

MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS
DECEMBER 2014 NEWSLETTER





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, muskratexpress@shaw.ca 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

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, secretary Ordell Steen, treasurer Katharine VanSpall and directors Nola Daintith, Cathy Koot, Peter Opie, Ray Hornby, Brian Chapman, Don Lawrence and Christie Mayall



Editors: Thanks to all of you who have contributed to this edition of the newsletter. Please expect your next edition of the newsletter in mid-January. If you have comments, suggestions or articles for the next Muskrat Express please contact Margaret Waring (398-7724), Jim Sims (296-3638) or e-mail us at muskratexpress@shaw.ca



Memberships (2015)

A friendly reminder that your annual membership dues will be due on January 1st, 2015. Membership forms have been attached so let's not delay, fill them out today and get them in the mail or drop by the Nature Centre. Don't forget your annual donation at the same time.

Williams Lake Christmas Bird Count

By Phil Ranson

December 14th will mark the 47th consecutive year the Williams Lake Field Naturalists (WLFN) have conducted the Christmas Bird Count and 115 years since the original count was undertaken in 1900. Since that time the number of counts has grown to the current 2300 across North and Central America.

From its inception year in 1969 until 2000, data from the Williams Lake count was submitted to the provincial government, either the 'Fish & Wildlife Branch' or the Provincial Museum. Since 2000, data has been submitted to Birds Studies Canada and the Audubon Society who jointly administer the collection and distribution of the vast array of information obtained over the Christmas period.

Since the first count in 1969, The WLFN has recorded about 120,000 birds of 119 species on the single day census run between December 14 and January 5. Numbers of birds and species vary from year to year with a scant 21 species tallied the first year to a high count of 62 species in 2008. Several factors play an important role in the number of birds seen; from the numbers of observers in the field, to weather conditions on the day and in the preceding weeks. Snow and ice conditions can determine availability and accessibility of food supply as well as variables like cone seed and berry crops.



Northern Pygmy Owl from last year's count
Photo by Kris Andrews

A good fir and spruce cone crop last winter, as well as an ample supply of juniper berries resulted in a bumper year for both the fir seed eating Red Crossbills and the Townsend's Solitaire which rely heavily on juniper berries for winter sustenance. It was a record year for Solitaires with 85 counted which was not only the best total for this area but was also the highest on any count in Canada. Red Crossbills which were quite common last winter have yet to be reported this season and indications are that Solitaires numbers are also down due in large part to a poor berry crop.

Last year's count of 3953 birds of 47 species was below the 10 year average of 4200 birds of 53 species and it's difficult to predict what will turn up on December 14th. Even with the relatively low numbers last year there were still 9 species which occurred in record high numbers, many of these at bird feeders. With the early date of this year's count there's always the hope there will be some open water on Williams Lake to add to the variety of birds seen.

Bird feeders attract not only our more common species but also provide us with some quite unusual birds in winter. The Scarlet Tanager frequenting a Terra Ridge feeder on the 2012 count was a once in a lifetime occurrence. Feeder watchers contribute greatly to the count and the WLFN encourage everyone with a feeder to let us know what they see on count day. For more information on the Williams Lake Christmas Bird Count please contact Phil Ranson at 250 398-7110 or ranson1@telus.net.



Scout Island Nature Centre News

From Sue Hemphill and Jenny Noble

Nature's Scribes

This year's Fall Break Writing Program (Nov 12-14) brought 8-10 enthusiastic writers to the Nature House for 3 afternoons of games, observation and imaginative composition. Each day began with a journal entry, recording weather, date and any unusual sights or events from the morning.

Our first day's theme was "birds getting ready for winter", so we walked through the Bulrush Trail and out to Otter Point. Environmental Educator Paula Laita led a lively discussion about how important SINC is to successful migration, comparing it to a hotel, restaurant and gas station for the travelers. Bonus sightings: muskrats sunning on the ice, swans passing directly overhead. The kids wrote stories and poems based on their impressions.

On Thursday we turned our attention to how plants get ready for winter, their many strategies for surviving the cold and ensuring their return. Through the willow trail and out to the bridge,



Looking for Migrators on the Bulrush Trail



The Scribes at Work

where we marveled at how floating panes of ice caught the low-angled sun's rays. Then in a guided visualization, we imagined ourselves as trees, our roots reaching deep into the earth and our branches stretching toward the sun. Something's coming toward us...what will happen? Thus began their story for that day.

Friday was "Mini day", so we dipped some invertebrates out of the tanks and set out several other natural items for viewing under magnification. The microscope was especially popular, as the kids found more and more things they wanted to see...feathers, bits of wood, wasp nest parts. In this day's story, they invented powers and potions to shrink themselves down to microscopic scale and encounter a creature they'd seen. You can bet

there were some close calls!

Watch for some samples of their work when we display the results of this year's Art in Nature adventures at the library.

Paula engaged the writers in games on each day's theme. I was delighted once again at how the games seemed to get ideas and enthusiasm flowing. We were also very pleased to have Lina, a visiting teacher from Switzerland, taking these great photos.

Appeal for Donations to Scout Island Nature Centre

Winter has leaped on the Nature Centre. With no protective covering of snow, the ground and water are quickly taking on their solid state, and evidence of above-ground life grows scarcer. But of course the resourceful winter birds still flit through the bare willow branches, and the muskrats hunker on the ice by Otter Point.

There's no season when we lose our passion for connecting children with Nature. School classes in the "Salmonids in the Classroom" program have received their tanks and chinook eggs, and eagerly watch for the little pink orbs to develop into fish. Our classes, Young Naturalists' Club, and Discovery Pre-Schoolers bundle up and venture out on the frosty trails to observe nature's cold-weather strategies.

Donations to Scout Island helped make it possible for us to provide nature education even during 2014's unfortunate public school disruptions. Our participation in innovative programs like homeschool enrichment and the new Grade 7 Outdoor Academy help integrate the benefits of nature into more children's lives. Our fun school holiday and youth group programs inspire kids to appreciate nature, learn nature crafts, and be active outdoors year-round. These experiences nurture the love of the natural world that's so essential to developing environmental awareness and fostering cognitive development.

Friends' support has also made possible much-needed upgrades to the caretakers' residence and reinforcing the bridge foundation.

Thank you to all who have helped with these improvements!!

By donating to Scout Island Nature Centre, **you will help us continue to offer these opportunities. You'll also receive a charitable receipt**

Most important, our Friends ensure that Scout Island Nature Centre can continue to offer the *tonic of wilderness* to whole community (people and wildlife)

Donation form can be found at the end of the newsletter.

This fabulous framed but unsigned print of Siwash Rock has been donated to help raise funds for Scout Island. Wouldn't it just make a swell holiday gift as well as giving a boost to our programs? We're open to offers, starting at \$100. If you want to come by for a look, give us a call at 398-8532 to make sure someone will be here to open the door.



Williams Lake Field Naturalists News from the Executive

By Fred McMechan

The following is a summary of the topics considered at the executive meeting on Thursday, Nov. 20:
Club business:

- 1) A meeting was held with the new Director of Municipal Services to discuss the construction of the board walkway along the Cattail trail in the Williams Lake River Valley. More engineering plans need to be developed. He is supportive and plans will be made to start the project next spring.

- 2) A new Ministry of Education committee will revise the present draft science curriculum so that environmental education is included. Lenny Ross and Christie Mayall, on behalf of BC Nature, have offered to serve on the committee. At this point they have not received a reply on their offer.
- 3) Information about the BC Nature Field Camp at Tatlayoko Lake has been prepared and has been placed on the websites for BC Nature(www.bcnature.ca) and our club website (www.williamslakefieldnaturalists.ca). More preparations for this camp will be made through the winter and in the spring.
- 4) Planning for the Christmas Bird Count was made. This information is found elsewhere in this newsletter.
- 5) A bursary for \$800, which will be given to a graduating secondary student in 2015, was approved.
- 6) Plans for offering evening presentations in 2015 were discussed

Scout Island Nature Centre business

- 1) The roofing project at the caretaker's house was completed. As a part of the project new soffits were installed on the porch roof.
- 2) A PayPal account will be set up on the Scout Island Nature Centre website so that donations can be made online.
- 3) On our invitation Briony Penn has offered to be our guest speaker at the Nature Centre banquet in April of next year. Information about her presentation and the banquet will be available in January.
- 4) The project to insulate the attic of the caretaker's house was completed recently.
- 5) The Land Reserve was renewed this year. The area of the Reserve includes the west end of Williams Lake which surrounds the Nature Centre properties and Crown Land properties within this area. It replaces the Order-in-Council Land Reserve which was in effect for a 30 year period from 1984 to 2014
- 6) We recently received the radon test results from Interior Health. The test was carried out in the basement of the Nature House. The results showed a safe level of 78 Bq/cubic m (Becquerels per cubic meter). The Canadian guideline is 200 Bq/cubic m.
- 7) An erosion control project next to the bridge on the island Trail was completed within the last two weeks. This involved the spreading and building up of either rock rip rap or $\frac{3}{4}$ crush gravel at both ends of the bridge. This project needed to be carried out because there was some erosion around the bridge during the high water period in the spring.

Brown Creeper (*Certhia Americana*)

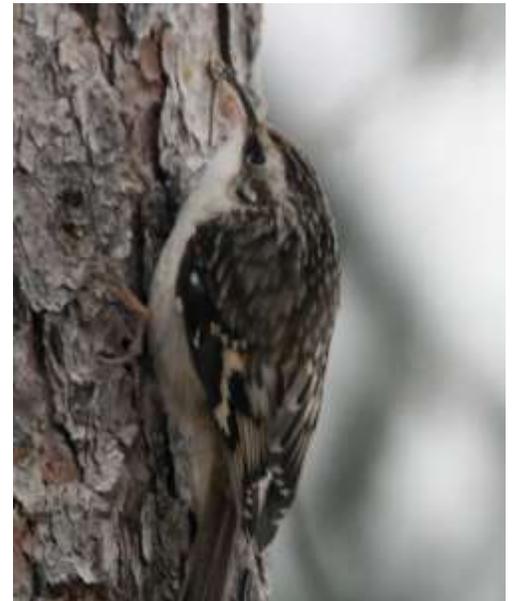
Researched by Jim Sims

Sources: Checklist of Cariboo Chilcotin Birds, Birds of BC vol.4 and www.allaboutbirds.org

I frequently see this Brown Creeper searching the trees close to my bird feeder, looking for the shelled sunflower seeds or bits of suet that the Chickadees have been hiding in the bark of the spruce trees. It works its way up the tree and then returns to the bottom of the next tree pausing briefly as it goes to probe the crevasses with its long thin curved bill. Note how it holds itself close to the trunk of the tree by holding its feet out to the side of its body. The stiff long sharply notched tail also provides



needed support. When moving up the tree it hops on both feet at the same time causing the head to duck with each hop. Its specialized anatomy makes it difficult for the Creeper to move down the tree like its cousin the Nuthatch. When threatened it seldom takes flight but will pull its body in against the tree trunk and remains motionless. The mottled brown back looks like a piece of bark hanging from the trunk of the tree. During the non-breeding season they may follow other small bird species such as Chickadees and kinglets.



Jim's Brown Creeper

The Checklist of Cariboo Chilcotin Birds lists the Brown Creeper as uncommon (1 to 6 individuals per day per locality in the appropriate habitat). It is a year round nesting resident. The Checklist also supports what I see here at Rose Lake, it is more likely to be observed in the winter when it likes to forage in trees near bird feeders and seldom visits the feeders (maybe it likes its sunflower seeds shelled).

During the summer it prefers old growth coniferous forest with large trees where it can find dead or dying trees to nest in. They have a preference for forest with a mixture of tree types as the different tree species will attract different insects at different times of the year. In this habitat they can be hard to spot in the thick forest cover however the male will be singing for his mate constantly and if you can recognize its song they should be easier to find. The call notes I hear now are too close to the Kinglets for me to distinguish it. The female usually builds a nest behind a piece of loose bark. She begins by layering twigs and strips of bark that the male has brought to her. Insect cocoons and spider egg cases are used to stick the nest to the bark and the tree trunk. Sometimes material from the base will be removed and recycled into the nest cup that is made up of wood fibers, spider egg cases, hair, feathers, grass, pieces of leaves, lichens, and mosses. This nest box was erected on a Douglas fir tree by William Merilees of Nanaimo. The design has proved successful at attracting Creepers on Vancouver Island. Maybe I'll try one on the back of my 10 acres.



Photo from
the Birds of BC vol 4

The seeds and bits of suet it finds near our feeders is a small part of its diet. The diet usually consists of small insects and spiders that it finds hidden in the bark of the tree. A single tiny spider can provide it with enough energy to fly vertically up to 200 feet. It is estimated that the Creeper will burn from 3 to 10 calories per day.

The Creeper is sometimes used as an indicator species to monitor the impact of forest practices. The breeding bird counts indicate a stable North American population from 1966 to 2010. Clear cutting and selective logging practices remove the large trees they forage and nest in. Salvage logging will remove potential nesting sites and fragmentation of the forest may also have an impact. Will we see a change in the future?

Watch for this bit of bark spiraling up the tree and then falling to the bottom of a nearby tree close to your feeder.

Our View of the Night Sky – December 2014.

By Steve Capling

Planet Review

Mars is visible low in the southwest evening sky.

Jupiter rises in the East in mid-evening in western Leo.

Saturn re-appears in the morning twilight sky early in December.

Venus re-appears low in the SW evening twilight early in the month.

Look for Uranus in the southeastern sky as a pale green fuzzy object - magnitude 5.7 in southern Pisces.

Mercury disappears from view until the last few days of December when it re-appears below Venus in the SW evening twilight.

Meteor showers

The next forecast meteor shower is the Geminids that peaks on **December 12/13**. Looking towards the east to the constellation Gemini after sunset until about midnight will give the best chance of observing meteors. The moon rises around 3:30 which will affect seeing any meteors unless they are quite bright.

Winter Solstice - The 'official' start of winter happens on December 21st.

Asteroid 6 Hebe

Asteroid 6 Hebe is still well placed for observation, lying in the constellation [Eridanus](#) (located to the west or right of the base of Orion), above the horizon for much of the night. It shines at mag 8.1, making it an easier target in telescopes.



Major meteorite source - (left this in because this is really quite special!)

Hebe is the probable parent body of the [H chondrite meteorites](#) and the [IIE iron meteorites](#). The orbit of Hebe compares with the orbits of Earth, Mars and Jupiter. Recent research implies that it is the source of about 40% of all meteorites striking the Earth. Evidence for this connection includes the following (after Michael Gaffey and Sarah L. Gilbert.^[8]):

- The spectrum of Hebe matches a mix of 60% H chondrite and 40% IIE iron meteorite material.
- Hebe is extremely well placed to send impact debris to Earth-crossing orbits. Of the asteroids in this "well-placed" orbit, Hebe is the largest.
- An analysis of likely contributors to the Earth's meteorite flux places 6 Hebe at the top of the list, due to its position and relatively large size.

Evening Sky Map – courtesy of Skymaps.com.

For a printable sky chart go to this web site – www.Skymaps.com/downloads.html - and scroll down the center of the page to the download button. “December 2014: Northern Edition (PDF)”. At the end of the month it changes to show the next month’s chart. I did not include the chart this month as it is out of date and you may as well get the new December chart next week.

I have enclosed a donation of \$30____\$50____\$100____\$200____\$300____other_____

Name_____

email_____

postal address_____

A donation to the Nature Centre in a friend or family member's name makes a great holiday gift! We will send you a beautiful card that you can give to the recipient acknowledging your gift to the Nature Centre in their name.

I am making a donation of _____ as a gift. Please send me a card that I can give to the recipient.

Please make your cheque payable to Scout Island Nature Centre Fund and mail it to

Scout Island Nature Centre
1305 A Borland Rd.
Williams Lake BC V2G 5K5