

MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS

JANUARY 2009 NEWSLETTER

WISE
ADVICE
TIME TO PAY
YEARLY MEMBERSHIP



NATURE HOUSE
FEB 4 7:30 AM
CHECK OUT THE
GEOLOGY OF
OUR HOME

HI I AM A
HOBO SPIDER
LOOKING FOR
A NICE HOME



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

Membership fees: Family (\$27) or single (\$22) memberships can be mailed to the above address. Please include your address and phone number with your membership fee. For more information about the club please contact Fred McMechan at 392-7680. **Your membership dues for 2009 were due as of January 1st 2009. Most of you have been negligent in this matter. Please keep your membership current by completing the membership form that is attached to the last page and mail it or drop it off at the Nature Centre today.**

Executive of The Williams Lake Field Naturalists: president Fred McMechan, vice-president Jim Sims, secretary Kris Andrews, treasurer Katharine VanSpall and directors Nola Daintith, Ordell Steen, Anna Roberts, 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 (296-3636) or e-mail [muskrat\(at\)midbc.com](mailto:muskrat(at)midbc.com) (NOTE change the (at) to @)

Please note the change in email address for the Muskrat Express. Please send inquires that relate to the Muskrat or articles, email or snail mail address changes or corrections to the above address.

Winter Social and AGM

Join us for our annual Winter Social and AGM on **Friday March 27th** at The Nature Centre.

- Enjoy the delightful variety of delicious dishes at our Pot luck supper starting at 6:00pm
- Meal will be followed by a very brief AGM
- Following the meal Kris Andrews will present "**Wildflowers of Sichuan and Yunnan**": A 2007 journey by bus through the mountains of western China in search of wildflowers, with a glimpse of Tibet thrown in for good measure.

Please attend this entertaining and very important program (agm). Some of our grants require more participation in the AGM than we have been getting in the past few years. It will be a very significant loss for our Nature Centre programs if we lose these grants. Don't miss out on this fantastic meal, social time and awesome slides by Kris because of the short time we must give to our AGM.



“The Art of Nature: An Evening with Ken Ferris”.

Annual Fund Raising Banquet

Friday April 3rd at the United Church (Pre-meal social begins at 6:30pm)

Ticket \$30 are available from the executive or “The Open Book”

Throughout his life Ken has been surrounded by the sights and sounds of nature and this is reflected in his many accomplishments. In 1984 Ducks Unlimited named him “Artist of the Year” and has subsequently presented him with their Bronze, Silver, Gold and Emerald Teal Awards for his outstanding contribution.

In 1987, Ken was one of thirty world acclaimed artists included in “Waterfowl of North America” a limited edition book of full size prints commemorating the 50th anniversary of Ducks Unlimited Canada.



Cougars by: Ken Ferris

With his exquisite portrayal of a Hooded Merganser, Ken won the 1993 Wildlife Habitat Stamp Competition. A series of collector plates, “Treasured Ducks of Canada” were produced by the Bradford Exchange in 1994 and quickly sold out.



Winter Robin by Ken Ferris

In 1996, Ken was one of eighteen acclaimed wildlife artists invited to take part in “Animal Art in The Park” and was featured in “Wildlife Art in Stamps” at Algonquin Park, Ontario.

During Ken’s early years as an artist he lived in Williams Lake and was a frequent visitor to Scout Island and The Nature Centre. He used our extensive collection of bird specimens to provide details for the birds in his paintings. Since moving to Prince George he has become one of British Columbia’s better known wildlife artists. Ken will bring some of his original paintings, and sketches to show the process used to produce a final painting. He will also talk about how his art has progressed over the years. He will give greater insight into some of his paintings; why he chose to paint them, how he got the ideas for the subject, the composition, and the scene. Please plan on joining us again this year for another very entertaining evening.

Volunteer Needed

We are looking for a representative to sit on the “BC Agriculture Wildlife Advisory Committee”. If you are interested please, contact Fred for information about the committee and the meeting times.

Thank-you to Phil, Rob and Sue for the articles you have provided. Others don't forget we are looking for more articles or suggestions.

41st Annual Williams Lake Christmas Bird Count

Report from Phil Ranson

The 41st annual Williams Lake Christmas bird count held on December 14th was conducted a couple of days into the big chill and provided a challenge to the 34 bird counters in the field. Williams Lake was struggling to stay open and finally froze on count day, driving out at least 6 waterfowl species that had been seen the day before. But before the lake iced over entirely, some species remained in the few patches of frigid water including a Common Loon, 3 Horned Grebes, 2 Pied-billed Grebes and another 5 species of hardy diving ducks which combined to allow a record number of species on the day, advancing the previous count high from 58 to 63 species.

Although the addition of the duck species allowed for a record count, the big story of the day was the diversity of Owls and undoubtedly the highlight of the count was the sighting of 2 Boreal Owls which had never before been seen on the Williams Lake count and are only rarely recorded in winter. Both were seen roosting in aspen trees; one on Woodland Drive and the other on Richland Drive. 4 Short-eared Owls were seen in the Mission Rd, Sugarcane area; a Northern Hawk Owl was at the edge of the count area along Hwy 20 and 5 Pygmy Owls were spotted at various locations within the 24 km diameter circle. Additionally a Great Gray Owl and a Barred Owl were seen during count week.



Boreal Owl

Despite the high number of species, overall bird numbers were generally down from the last couple of years. Pinpointing a specific reason is difficult and a variety of factors probably come into play. Aside from the obviously cold conditions, there was an almost complete absence of forest finches, particularly Evening Grosbeaks, Pine Siskins, Redpolls and Crossbills. Some berry eating birds such as the Pine Grosbeak and the Bohemian Waxwing were well represented in the urban areas with the record high 1827 Waxwings contributing to 40% of the total count.

Raptor numbers, while never plentiful in winter, were also down with only one Rough-legged Hawk, and Red-tailed Hawk being missed for only the second time in the last 12 years. This is possibly due to the thick snow crust deposited by the freezing rain the week previously, making it difficult for them to intercept rodents under the snow. This might also explain the arrival of some of our higher altitude owls like the Boreal Owl which may be having difficulty foraging in their usual mountain forest habitat. Summary table can be found at

www3.telus.net:80/CaribooBirds

Thanks to all who participated and special thanks to Fred for hosting the after count party and to Phil for coordinating the count.

Scout Island Nature Centre News

We are taking complete advantage of the great snow at the Nature Centre with winter Snow Fun programs for grades 3-7. Recently, two French immersion classes walked down (yes walked down at -15 degrees) from Marie Sharpe for the day. They went skiing on the lake and snow shoeing along the marsh looking for tracks and other signs of animal life. They found signs of deer, mink, mice, and of course birds. Then they walked back to school. This group showed that winter is fun and legs are for walking. Snow Fun and Birds in Winter are the programs offered to elementary school. High school programs include Water Systems (compare the salt water and fresh water life at the Nature House) for grade 8, Food Pyramids in Winter for grade 10, Invertebrates in the Intertidal Tank for Grade 11 and Shrinking your Ecological Footprint for any age.



Katimavik participants and steady volunteer Pete Goetler continue to help us maintain the live tanks, feed the birds, and develop materials for the nature house. There are also volunteers helping with the winter school programs. Contact Sue if you want to get involved.

Marie Sharpe Students Enjoy SINC

There is a committee that has just begun planning for restoration work for the north side of the marsh. We would like to see this side of the marsh restored to native vegetation for wildlife. Eventually we hope to have a trail on this side that will help to provide a safe walking and bike route to the Nature Centre. We will need help with planting this spring and summer so stay tuned.

We will be hiring university students for summer staff again this year. If you know of a university student who would be interested please have them send in their resume. Students interested in biology and/or teaching usually enjoy the work the most.

The good news is that the federal government has approved Katimavik's funding for another program year until the fall of 2010. The bad news is that the funding is only for 1 year again. As you know, SINC has benefited extensively from the work done by Katimavik volunteers over the past 4 years. This is a wonderful program that benefits non profit groups as well as youth. I can't think of a better way to encourage youth to be engaged in their communities. For over 30 years now, Katimavik has reached out to hundreds of communities across Canada with full time volunteers willing and able to make a difference. In 2008 alone the participants contributed 667,730 hours of volunteer work valued at \$1,150,000.

Now that they have the affirmation of funding for the 2009-10 program year, Katimavik will be able to accept the many applications that were on hold. Until this announcement, Katimavik had been unable to begin recruitment for the next program year due to the imposed moratorium and the uncertainty surrounding the program's future. While the decision to renew next year's funding is welcomed, a multi-year funding plan is required in order to ensure stability and provide the means to implement both program and funding diversification strategies. We need to let our MP know that we want this program to be provided with secure long term funding so that participant recruitment and maintenance of high quality staff can be successful. Please write a letter or email to Dick Harris, #214 1811 Victoria St. Prince George BC V2L 2N1 or Harris.R@parl.gc.ca And yes, I did ask you to write letters 2 years ago when the government decided to cut the program. Our letters had an effect. They have been giving funding on a yearly basis since then.

Finally, an invitation—It is beautiful at the Nature Centre in the winter. You are all welcome to come and sit and watch the birds out the windows (at the three feeders). Jim has also set up a camera at one of the suet feeders. There are wonderful books to read in the library and a wide variety of nature magazines.

Conservation Update

The WLFN have been writing letters related to several conservation issues over the last several months:

- We wrote a letter to Paul Sprout, Director General, Pacific Region Fisheries and Oceans Canada (and copied to others) stating: *We are extremely concerned about the reduction in Fisheries and Oceans Habitat staff for our region. We need these Habitat staff on the ground in Williams Lake to help us and other stewardship groups maintain healthy habitat for the salmon in the watersheds of the Cariboo Chilcotin. We have had an answer that basically states that no change will be made in their policy and Fisheries staff will serve this region from PG and Kamloops.*
- Comments were completed on the “Draft Environmental Impacts Statement Guidelines for Prosperity Gold-Copper Mine Project and sent to the BC Environmental Impact Assessment Offices and the Canadian Environmental Assessment Office. A review panel has now been chosen by the Federal Environment Minister. We will take part in the public review of this next step that the panel will carry out. For more information on this process go to www.ceaa-acee.gc.ca
- There have been meetings and emails with Tolko Industries in relation to planned logging on Eureka Peak. This logging will impact the trail into the alpine, increase motorized access to the alpine and the wildlife that use the area. We have asked them to reconsider these blocks. Tolko has changed the block pattern so as to reduce the impact on the trail but the logging will take place. It has also offered to work with WLFN to apply for funding to rebuild the trail and to try and get this trail labeled a Ministry approved trail.
- Real action was taken this fall by WLFN and Ducks Unlimited in the lower Williams Lake River Valley. Ordell Steen and Katharine Vanspall with help from volunteers and funding from WLFN, Rotary Daybreak, Rotary Noon and Ducks Unlimited fenced the pond/marsh that are below the last parking lot. Cattle can still access a prescribed area

for water, but the rest is protected so that riparian vegetation can reestablish. A people entrance is part of the project so that school classes can continue to use this area as an outdoor classroom.

Sue Hemphill (Scout Island Nature Centre Teacher Naturalist)

Cariboo Chilcotin Sustainability Coordinator

Through the process of developing the Conservation Strategy the need for a Sustainability Coordinator was identified. My name is Carla Glessing and I was hired as the Sustainability Coordinator by the CCCS. My background is as a forester and I have worked for the U.S. Forest Service, the B.C. Ministry of Forest and as a consultant through my own company in the areas of inventory and land use planning. Throughout my career I have worked with a myriad of groups, ministries and community members. I am familiar with the workings of non-profit societies as I was a volunteer with Big Brothers/Big Sisters of Quesnel for over 10 years. It was my interest in sustainability and ecosystems that motivated me to pursue a career in forest management; and it is that interest that continues to motivate the choices I make each day as I try to reduce my carbon footprint and work with others in making the communities in our region more sustainable.

My position involves communicating with, reaching out to and learning from City and CRD staff, civic and CRD governments, non-government organizations, business leaders and community members across the Region to share information and build partnerships with the goal of making our communities more sustainable and resilient. There are community sustainability committees meeting in the South, Central and North Cariboo and I provide support to and share information between the committees. I am also working with committees to plan a Regional Sustainability Conference and a Local Community Sustainability Event in Williams Lake. Community Events are also planned for 100 Mile House and Quesnel.

If you would like to learn more about these initiatives please feel free to contact me at 398.6323 or 267.3143 (cell). My e-mail address is sustain@ccconserv.org.

Birds with a Red Dress On

Researched by Sue Hemphill (information gathered from Canadian Wildlife Nov. 2008 and article by Julie Feinstein on the web site Birders World Magazine)

Chemistry and structure combine to produce a rainbow of colors in birds' amazing feathers. Feather colors grab our attention like few other qualities of birds. For most birds, colors are useful in teasing out their identification.

From peacock blue through swan white to oriole orange, every bird color is produced by the interaction of just two coloring systems - one structural and one chemical. Structural color results from the scattering of reflected light, while chemical color relies on a palette of pigments. Intricately arranged feather layers allow chemistry and structure to interact to produce the colors we see.

Unique to birds, feathers grow in a symmetrically branching pattern, resembling the leaves of ferns. In each feather, small branches called *barbs* grow out of a central shaft, and smaller branches called *barbules* grow out of each barb. If you were to look at the cross-section of a barb under a microscope, you'd see a central core surrounded by a layer of color-producing

structures and an outer region called the cortex.

Pigments in either the core or the cortex are responsible for some feather colors, but colors also occur in feathers in which the cortex is pigment-free. In these feathers, the layer between core and cortex - called either the *cloudy zone* or the *spongy layer* due to the appearance of a dissected feather to the naked eye - produces colors through convoluted air cavities that act as tiny light-scattering prisms. Not all feathers have a cloudy zone.

Pigments produce many of the colors in nature. Like paint and dye, pigments are chemicals that absorb some wavelengths of light and reflect others. The absorbed color disappears, and the reflected color is what we see. Pigments in the feathers of a cardinal, for example, reflect red light, and absorb all non-red wavelengths. Four types of pigments are found in feathers. The most common ones are melanins and carotenoids.

Carotenoids produce red, yellow, or orange feathers. Animals gain carotenoids exclusively from the plants in their diet, including flowers, roots, seeds, and fruits. Carotenoid pigments are generally fat-soluble substances like the vitamin A in carrots from which the carotenoids take their name.

The dogwood tree grows bright red autumn berries - a favorite food of the Northern Cardinal and a source of red carotenoids. When the cardinal metabolizes dogwood berries, the carotenoid pigments are sequestered in the liver and then transported to the bloodstream for eventual deposit in growing feather follicles where they crystallize. Carotenoids are deposited only in the cortex, never in the feather core. Cardinals acquire orange, red, and yellow pigments from many seed sources, continuously keeping red plumes vibrant. A caged cardinal fed carotenoid-free seeds would lose its brilliance with successive molts.



Cardinal

Yellow goldfinches, likewise, get their bright color exclusively from the seeds they eat. The inner core of a yellow feather is devoid of pigment, so only the light yellow color of the carotenoid is visible. In many ways, mixing shades of carotenoids is like mixing paints. A Cedar Waxwing's yellow tail-band can turn orange through consumption of red fruit. Similarly, orioles can become redder and tanagers can become very orange. Our male house finches show a range of "redness."

The pigments are processed in the liver, but the bird's appearance doesn't change until new feathers grow. For many songbirds, deeper colors in the food source make stronger colors in the feather. Behavioral scientists suggest that the brightness of carotenoid colored plumage indicates a male bird's physical condition and influences mate selection.

There is some indication that the males with the reddest feathers are better able to get through the winter and have fewer feather mites, lesions and infections (*I could not find an explanation*

as to why this would be true. Can anyone out there find more information or suggest a reason). Another whole topic of investigation is how bird evolution may change because of introduced plants with different coloured berries. Go to www.americanbirding.org for a discussion of what is happening to the Baltimore Orioles eating introduced honey suckle species in the Toronto area.

This is only a discussion of the red colourings and not all colours relate to pigments. Colour related to feather structure are for another article. Anyone game on writing it?

The hobo spider, *Tegenaria agrestis*, in Williams Lake

Researched by Rob Higgins

The hobo spider, *Tegenaria agrestis*, has spread through southern British Columbia over the past several years. It has generally become common in the warmer southern portions of the province where it is closely associated with human dwellings. Some specimens have been collected in Prince George, in fact, residing in the home in which I usually stay when in Prince George, but it has not been documented in Williams Lake until now.

Two specimens have been collected from my home on Moon Avenue. The first was a male, seen dashing across the living room floor late on an August evening (Figure 1). The colouration is similar to that of many of our wolf spiders but larger (approximately 4cm leg span) and, at least in this case, seemed to be moving much more quickly. The second specimen, a female, was also collected on our living room floor but this time in mid-November.

The hobo spider is a funnel web spider which means that it constructs flat sheets of webbing that lead into an enclosed tunnel in which the spider resides. The females do not generally wander but the males are motile during the fall reproductive season when they are searching for a mate. Neither the female nor male are aggressive although the species name may lead one to assume otherwise. In fact, the Latin translation of *agrestis* simply means "in the country." Granted, that is a bit odd for a spider commonly found in homes.

The hobo spider has gained an ill deserved reputation as venomous, causing necrotic lesions around bites. There is no foundation to this widely held belief. This is a species initially introduced from Europe where there is no suggestion that this spider is dangerous. Further, there are no scientific records that link this spider to bite-associated lesions here, although some physicians have glibly attributed lesions of unknown origin to this spider. It is likely that many such lesions did not arise from a spider bite at all.

The identification of this spider requires a microscope and some knowledge of spider reproductive anatomy. In southern BC it appears very similar to another funnel web spider, the giant house spider, *Tegenaria duellica*. To date though, the giant house spider has not appeared in Williams Lake. I cannot say just how common the hobo spider may now be in Williams Lake. I assume, however, that it is very unlikely that the only specimens happened to move into one of the few homes in which the resident was able to identify it.

If anyone is interested in seeing these spiders a trip south will be necessary. Both of the hobo spider specimens are now residing at the Royal Museum in Victoria, resting in their own smartly



Male *Tegenaria agrestis* collected in Williams Lake in August. Photo: Rob Higgins

labelled vials.

Acknowledgments: My thanks to Robb Bennett for confirmation of the species identifications and whose publications have provided most of the information for this article.

Gray-crowned Rosy-Finch

Researched by Jim Sims - Source "The Birds of British Columbia" and <http://www.birdweb.org>

Three Gray-crowned Rosy-Finches have been visiting Felker Lake bird feeders. Audrey did get a couple of pictures of them but unfortunately there is not enough detail so we will have to settle for a photo from the web. Many of you are asking what is this bird? This finch is a medium sized songbird with long wings and tail. The heads are almost entirely gray with black forecrowns, and bodies are dark brown with a rose-colored wash, especially on the wings.



Photo from <http://www.schmoker.org/BirdPics>

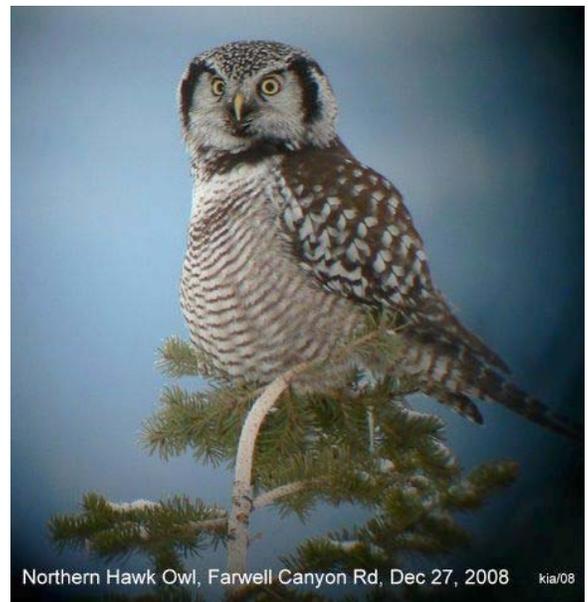
If you look at your check list you will find they are common in the Cariboo Chilcotin during the winter and are fairly common during the breeding season. So why don't we see them? Well it all has to do with their preferred habitats that are areas we do not visit very often. At this time of the year they can be found in very large flocks feeding in the lower grasslands where they will search out seeds. Perhaps the greater snow depth this winter has forced them to visit feeders which is a rare event. We do get reports of migrating Finches in the Fall and Winter as they pass through the grasslands along the Fraser and Chilcotin Rivers. During the breeding season they can be found at high elevation. In fact they may have the highest breeding elevation for any songbird. One of the few times I saw a flock was while climbing Perkins Peak near Kleena Kleene. This is an example of their typical summer habitat, open rocky slopes with possible nest sites close by. There are very few nesting records for this finch as they prefer to nest above the tree line in rock crevices, along cliff ledges, and under overhanging rocks. Typically, the nest is totally hidden from view. They will also often feed in a flock some distance from the nesting site.

Bird Sightings from the Williams Lake Area (January and December)

Owls quite often catch the headlines when it comes to Winter birding and these past two months have been notable for the number and variety of owls reported. Other birds are making the news by their absence. This time last year, the big story was the influx of forest finches particularly White-winged Crossbills which were believed to be responding to a good spruce cone crop. Based on the complete absence of Crossbills this winter and the scarcity of other forest finches such as Redpolls, Pine Siskins and Evening Grosbeaks, we may have to assume that the cone crop failed along with the seeds on Birch and Alder. This of course will not tell the whole story. Many forest finches are considered to be 'eruptive' species and populations fluctuate wildly in any given area possibly due to breeding success, weather patterns and a general tendency for wide range wandering aside from any consideration of local food availability.

The two Boreal Owls found on the Bird Count were not only the highlight of the count but possibly the winter. These Owls although seldom seen are probably a lot less scarce than sightings would indicate but they are strongly nocturnal and tend to stay well hidden during the day except when forced out by hunger. Most of the local records are either from feathered remains – 2 specimens have been discovered in the Williams Lake River Valley in winter in the past 10 years, probably the victims of larger Owls, or birds calling on breeding territories. There is a poor understanding of the range of these small owls but any heavily wooded area, particularly to the east and into the hills around Horsefly and Quesnel Lakes are likely areas. Of note was another recent Boreal Owl photographed after hitting a window in daylight at a ranch on the Soda Creek, McAlister Rd. It recovered and flew off.

Northern Hawk Owls are also staging their best season since the winter of 2000/2001. At least 10 individuals have been reported and their fidelity to a winter micro habitat, daytime hunting and preference for the tips of tall trees makes them quite easy to locate. Great Gray Owls, Great Horned Owls, Barred Owls, Short-eared Owls, Saw-whet Owls and Pygmy Owls are also being regularly seen. One winter visitor that has failed to make an appearance so far is the Snowy Owl, which with the Long-eared Owl would round out the complete list of Owl possibilities in winter.



Northern Hawk Owl, Farwell Canyon Rd, Dec 27, 2008 kia/08



White-throated Sparrow

Passerines are few and far between towards the end of winter but Bohemian Waxwings which appeared in good numbers just before the count and usually move on as food stocks dwindle seem to be finding enough sustenance to stick around in good numbers for January. Juniper berries seem to be their staple having exhausted most of the fruit on the Mountain Ash. A White-throated Sparrow was a regular visitor to the Scout Island feeder through December while a close relative, the Golden-crowned Sparrow which seldom spends the winter, has found a home in the hedgerows at the Dunlevy Ranch at Soda Creek. As much as we appear to be mired in the depths of winter, some Bald Eagles are already checking out their nesting sites and before February is over, Trumpeter Swans will be landing in the open waters at the Williams Lake outlet.

Phil Ranson

WILLIAMS LAKE FIELD NATURALISTS MEMBERSHIP

Name(s): _____

Address: _____

Phone: _____ email _____

Cost: Family membership \$27 _____ Single membership \$22 _____

Membership cheque made out to Williams Lake Field Naturalists.

I have included a donation of _____ to the Scout Island Nature Centre Fund Raising Campaign
(Please provide a separate cheque made out to Scout Island Nature Centre. A charitable receipt
will be given.)

Please mail completed form and cheque to:

Williams Lake Field Naturalists - 1305A Borland Road - Williams Lake, BC - V2G 5K5