

# MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS

JANUARY 2012 NEWSLETTER

Why does the Chickadee  
have a bent tail?



I heard  
Prof. Henry  
Higgins from  
London is coming  
to answer our  
questions!

Why are these  
Willow buds  
on the snow?



Would a mouse  
sleeping under the  
log be safe?

What type of  
snow granules do  
mice like to play in?

Coming THURSDAY FEB 16 7:30 PM  
is the very famous Prof. Rob Higgins of  
WL+TRU to tell us about the RED HOT FIRE ANT





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The newsletter for the:  
Williams Lake Field Naturalists  
1305A Borland Road, Williams Lake BC, V2G 5K5

**Membership fees:** Family (\$30), single (\$25) or student (\$10) memberships can be mailed to the above address. Please complete the membership and waiver forms available at the Nature Centre (250) 398-8532, [muskrat@midbc.com](mailto:muskrat@midbc.com) or the web site below. For more information about the club please contact Fred McMechan at 392-7680 or e-mail [Fred\\_McMechan@telus.net](mailto:Fred_McMechan@telus.net)

**Williams Lake Field Naturalists Website** <http://www.williamslakefieldnaturalists.ca>  
**Scout Island Nature Centre Website** <http://www.scoutislandnaturecentre.ca>

**Executive of The Williams Lake Field Naturalists:** president Fred McMechan, vice-president Jim Sims, secretary Ordell Steen, treasurer Katharine VanSpall and directors Nola Daintith, Rob Higgins, Rick Dawson and Cathy Koot

**Editors:** If you have comments, suggestions or articles for the Muskrat please contact Margaret Waring (398-7724), Jim Sims (296-3638) or e-mail us at [muskrat@midbc.com](mailto:muskrat@midbc.com)

### Membership Reminder

If your fees for 2012 have not been paid they are now overdue. Don't forget a donation to Scout Island is always welcome. Forms can be downloaded from the club website or can be picked up at the Nature Centre.

### Invasive Species, Invasive Ants, and the End of Standing on the Grass in Vancouver

The identification of the European fire ant (*Myrmica rubra*) in North Vancouver in the fall of 2010 by Rob Higgins marks the first determination of this pest ant west of southern Ontario, in Canada, and above 49 °N latitude in North America. Since this first identification, Rob has confirmed the presence of this ant in Burnaby, Vancouver, and Victoria. The European fire ant is an urban ant, most likely being introduced in landscaping plants and then spreading densely through lawns, raised garden beds, small homeowner cold-frames and greenhouses. This ant swarms rapidly when disturbed (e.g., garden weeding, lawn mowing) and, unlike most ant species in BC, readily and noticeably stings.



European Fire Ant  
(*Myrmica rubra*)



To date this ant has not been identified in the high value parks in south-coastal BC but that is unlikely to continue.

In this presentation, the biology of invasive species in general will be considered, as well as the global issue of invasive ants with the European fire ant as a relatively local example. The introduction of this species to North America will be reviewed. The natural history of this ant will be discussed, especially where this differs from that of its

native range, and helps to explain the manner in which colonies spread once established. Further, management strategies will be considered, particularly in the context of urban neighbourhoods.

### **Climate Change in Northern BC and its Impacts on Water Resources**

Tuesday March 13th

**Program by: Stephen Déry** (*Environmental Science and Engineering Program, UNBC*)

Mark this date on your calendar so you don't miss Stephen's talk on expected changes in our area due to climate change. More details will be provided in the February newsletter.

### **Cariboo Christmas Bird Counts – a Regional Roundup**

By: Phil Ranson

100 Mile House initiated their first 'official' bird count conducted under Audubon rules on January 2. They were short on observers with only 6 in the field but still managed to see 31 species including surprising additions of Yellow-headed Blackbird and a Brown-headed Cowbird as well as some good to get species; 3 Trumpeter Swans, a White-throated Sparrow and a flock of Rosy Finches.

Quesnel held theirs on the same date with 24 observers and a count of 50 species. The Quesnel and Narcosli counts are both unencumbered by Audubon protocols and survey from a larger area. Highlights of the Quesnel Tally were 6 Hawk Owls, 5 Blue Jays, 4 Rusty Blackbirds, a Gyrfalcon (3rd occurrence on the Q-CBC since 2005) and new to the count Pintails (2) and Collared Doves (3).

Highlights for the handful of observers on the Narcosli Count; making up the 33 species on Dec 23<sup>rd</sup> were a pair of Killdeer, 4 Collared Doves, an American Tree Sparrow and a surprising Yellow-rumped Warbler at the Yorston Ranch for perhaps only the third regional winter record.

The 33 counters at Williams Lake had a total of 49 species with a few highlights: New to the count was a Eurasian Collared Dove at the SI feeder. Count highs were recorded for Merlin, Black-capped Chickadee and European Starling. The Collared Dove did not appear in the region until 2008 but will no doubt become a permanent fixture.

The Soda Creek count was held on Dec 16 in snowy conditions. A total of 29 confirmed species with an additional 2 species remaining unidentified were tallied. It was unfortunate the Soda Creek, Macalister route could not be covered due to poor road conditions. This could have added at least another 5-6 species and possibly more. Two Hawk Owls, a Short-eared Owl and a Pygmy Owl however were adequate consolation.

Notable on all counts was an influx of White-winged Crossbills benefiting from a good spruce cone crop. Full Williams Lake report has been attached at the end of the newsletter.

### **Young Naturalists Program**

By: Mary Forbes Young Naturalist Club Leader Williams Lake

Now that the Holidays have passed and the snow and winter weather has finally arrived in Williams Lake the winter schedule for the Young Naturalist Club is ready to roll-weather dependent as always.

**Saturday January 28<sup>th</sup>** from 6-8pm at the Nature House will host a Star Party. Local Astronomers will guide this evening of star gazing for all levels. Bring your telescope if you have one, if not a pair of binoculars can show an amazing amount of detail. Dress warmly for

laying in the snow (or on the ground) with gloves, mittens, hat and **no headlamps or flashlights please to protect our night vision**. This event is weather dependant, if very cold or overcast the event will be cancelled, call the nature house or Mary 250.855.8443 [mmmforbes@yahoo.ca](mailto:mmmforbes@yahoo.ca) with any questions.

**Saturday February 25<sup>th</sup>** from 1-3pm meet at the Nature House for Snow Fun with science, adventures and sledding (please bring your crazy carpet). If too cold or in case of no snow we will stay indoors and look at and discover the wonderful world of Animal Skulls, Fur and Tracks. Please dress warmly and bring any unique skulls or pelts you might have from home to share with the group.

**Saturday March 31<sup>st</sup>** from 1-3pm meet at the Nature House to learn about Baby Animals, with matching games, pictures and live animals to share the experience with. Live baby animals will be available to interact with the kids.

For the Last Young Naturalist Club until Summer Programming we will meet **Sunday April 22<sup>nd</sup>** to help create the Second Annual Community Earth Day Event. Anyone with something to share to make this day wonderful please contact Mary to host an event; be it nature journaling, tree planting, bird watching, litter picking or anything you can think of. Mary will be hosting another mural painting event using paint from Cariboo Disposal's paint recycling program from 9am to 3pm at a secret downtown location (to be announced), if you had fun at the Delainey's Mural Painting last year you'll be sure to enjoy the 2012 version just as much!



See you soon!

### **Scout Island Nature Centre Report**

By: Sue Hemphill

It is really winter -22 degrees and snowing outside the Nature House as I write this. This means we can start doing snow exploration with the classes that visit. I am offering several programs at the Nature Centre from January through April including: Snow Fun, Mammals in Winter, and Winter Birds. Mary will be doing Owl programs at schools. SD 27 Home Schoolers have started a unit on "Small



**Don't build that snow fort with "Pukak Snow"**

Things.” The goal is to learn how to use both magnifying glasses and microscopes. There is a new group of Home Schoolers from the 100 Mile area having fun at the Nature Centre thanks to Kristi Iverson encouraging the group –and helping me lead it.

I hope all that bought nuts and chocolate are enjoying them. We made a good profit on this fund raiser. There are still cashews, walnuts, and pistachios left. These are the freshest nuts you will ever taste.

Some of you may have heard that the Province has increased gaming grants by \$15 million to a total of \$135 million, beginning this fiscal year. In addition, funding has been reinstated for eligible adult arts and sports organizations, **environmental groups** and animal welfare agencies. This is somewhat good news and is a direct result of the number of letters written from people across the province including our own members. So thank-you—However, apart from the reinstatement of groups, there is very little new in the Premier’s announcement. The recent government releases state that \$135.0 million of the \$1.10 billion total net government gaming revenues has been allocated to non-profit community organizations. The money earmarked for non-profit community organizations equals 12.27% of the net gaming income for the province, a far cry from the 33.3% promised in the 1999 Memorandum which states: "...ensures charity entitlement to an amount, after accounting for retained bingo revenues, equal to 1/3 of ongoing government net community gaming revenue;". That would be \$366.3 million. So if you have the energy, keep on writing your MLA and let him/her know that this is still not acceptable.

I am already receiving resumes from university students interested in working as summer staff and have interviewed two. If you know any young people that might be good candidates for summer staff (full time work May-August), please have them send me a resume.

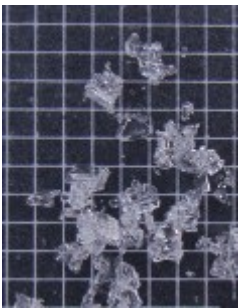
[shemphill@midbc.com](mailto:shemphill@midbc.com)

Now for some Snow Fun (with some help from Jim)

### **Pukak Snow**

On a cold day, make a snow study station by placing your shovel straight down into the snow and pulling it towards you. You should have a side view or profile of the snow from the top to bottom. Scoop away any loose snow. Now look at the layers. Chances are you will find the largest crystals at the bottom of the snow. You probably also found it was easy to dig into those layer. The subarctic Indians and arctic Inuit of northern Canada and the Eskimo in Alaska

call this granular snow pukak (pronounced “poo-cack”). Heat that rises from the ground party melts the bottom snowflakes and they become these pea-sized grains of snow. These Pukak snow crystals were scrapped from the bottom of the snow column to the right. Note the snow looks like bits of ice crystals and has completely lost its snow-flake look. The background is a 2 mm grid.



**Pukak Snow**



If you could shrink and visit the pukak layer, you’d be surprised to see what a busy place it is. Mice, shrews and voles scurry about in the pukak layer all winter long. Under the snow blanket, these small animals are protected from predators and cold temperatures, and there are plenty of plants and seeds to eat.

Animals that use the snow blanket to survive the cold winter are called chioneuphores. Because these animals don't have special adaptations to survive the cold, they would freeze or starve if they stayed above the snow. But sometimes they have to go to the top of the snow to build tunnels or ventilator shafts – they are holes in the snow about the size of your thumb.

### Scout Island Beckons

By: Monica Lamb-Yorski ( another in entry from our Scout Island Nature Centre writing contest)

For the first six weeks of living in Williams Lake I avoided you, yet you kept tempting me. Your changing colours, proximity to the lake, and promise of birds and paths pestered and suggested you'd be my type.

Then on Thanksgiving Monday, after our older children had left to return to the coasts – north and south – I could no longer resist. Before dinner, when the sun began to break up the rain, I decided it was time to succumb. From our old log home, tucked below Signal Point, where during a family hike I had spied on you more closely the day before, I departed alone. Moments after walking along the highway, I scurried down a path to a road below, and made my way to you.

My heart quickened as a tree filled with singing blackbirds welcomed me along the entrance road. Their melody comfortingly reminded of autumns in other places I have lived. Cars parked at the caretaker's house suggested visitors for dinner, while no other evidence of humans at the site surfaced. Yes, you and I were alone for our first encounter. Excitedly I ventured in, disturbing two large gaggles of Canada Geese, but not enough to cause them to fly away. For thirty peaceful minutes you shared your paths, even revealing a surprising height of land where you enticed me to pause, view the lake, appreciate the breeze, and reflect on everything I have to be grateful for.



Pause for a view from the height of land (photo by Don Piller)

I departed knowing I'd made a new friend.

### Our View of the Night Sky – January & February 2012.

By: Steve Capling

Many folks who like to look at birds have binoculars and spotting scopes. Since you can't look at birds easily in the dark, why not try using your equipment (including your eyes) at night to look at the sky! Check out this web site <http://spaceweather.com/flybys/flybys.php?zip=v2g3t2>

to find out what satellites are visible from Williams Lake. Another useful site is What's Up in the Sky and Space at <http://www.astronomyalmanac.com/what-is-up.html>. This site gives a quick update on what is happening above us including the moon and sun. It also has an Aurora activity monitor and useful links. If you really like looking at night sky objects consider joining the Royal Astronomical Society of Canada (<http://www.rasc.ca/>) and get more information and access to their viewing data and observing programs. A membership includes a subscription to Skynews magazine.

There are two very bright objects in the early evening sky. Venus is very bright and visible at dusk to the southwest and is about four times brighter than Jupiter.

Jupiter is higher, not as bright and is visible at dusk in the south. Use binoculars or a telescope to look for the four moons, Io, Europa, Ganymede, Callisto. The first three are the innermost ones and disappear behind or in front of Jupiter depending on their orbit location. Callisto lies far enough from the planet that it is always visible, passing either above or below Jupiter. If you want more of a challenge, try to observe the moons, particularly on January 27 at 11:30 p.m. and Europa on February 22 around 10:45 p.m., as they transit across Jupiter. See various websites or Skynews / Astronomy / Sky & Telescope magazines for more details.

Mars comes into view mid to late evening in the constellation Leo.

Saturn comes into view around midnight and you should be able to see the Cassini Division that separates the outer ring from the brighter inner ring.

For those of you who prefer using binoculars, check out this web site for information on what to look for and how to get the most out of binocular viewing: <http://www.philharrington.net/>

The constellation Orion rises in the southeast in the evening.

### Asteroid 433 Eros

This is a great time for backyard observers to observe Asteroid 433 Eros, brightening to mid-8th magnitude and speeding towards close approach to Earth on January 31, plunging through about one degree of Dec per day! Further info can be found in the 2012 Handbook (p.250), Jan/Feb SkyNews (p. 30). There is a rough finder chart at <http://dl.dropbox.com/u/17678378/Eros.pdf>, or here [http://media.skyandtelescope.com/documents/WEB\\_Feb12\\_Eros.pdf](http://media.skyandtelescope.com/documents/WEB_Feb12_Eros.pdf).

### Comet Garradd

You will need a telescope for this one but give it a try in binoculars. This icy visitor won't likely be at its best until February, when its estimated total magnitude should be at or slightly better than 6.0. In late January, Comet Garradd cruises along the east side of the Keystone in Hercules, and on the morning of February 3rd it's just  $\frac{1}{2}^\circ$  from the globular cluster M92.



## Bent-tailed Chickadee (BTCH)

By: Jim Sims



No it is not a new species. After lunch today I was enjoying the comfort of my kitchen nook with a big mug of free-trade Coco in hand when I noticed this hanging below my feeder. It was 2 years ago when this favourite bird visited my feeder on a regular basis. When the year ended, I thought I would not recognize it again as I thought the tail would grow in straight following the moult. Is it the same bird? Is it a genetic default? Does it cause the Chickadee to fly in a circle? Is it an offspring from the older bird?



Turn around  
Please!



This web site <http://www.birdnote.org/birdnote-info.cfm?id=1935> might help provided the answer. At night the chickadees roost in a cavity that is often very tiny and as a result the tail can get “bent out of shape”. Perhaps it was not always the same bird that I was seeing. Maybe today’s tail was frozen in the bent position?

Why not join me in a search for more BTCH while you watch your feeder.

## What are the Stories the Tracks in the Snow tell us

By: Jim Sims

For the past week I’ve had to give up my daily ski outings due to the cold and have turned to long afternoon walks with the dog out here at Rose Lake. The walks have taken me into a spruce forest along the south shore of the lake where we can get out of the very cold wind chill. It was not long before I started to notice that each day there were new fresh tracks left behind by some critters and still not buried by the persistent snow fall. I was intrigued by the stories that the tracks often told.

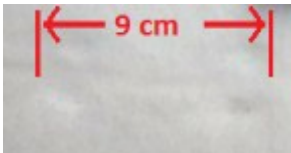


This is one of my favourite winter tracks that I am always on the lookout for. The track is about 2.5 cm wide and has 4 obvious toes. There was about 20 to 25 cm between the tracks that were joined by a slide (tail) mark.

I followed the track a short distance across the trail to a small willow shrub. The tracks disappeared below the shrub and then re-appeared on the other side. If you examine the picture closely you may be able to notice that the foreground branches have no new snow caught



on the them while the background branches are all laddened with new snow. The picture does not show this but below the shrub there were several bits of tree buds in the snow. Shortly after the bird returned to the ground I found this mark in the snow and the tracks stopped abruptly as the Ruffed Grouse flew off to search out another shrub to feed on.



This track was left behind by a tiny chioneuphores that Sue described in an earlier article on snow. The tracks were very small. They started beside the stump of a tree that was buried in the deep snow. They crossed the trail and then disappeared into a thumb size hole in the snow leading down to the pukak layer in the snow. (I like that word!)

The most common track by far was this one to the right. The individual foot print was about 12 cm long and was almost always in a pair that is typical of the tracks made by members of the weasel family. What looks like a set of 2 feet is actually made by 4 feet as the hind feet land in the same track made by the forepaws. The tracks varied in distance between the tracks from a walking 15 to 20cm up to a giant leap of 150cm but usually was about 70 to 80cm. The tracks crossed my trail regularly and it was obvious that the weasel was concerned about me walking there or perhaps more so my dog. When it crossed the trail it often left behind a territorial marking of a bit of “Yellow Snow”.



Today I decided to follow the track to see if the weasel was up to anything exciting. Smedley (my dog) soon discovered what I was doing and was eager to help. Little did he know that his help was not always appreciated. It wasn't long before I noticed the tracks stop, turn around and disappear. Close examination revealed that the tracks had disappeared into a hollow below a fallen tree that had several branches buried by the snow. At first I thought it might still be under the tree but then I noticed the track 3 metres away where they came up from under the snow where the top of the tree protected another hole in the snow. The weasel had surely been under the tree rumaging around in the Pukak Snow looking for a tiny chioneuphore. What kind of a weasel was it? I'm not

certain but I expect it was a Marten.

Thanks again to all of you that provided articles. A special welcome to Steve and we look forward to more exciting articles on “Our View of the Night Sky”. Look for the next newsletter in late February when we will feature the agm **PARTY** and the annual Fund Raising Banquet.

### Williams Lake Christmas Bird Count Summary (2011)

	SPECIES	2011	Prev. 10 year Ave.	Count high (year)	Comments
1	Mallard.	90	139.7	264(05)	
2	Green-winged Teal.	9	6.9	16(02/09)	
3	Barrow's Goldeneye	1	0.5	3(08)	
4	Ruffed Grouse.	1	4.1	11(77)	
5	Bald Eagle.	10	12.5	26(00)	
6	Northern Harrier	2	0.2	2(05)	
7	Red-tailed Hawk	2	1.2	8(00)	
8	Rough-legged Hawk.	2	1.1	4(05)	
9	Merlin	4	0.7	2(04)	Count high
10	Wilson's Snipe.	1	4.3	10(05)	
11	Rock Pigeon	402	262.4	430(06)	
12	Eurasian Collared Dove	1	0.0		New to count
13	Mourning Dove	3	12.2	59(05)	
14	Northern Hawk Owl	1	0.3	2(89)	
15	Belted Kingfisher	1	0.3	3(77)	
16	Downy Woodpecker.	20	24.4	36(10)	
17	Hairy Woodpecker.	25	29.5	50(06)	
18	Northern Flicker	41	35.0	49(06)	
19	Pileated Woodpecker.	21	25.4	32(05)	
20	Northern Shrike	1	2.3	10(00)	
21	Gray Jay.	10	15.1	31(87)	
22	Black-billed Magpie.	4	12.2	33(06)	
23	American Crow.	483	386.7	984(00)	
24	Common Raven.	454	337.3	474(09)	
25	Black-capped Chickadee.	372	285.5	343(03)	Count high
26	Mountain Chickadee.	217	207.9	355(08)	
27	Boreal Chickadee	1	0.2	2(03)	
28	Red-breasted Nuthatch.	92	64.2	237(95)	Numbers rebounding
29	Brown Creeper.	8	3.4	9(2003)	
30	American Dipper.	13	22.0	53(01)	
31	Golden-crowned Kinglet	7	2.1	21(00)	
32	Townsend's Solitaire.	22	21.1	50(01)	
33	American Robin	1	4.6	30(01)	
34	Varied Thrush	1	0.6	2(91/05)	
35	European Starling.	264	81.4	184(07)	Count high
36	Bohemian Waxwing.	924	1041.3	1827(08)	
37	Spotted Towhee	1	0.1	1(05)	Second time on count
38	American Tree Sparrow	1	0.4	15(00)	
39	Song Sparrow.	14	26.7	44(09)	
40	Dark-eyed Junco.	19	76.0	373(89)	Lowest total since 1984
41	Red-winged Blackbird.	1	16.3	269(83)	
42	Pine Grosbeak.	16	83.5	453(85)	
43	House Finch.	290	268.8	481(06)	
44	White-winged Crossbill	84	10.7	261(88)	
45	Common Redpoll	193	125.0	761(85)	
46	Pine Siskin	5	12.6	866(94)	
47	American Goldfinch.	35	40.1	101(01)	
48	Evening Grosbeak.	3	21.4	638(89)	
49	House Sparrow.	430	232.1	490(10)	
	TOTAL INDIVIDUALS COUNTED	4603	4003.8	4908(06)	
	TOTAL SPECIES REPORTED	49	52.8	62(08)	