert Forsyth, a terrestrial slug and snail expert, says in his book "Land Snails of British Columbia" that more than one third of the terrestrial slug and snail fauna of BC is exotic. *Deroceras reticulatum* was already established in Victoria (BC) gardens by the late 1880s. Less is known about Alberta's land snails and slugs, but we're starting to learn more.

It's uncertain if Bigfoot was originally a BC resident or came in from a garden centre within Alberta, a common point of entry for exotic molluscs into BC. Indeed, a few of Robert's favourite snailing grounds for exotics are plant nurseries and garden centres. We also recall, and dug through to view, some pictures taken by a Bow Valley Naturalist of a big black slug found around Emerald Lake, Yoho National Park, in September 2001. Robert also suggested it was *Arion rufus*, most likely transported on lumber from the coast of BC.

Other exotic, introduced molluscs, both terrestrial and aquatic, can cause massive environmental change and damage. Ever heard of the Zebra Mussel in the Great Lakes? The Giant African Land Snail, *Achatina fulica*, found on the IUCN (International Union for the Conservation of Nature) Global Invasive Species database, has been nominated as among 100 of the "World's Worst" invaders. In BC, both *Deroceras reticulatum* and *Arion* are considered among the worst agriculture pests as they will definitely eat a variety of plant materials.

What's the fate of Bigfoot? He/she (*Arion* are hermaphrodites - both male and female organs in the same individual) has gone on for a higher education and lives in a terrarium at Grant MacEwan University College in Edmonton, to fascinate up-and-coming biologists. But we wonder, are there Bigfoot offspring out there?

Perhaps this little piece could have been titled: The Arion that Ate Harvie Heights.

Dwayne, Robert, and Brenda have begun an ambitious three-year study to document the terrestrial snails and slugs within Waterton Lakes and Banff National Parks. One subspecies they are particularly interested in, the Subalpine Mountainsnail, has historically been found in Alberta only in the Cypress Hills and Waterton. It was first discovered along the shore of Waterton Lake during the 1873-74 US-Canada boundary survey and little if any research has occurred on it since then. Another closely related subspecies, the Rocky Mountainsnail, is found in the Cypress Hills and then extends from Waterton to at least the Crowsnest Pass on the Alberta side, and in the Kootenays and up to Fernie on the BC side. In addition to these particular snails, the fauna of the southern Rockies is unique in Canada in that it is comprised of characteristically Rocky Mountain species, as well as Arctic-Alpine, central and eastern Canadian, Pacific Slope and widespread Holarctic/Nearctic species. Some of the species they expect to encounter may be rare and potentially endangered, or new species records for Alberta (as was Bigfoot) or Canada. Stay turned as the data come crawling in.

Great Grig! Jimminy Cricket!

Brenda Lepitzki

There we were, eye to eye, only a few centimetres apart. Gulp. I'd better move back, slowly, for a better look at the situation. Phew, the antennae are waving curiously, that's good, there's no aggression or flight response.

If I wasn't so used to expecting unusual critters in the places we explore, I would have jumped up exclaiming something worse than the title of this article. Actually, I had seen this kind of insect several times over the past years, usually near the thermal springs, and usually in the autumn. I was down low over the stream, looking closely at the bank and water, when I made out the shape of what is commonly known as a grig, a type of cricket. This adult was a substantial insect, as long as 3 - 4 cm, with a deep, rounded body, unlike most other types of crickets which are flatter, and two long flexible antennae. They are in the same insect family as grasshoppers.



Uhler's hump-winged cricket?

Photo: D. Lepitzki

This one was tucked in a mossy indentation in the bank right next to the water. They prefer damp conditions, and are found under loose rocks, logs, and in caves. We see them quite active on cool days, possibly because they are searching for winter hideouts, or egg laying sites. They can make their way into buildings; last year we were shown one that was found in the Town's sewage treatment building, and we've heard of them being found at the Icefields area.

Unfortunately they haven't learned to swim as we have also found them drowned.

The species that we see here in Banff might be Uhler's hump-winged cricket: *Cyphoderris monstrosa*. Latin names are wonderfully descriptive, as this cricket is indeed monstrous in size for its kind. Although most folks find the Latin a daunting aspect of science, it instead provides more insight into the subject being named.

I have yet to find any written accounts of what may have been seen here in the past by entomologists. Part of the excitement of finding a new plant or animal is the question of whether or not it has been found here before, and how rare it is in the local or wider environment. Even if it is a common species, the excitement of my personal discovery is never diminished.

These encounters with enigmatic microfauna motivate me to get out as often as I can, to know the park better, and to encourage its preservation. I hope you too can take advantage of the precious opportunities we all have to experience wild life.

About Fungi

Diane McIvor

Some of you might remember the 'Year of the Mushroom' in the fall of 2004. According to Suzanne Visser, fungal ecologist at the University of Calgary there hadn't been a fungal display like that since the 1980's. Our curiosity, aroused by this event in the woods, hasn't waned and this fall was the best we have seen since that famous year. Since you can't harvest mushrooms in a national park taking pictures will at least help you identify which group they belong to: ie is it a gilled mushroom or a bracket fungi, tooth fungi, sac fungi, jelly fungi, sponge (boletes) fungi or a puffball type (see Mushrooms of Ontario below). The best time for the show, although it depends on temperature and precipitation, elevation, and forest types, appears to be from mid-August to mid-September.



Clitocybe gibba var. *maxima*.

Photo: D. McIvor

There are many books on the subject, many available at the Banff Library. Here is a list of the ones we find most helpful.

- **Mushrooms of Western Canada. Schalkwijk-Barendsen. Lone Pine Press 1991.** This book covers the fungi that are most likely to be found in Alberta. The drawings (watercolor) are not always helpful. It is best to use this book when you can compare the drawings to the photographs of the mushrooms in the following books. Although I use the other guides a lot I always come back to this book to find out if the fungi is likely to occur in Alberta or in the Rockies.

- **Mushrooms of Ontario and Eastern Canada. George Barron, Lone Pine Press 1999.** Although the focus is on Eastern Canada I find this book very useful in matching the drawings in the book mentioned above to the photographs in this book. This is the book that offers the most in helping you recognize which group the mushroom belongs to. A lot of the species that occur in Eastern Canada also occur in the west.

- **Mushrooms Demystified. David Arora. Ten Speed Press 1986.** This is a very comprehensive guide for all species that are known to occur in western North America. The emphasis is on California but most of the fungi occurring in western Canada are likely to be mentioned here. Most of the photographs are black and white so it's not as helpful for beginners.

- **All That the Rain Promises and More...by David Arora. Ten Speed Press 1991.** This is the pocket guide version of Mushroom Demystified (above). Good one to carry in the field. All photographs are in colour.

- **Mushrooms and Other Fungi of North America. Roger Phillips. Firefly books 2005.** Although the emphasis appears to be on the mushrooms found in Eastern Canada, the color photographs taken indoors are useful as they show all aspects of the mushroom: gills, stem, young and mature specimens.

- **Mushrooms of North America. Orson K. Miller Jr. E. P. Dutton & Company, 1950's.** The Banff Library has a newer and updated similar version of this book. **North American Mushrooms: A Field Guide to Edible and Inedible Fungi Orson K. and Hope Miller. Falconguide 2006.** Dr. Miller, the first to write a book on the mushrooms of western North America, did most of his collecting in Western US and Canada including the Rocky Mountains. Very good colour photographs.

- **The Mushroom Hunter's Field Guide. Alexander H. Smith. Smith & Weber 1980.** Useful guide for mushrooms found in the eastern and western US and Canada. This book and the early Miller book were first published in the late 50's so the descriptions can be a bit confusing since a lot of the names have changed and some of the mushrooms now are assigned to a different family.

The Banff Library has other guides that I use occasionally. One I use often is:

A Field Guide to Mushrooms: North America. Ken H. McKnight (Peterson Field Guides 1998 (R)) (Paperback). He uses common names and scientific names for each species. The pictures of the mushrooms are painted plates, not as helpful as photographs in my opinion.

Two recently published books also might interest you. The first includes some very interesting information about research being conducted on the use of fungi for various kinds of ecological restoration work - mycorestoration. The second one deals with some fungi being used for medicinal purposes.

- **Mycelium Running. How Mushroom Can Help Save the World. Paul Stamets. Ten Speed Press 2005.**

- **The Fungal Pharmacy Medicinal Mushrooms of Western Canada. Robert Dale Rogers. Prairie Deva Press 2006.**

Also there is the ability to find out more using the web. Here is a list of the most helpful sites:

<http://www.mushroomexpert.com/>. My favourite site at the moment and the author is an amateur!

<http://www.uoguelph.ca/~gbarron/>. He is the author of the book on the Mushrooms of Ontario. He is the only author to cover the fascinating slime moulds in his book and on his web site.

http://www.usask.ca/biology/fungi/home_%20page.shtml. Just photos. No text available.

http://www.mykoweb.com/na_mycos.html. The North American Mycological Society site.

The **Alberta Mycological Society** is developing a provincial database of fungi where you will be able to search the data by using either a specific name of a fungus or search by area. Check their website <**www.wildmushrooms.ws**> for the launch date.

What a fascinating world! So little is known about the Kingdom of Fungi; it is a field where discovery beckons. Recently the President of the Alberta Mycological Society was asked if he knew how many species of fungi are likely to occur in Alberta. He is a professional mycologist but after consulting colleagues and the relevant literature he could respond only that the number probably was somewhere between 5,000 and 15,000, a wide margin indeed! I wonder how many species exist in Banff National Park? Nobody knows.

To see a sample of each group of mushroom found in the Bow Valley go to the BVN website:

<**<http://www.bowvalleynaturalists.org>**>

From **Earth Alive! Essays on Ecology - Stan Rowe**

Quoting Hilda Neatby

"Here is as good a definition of education as any: the discovery that the world is more interesting than oneself. It is also a good definition of citizenship, and of mental health."

Rowe himself writes:

"The basic goal of a liberating education (is) understanding what it means to be human in a living world. Enlightened action will follow."

Addresses

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