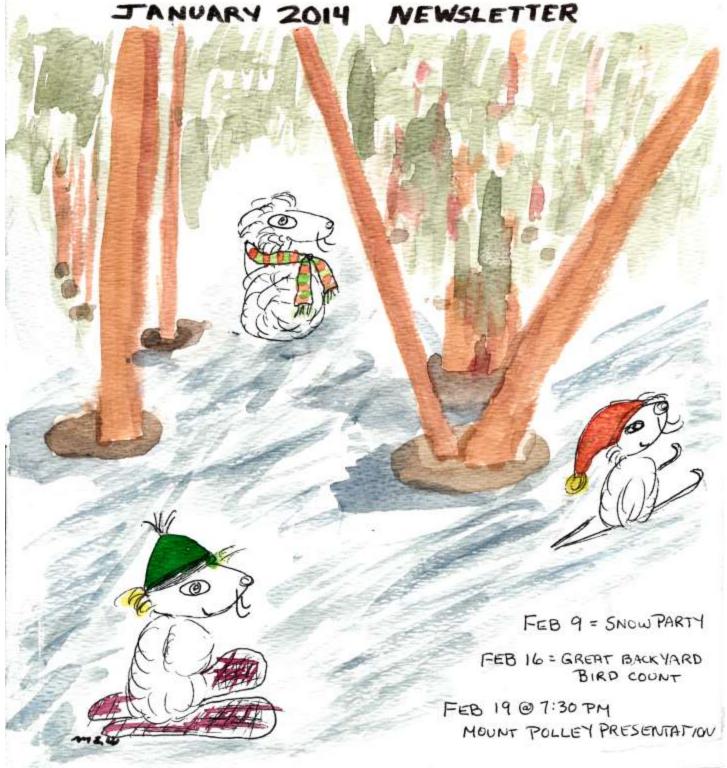
MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS



The MUSKRAT EXPRESS



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@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 **Many of you have already renewed your membership** for 2014 punctuality is appreciated. The few of you who are delinquent will you please join us today.

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, Cathy Koot, Peter Opie and Ray Hornby



Editors: Thanks to all of you who have contributed to this edition of the newsletter. Please expect your next edition of the newsletter in the last week of February when we will feature details on the annual fund raising banquet as well as the Annual General Meeting. 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@midbc.com.

Great Backyard Bird count

Sunday February 16th from 9:30-11:00 Everyone is welcome to attend (Children must be accompanied by an adult).

- introduce what the Great Backyard Bird Count is and how we've contributed in the past.
 - review birds we might see (specimens from freezer)
 - go for a walk and look at feeders and birds around Scout Island.
 - come back and do pinecone feeders craft.

Questions please call Julianne 392 5375 or <u>j_trelenberg@hotmail.com</u>

Environmental Monitoring and Reclamation at Mount Polley Mine

Wednesday February 19^{th} at 7:30pm at Scout Island Nature Centre

An evening program presented by Colleen Hughes, EP environmental Coordinator Mt. Polley Mining Corp.

Environmental Technicians at Mount Polley are responsible for environmental monitoring and so much more. This presentation will include a review of current monitoring methods for surface and groundwater, vegetation, soils, air, climate, and wildlife. It also provides information on employee education for spill response, wildlife awareness, and sensitive habitat identification. Finally the presentation also includes information on the reclamation research and planning that is ongoing at the mine





Annual Fund Raising Banquet

Friday April 11th

Once again Scout Islands Annual Fund Raising Banquet will be held at The United Church Hall and YES Joanne will be providing the desserts. The evening program will feature a presentation by Jackie Hildering, a dynamic, diversely qualified and highly acclaimed marine educator living on Northern Vancouver Island, British Columbia. As "The Marine Detective", Jackie bundles her skills as a biology teacher, cold-water diver, underwater photographer, communications expert and whale researcher to reveal the astounding and diverse life of the cold, dark waters of the eastern North Pacific. More details will be provided in the February Newsletter but please mark this date on your calendar today.

Yard and Plant Sale

Margaret will be organizing our May Plant and Yard Sale again this year. Some of us are starting to make plans for our bedding plants for this spring. Please start a few extra plants for the sale as these are a big draw for the sale as well as a great money maker. Remember the major part of this sale provides a bursary for a high school graduate.

Report on the 46th annual Williams Lake Christmas Bird

By: Phil Ranson

Williams Lake Field Naturalists held their 46th annual Christmas Bird Count on December 15th in generally mild conditions, but the big freeze earlier in the month had taken its toll on bird numbers. The 37 counters in the field in 16 parties along with 17 feeder watchers tallied 3954 birds of 47 species, about 200 birds and 6 species less than the 10 year average.

With the lake frozen, only a handful of waterfowl remained on the few patches of open river water or the City sewage lagoons. While the loss of several duck species contributed to the generally low numbers, several of our winter finches were also absent this year including Pine Siskins, missed for the first time in 10 years; Common Redpolls and Pine

Grosbeaks have only been missed once before in the last 10 years and Evening Grosbeaks numbers continue to dwindle with only one bird in 2012 and none this year.

Some species however had a bumper year and none more so than the Townsend 's solitaire, a member of the thrush family which relies almost exclusively on juniper berries at this time of year. Our previous high of 50 birds was eclipsed with 86, the highest number ever recorded on any bird count anywhere in Canada. Other birds appearing in record high numbers included Dark-eyed Junco with 515 and Song Sparrow with 52. Both Northern Flicker and American Robin improved their previous best by one with Flickers up to 50 and Robins to 31. Also edging previous high count numbers were the Varied Thrush (3) and Spotted Towhee (4). The Northern Pygmy Owl came close its previous record with 6 seen including this one photographed by Kris Andrews on White Road.

A bird making a welcome return was the Sharp-tailed Grouse. A single bird was seen at Esler playing fields for the first count sighting since 1973. Another bird on the increase is the Eurasian Collared Dove, an introduced species from Eurasia which has spread across N. America having first arrived in Florida in 1982. It was not spotted in the Cariboo until 2008 and this winter there are at least 20 believed to be wintering in the region with 6 recorded within the 24 kilometre count circle. Another 2 wintering at a South Lakeside feeder were not seen on count day.



Northern Pygmy Owl Photo by Kris Andrews

Results of the count along with over 400 others across the country are submitted to Bird Studies Canada and the National Audubon Society where the figures are further refined by applying the number of party hours and the distances travelled. This provides more meaningful data for analysis by scientist involved in determining trends in winter bird populations. Complete results for the count can be found at the end of the newsletter.

Report: Green Holiday's Event 2013

By: Sue Hemphill

Green Holidays were Celebrated by many on Nov. 29 and 30 at the Art Centre. People of all ages squeezed in to create decorations, cards, wreathes, ... We ran out of the suet feeders and had only a few chickadees left and the kids loved making bird ornaments using feathers from Sue's chickens. A big thank-you to Jim for all his work on the suet feeders and chickadees.

The Cariboo Chilcotin Conservation Society and Scout Island Nature Centre hatched this idea three years ago. These two groups work hard all year at mentoring the community in ways people can live lightly on the earth (have a small Ecological Footprint). To some people living lightly can sound like a lot of work and not much fun. We decided to show how much fun and joyful it can be to be Earth Friendly. We invited other people to



help us (and this year the whole Art Centre got involved). There is real joy in celebrating whatever traditions you have at this time of year, and that joy can include making sure that what you do is good for all life on earth. So the charge for this event is for each person to continue to find ways to celebrate your traditions in an Earth Friendly way. And a special wish that everyone spend time outdoors enjoying and cherishing nature.

Bluebird Route Help Needed

Beverley Butcher is looking for someone to help her with her Bluebird Route. For many years she has kept detailed records for the Swallows and Bluebirds that occupy her nests. Here is an opportunity to learn about caring for a Bluebird route. If interested you can contact Beverley at 392-7577 or email Bev (Ctrl+click on the link)

Greetings from Sunny and Hot Mexico City

Greetings to newsletter readers from Mexico City, and many thanks for the messages of support. I look forward to coming home to Scout Island and my co-workers, and re-joining the joyous swirl of activities around the best job ever.

From Jenny





Scout Island Nature Centre Report

By Sue Hemphill

Note Sue has a new email shemphill@netbistro.com

The winter conditions at Scout Island have been perfect for taking students out exploring. Several classes have already been exploring and playing on Hare Island (across from the main island). Paula

has been doing snow experiments showing the students that the temperature of snow actually goes down when you put salt on it. A favorite activity is exploring the pukak layer. Teachers are always surprised that their class can spend a whole day at the Nature Centre exploring winter (the students are not surprised).

A favorite with all ages is Willy, our painted turtle. He has started to eat again with gusto—just be careful of your fingers.

There will be some changes in the preschool. This is Margret's last year. Discovery Pre School is looking for new teachers for September 2014. If you know of anyone with their Early Childhood Education Certificate that wants to teach in a nature focused preschool, please have them contact Sue.

Now for your Winter Pleasure –not everything is sleeping under the snow.

Winter Breeding

Peter Marchand, a winter ecologist who has extensively studied snow cover at the Center for Northern Studies in Vermont and elsewhere, has wondered how organisms that are buried under the snow get their cue to start growing or breeding. How do they know, as they appear to, that the snow pack is about to melt off? Do they sense the sunlight?

To investigate this problem, Marchand and his students studied the light-transmitting properties of the snowpack, finding that as the snow became increasingly more compact, it extinguished more and more light. But only up to a point. To their surprise, they found that when they mimicked the melting and refreezing that occurs in spring when the snow density increased, the snowpack became almost ice-like in consistency. Then, despite or because of greater density, it transmitted more light. Marchand speculates that this snow-penetrating light is sensed by voles and stimulates them to start reproducing, thereby giving them their legendary productive potential. Alternatively, the plants detect the light first, and by growing produce chemicals that give the animals that eat them an indirect cue that then stimulates their reproductive activity. Beavers also breed in winter. Then the males are sent out for a month in the spring at birthing time.

Snow Party at Moose House (Sue and Jurgen's)

Sunday Feb. 9 - 1 to 4pm Ski, Sled, Snowshoe

4pm Potluck for more information call 398 8532, 620 3498 or shemphill@netbistro.com

We can't guarantee perfect conditions, but we have lots of snow. There is 10 km of ski trail (groomed by our skis) and 3km of snow shoe trail and do we have a sledding hill. So bring the kids too.

Northern Pygmy Owl (Glaucidium californicum)

Researched by Jim Sims

I hope you have noticed that the Northern Pygmy Owl was one of the feature birds in this year's Christmas Bird Count. Each year when Fred and I walk down the creek valley I always have a good look at the top of the fir tree where Fred and I saw one several years ago. It turned its back to us and we saw a second set of large black eyes, actually black feather patches adapted to look like eyes. It is assumed that these false eyes help stop predation by other larger owls and mobbing by songbirds. It did not fool us and we used this observation to confirm the sighting.

The Checklist of Cariboo Chilcotin Birds designates this owl as a fairly common (7 to 20 individuals per day per locality) year round resident that nests within the region.



Photo by Phil

The Northern Pygmy Owl is appropriately named for its small size, 16 to 18 centimetres (6in.). It is one of the smallest owls in North America. As well as its size feather patterns halp



The Eyes on the back of the head Photo by Kris Andrews

its size feather patterns help distinguish this species. The head and back are grayish brown with fine white spots. The bill and eyes are yellow. Look for a relatively long striped tail. The underparts are whitish streaked with prominent dark brown streaks.

The Pygmy Owl has some interesting variations from most other Owl species. It lacks the silent flight feathers so it is a noisy flier. It does not have well developed facial disks as noted in Phil's photo. It does not have asymmetrical ear structure like most owls so it does most of its hunting by site.

The Pygmy Owl is a woodland species frequenting open forests edges. It is a diurnal (dawn to dusk) hunter. It can often be found perched on the top of a tall tree where it will use a "perch and pounce" method of hunting. Once prey is observed it will glide and dive to make the kill. It is a ferocious hunter often taking prey their own size or larger. They feed mainly on small mammals and small birds. When roosting it will hide in dense brush to escape potential mobbing

by songbirds and threats from other predators. They depend on woodpecker holes for their nest sites. The female will lay a complete clutch before she starts incubating so all of the young will be of similar age unlike all other owl species. The female does all of the incubating and brooding while the male brings her food. They will frequently use the same nest cavity for several years.

Sources: Checklist of Cariboo Chilcotin Birds, The Birds of British Columbia Vol.3 http://www.owlpages.com/owls.php?genus=Glaucidium&species=californicum

Our View of the Night Sky – January / February 2014.

Planet Review

Jupiter is visible in the evening sky in the constellation Gemini. Venus is moving from the evening to a morning object and will be at its brightest around Feb. 15^{th} – mag -4.9, low in the south-east. You can look for a waning crescent moon near Venus on Jan. 28^{th} & Feb. 26^{th} . Mercury is now visible in the evening at twilight low in the west. Saturn is visible in the pre-dawn sky low in the south in the constellation Libra. Mars is visible after midnight and shines higher in the south in the pre-dawn hours.

Zodiacal Light

Starting around Feb. 15th for about two weeks, in the evening about an hour and a half after sunset, from a dark sky with no light pollution, looking to the west you might be able to see the zodiacal light. **Zodiacal light** is a faint, roughly triangular, diffuse white glow seen in the night sky that appears to extend up from the vicinity of the Sun along the ecliptic or zodiac. It is best seen just after sunset and before sunrise in spring and autumn when the zodiac is at a steep angle to the horizon. Caused by sunlight scattered by space dust in the zodiacal cloud, it is so faint that either moonlight or light pollution renders it invisible.

Asteroid 2 Pallas.

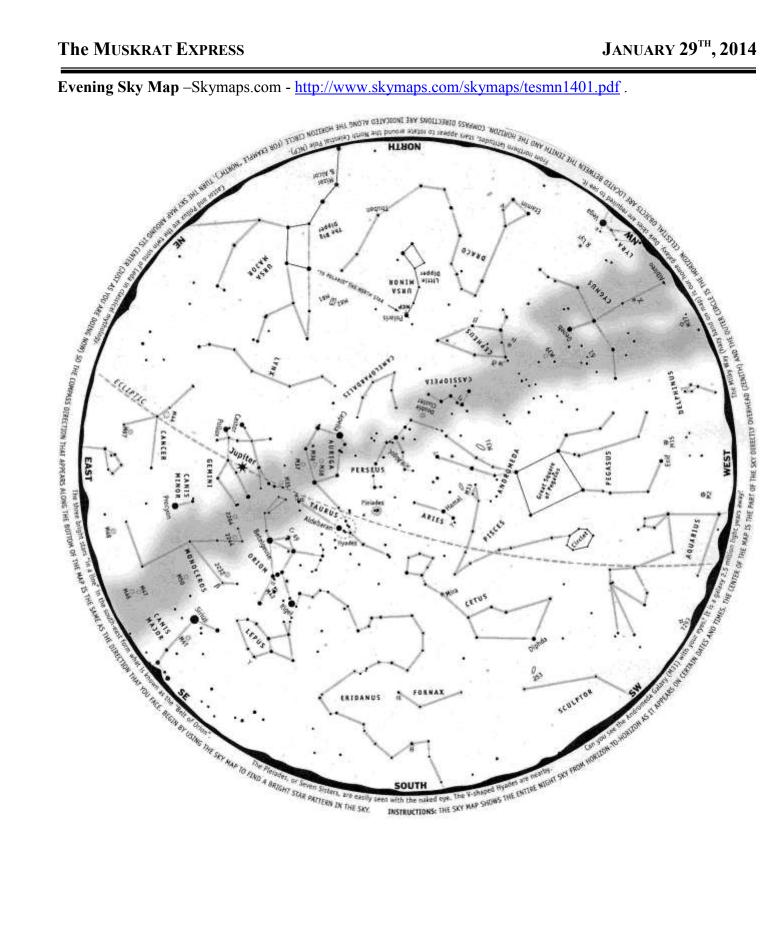
In late February through March, the asteroid 2 Pallas may become visible small telescopes at mag 6.3. On Feb. 26th it will be at its closest to earth and will passing within 1.233 <u>Astronomical Units</u>. (Note: The astronomical unit is used almost universally for measuring distances between bodies within our Solar System, and when discussing the sizes of planetary systems around other stars. For example, Jupiter orbits the Sun at an average distance of 5.2 AU.) Nonetheless, even at its brightest, Pallas is a faint object beyond the reach of the naked eye or binoculars; a telescope of moderate aperture and a good star chart are needed. It will look like a small star. Look for it moving north near the bottom of the constellation Leo, south west of Regulus. Pallas is one of the largest asteroids and the second asteroid discovered, by H. Olbers in 1802. Its diameter is some 530 - 565 km, comparable to or slightly larger than that of 4 Vesta, but it is 20% less massive, placing it third among the asteroids. Pallas appears to be the largest irregularly shaped body in the Solar System (that is, the largest body not rounded under its own gravity), and a remnant protoplanet.

The Palladian surface appears to be a silicate material; the surface spectrum and estimated density resemble carbonaceous chondrite meteorites. The Palladian orbit, at 34.8°, is unusually highly inclined to the plane of the main asteroid belt, and the orbital eccentricity is nearly as large as that of Ploto, making Pallas relatively inaccessible to spacecraft. The chemical element palladium, was named after the asteroid, which had been discovered just before the element.

Check this web site for an up to date finder map. http://heavens-above.com/MinorPlanet.aspx?desig=2&

Comet ISON

Comet ISON is done – it did not make it through its close pass with the Sun. It is now just cosmic dust......



Christmas Bird Count Results December 15th, 2013

Diada samuel Chiefe de	225	
Black-capped Chickadee.	337	
Mountain Chickadee.	198	
Red-breasted Nuthatch.	61	
Brown Creeper.	1	
American Dipper.	16	
Golden-crowned Kinglet	6	
Townsend's Solitaire.	86	СН
American Robin	31	СН
Varied Thrush	3	СН
European Starling.	105	
Bohemian Waxwing.	642	
Spotted Towhee	4	СН
Am Tree Sparrow	2	
Fox Sparrow	1	
Song Sparrow.	52	
Dark-eyed Junco.	515	СН
Red-winged Blackbird.	6	
Brewer's Blackbird	11	
House Finch	170	
Red Crossbill	202	
American Goldfinch.	26	
House Sparrow.	297	

TOTAL 47 species 3953

CH = Count High

CW = Seen during Count Week