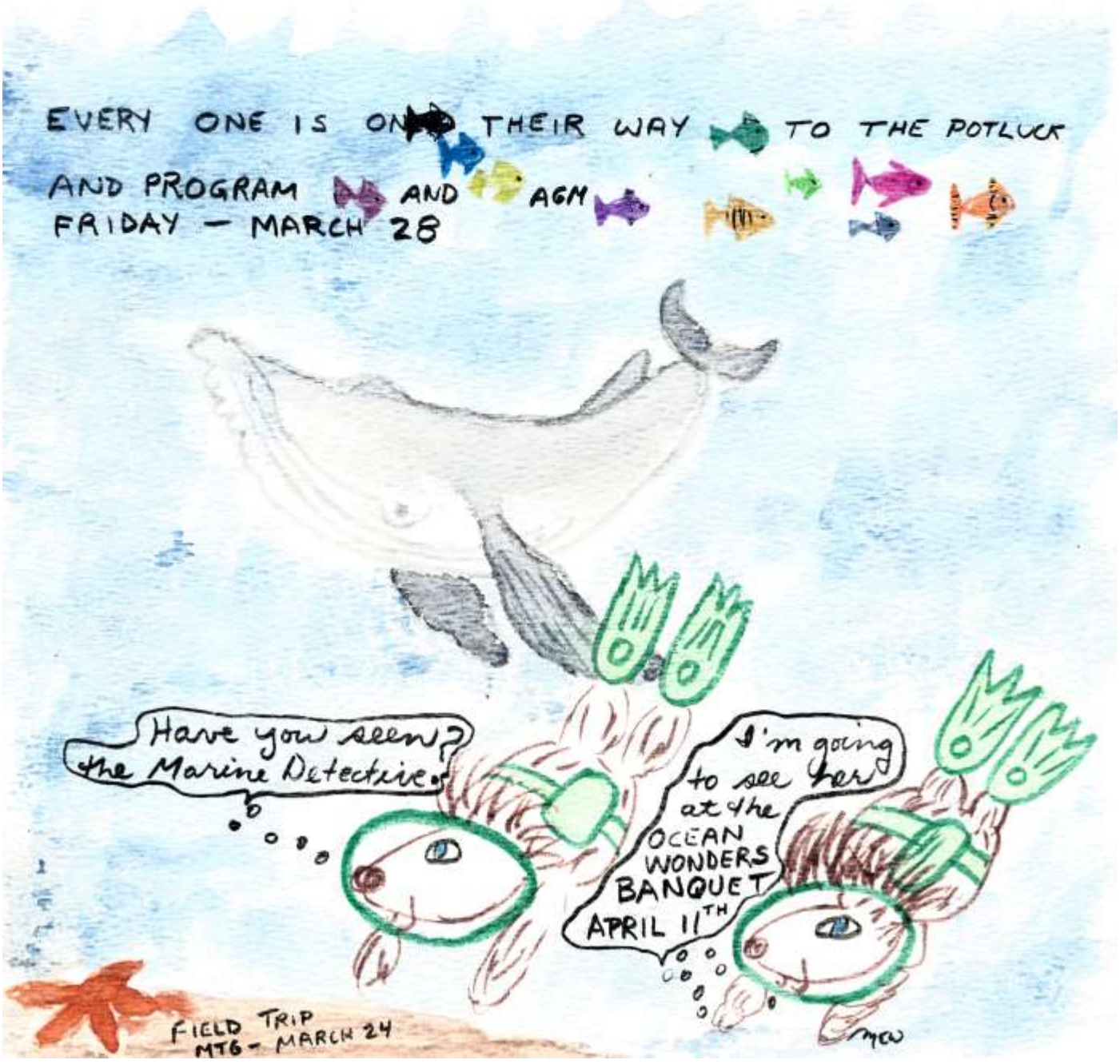
MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS

FEBRUARY + MARCH 2014 NEWSLETTER



The MUSKRAT EXPRESS **FEBRUARY 28TH, 2014**

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

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 mid to late April**.** 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 unfortunately our email address will have to be changed and a new address is not available at this time. Once a new address is established members will be informed via email.

Field Trip Planning Meeting for 2014

Tuesday March 25th at 5:00pm at Scout Island Nature Centre
Once again it is time for us to plan our list of field trips for the year. New leaders and new ideas are always welcome so let's see a good turnout for the meeting and lots of great trips planned for 2014. If you have a good idea for a trip, please share it with us even if you don't want to lead the trip. There is a good chance that we can find a leader for your trip. There is interest in having more Hump-day (Wednesday evening) outings this year. If you have an idea or want to lead one please let us know or attend the meeting. If you cannot attend please contact Jim Sims or Fred McMechan (see above for contact information). Hope to see all of you join us for a club outing again this year.

Annual Spring Social, Program and Annual General Meeting

Friday March 28th at Scout Island Nature Centre 6:00pm
The evening begins with our traditional pot-luck-feast at 6:00pm. The meal alone is a great reason to give up the evening to help us out at the very brief and important AGM meeting. We do need a good representative attendance from our membership in order for us to maintain some of our grants so please make an effort to attend this important and entertaining evening. We are searching for a new vice-president as Jim Sims will be stepping down. We are also always looking for new directors. You might not be aware that over half the time spent at executive meeting is spent on Scout Island issues and most of these are related to teaching. It would be a great asset to the executive to have an active teacher join the group. If you are willing to let your name stand for an executive position please contact Fred. Following the business meeting Ray Coupe will be talking and sharing pictures from his interesting trip to Arizona last spring.

Spring Yard and Garden Sale For 2014

By: Margaret Waring

YOU ARE NEEDED. I want to encourage you to start thinking about and preparing for our annual sale. Your help is essential! For many years we have had a spring yard and garden sale and it is now a traditional event. The purpose is to earn funds to provide a bursary for a student graduating from secondary school and aiming for a career in biology or a related environmental science. Any extra money earned is used for education programs at Scout Island. The second Saturday in May is the traditional sale day so plan on this (date will be confirmed in the April newsletter. Spring may feel far away but like the sale, it is just around the corner so when you are doing your spring cleaning please find some treasures to set aside for the yard sale. Instead of storing that great junk for another year let someone else use it and make some money for our bursary at the same time. Bedding plants, seedlings, garden plants and items are very popular. When starting some seeds for plants for your garden please start some for the sale too. Any ideas or questions? Please contact me at mewaring@hotmail.com or call 250 398 7724.

Winter Overnight Ski/Snowshoe Field Trip to Mtn. Murray Cabin

Katie McMahen and Francis McCoubrey are planning a weekend field trip to the Mtn. Murray Ski cabin on the weekend of April 5th. The Murray Cabin is a back-country cabin located in the Cariboo Mountains East of Barkerville. We won't be doing a lot of touring, it's more of an introduction to winter adventures for people who would like to get out, but are nervous about doing it on their own. The trail to the cabin gains over 500 metres in elevation over a distance of about 5 kilometres. More details will be sent out by email soon. In the mean time you can contact Katie at or Francis at

Annual Fund Raising Banquet

Friday April 11th United Church Hall Tickets are available from Scout Island Nature Centre, Club Directors or The Open Book. Get your tickets early! Don't miss this entertaining evening with all your Scout Island Human Friends and of course there is always Joanne's awesome desserts. Featured program will be:

Ocean Wonders by "The Marine Detective

Jackie Hildering is "The Marine Detective" - a biology teacher, cold-water diver, underwater photographer, and whale researcher living on NE Vancouver Island. She will present on some of the highlights of what she has learned about the astounding and diverse life of the cold, dark waters of the Northeast Pacific Ocean. From humpback whale feeding strategies to stunningly colourful nudibranchs, she will share her passion and photography, emphasizing how little is known about our life-sustaining oceans and how easily they are impacted by our daily actions – even when we live 100s of kilometers from the ocean.

Recognition includes being the 2010 winner of the Vancouver Aquarium's Murray A. Newman Award for Excellence in Aquatic Conservation and recent on-camera experience includes being featured on Animal Planet's "Wild Obsession" series in "Whales: Giants of the Deep."

For more on "The Marine Detective" see the links below.

www.themarinedetective.ca https://www.facebook.com/the.marine.detective

Notes from the Executive

By: Fred McMechan, president

1) This year our club will be working with the City to construct an elevated board walk along the Cattail Trail in the Williams Lake Valley. Engineering plans have been developed by Celtic Engineering. We have applied for funds to complement the funds which have been set aside by the City. We will be assisting in the construction with providing volunteers to do some aspects of the construction. The project involves the placement of gabion cages with filled rock, as the base, and then the construction of a board walkway above the cages. As a part of the project a dipping dock will be installed in the pond adjacent to the walkway. The dock will be used by school classes to do pond studies.

2) We are continuing with application to renew the License of Occupation on crown lands at the Nature Centre through the BC Lands Office . This agreement will allow us to legally maintain the present structures and develop new ones within the defined boundaries. Present structures include the elevated board walkways, the viewing platforms and the pedestrian bridges.
3) Our club has taken over the administration of the Williams Lake Air Quality contract with the Ministry of Environment (MOE). A local air quality committee and a coordinator are involved in providing input to the MOE .
4) Fred McMechan will be the designated representative to the BC Nature AGM in Victoria, May 1 – 4.
5) Our executive is concerned about the upcoming revisions of the science curriculum for BC schools in which it appears that there will be a de-emphasis on environmental topics. We have decided to send a letter to the Ministry of Education expressing our concern about this aspect of the proposed curriculum revision.
6) The energy upgrade project is continuing to be pursued. Last year we were able to remove the old oil furnace, and replace it with an air exchange heat pump and an electric furnace. In March the present insulation in the ceiling of the Nature House will be removed and replaced by spray foam insulation. This type of insulation will provide a higher insulation rating, will be cleaner and hopefully will deter the use by animals such as mice and squirrels.
7) The application by the City and us to renew the Land Reserve at the west end of Williams Lake is now being processed by the BC Lands Office. This Reserve will provide protection toward the environment and potential unsuitable development. This process will take place this spring and hopefully will be finalized in the next few months. The present Reserve had a 30 year term and we expect that the new one will also be in effect for the next 30 years,
8) In May Margret Onneken will be retiring as the pre-school teacher in 'Discovery Preschool' at the Nature Centre. We have been advertising for a replacement and since January interviews have taken place. Unfortunately there are very few licensed pre-school teachers available in the community.
9) We invite you to attend our AGM on March 28. Please also consider attending the Scout Island Nature Centre Banquet on April 11. Details about these two events are given in this newsletter.

Be Wild this Spring Break at Scout Island Nature Centre

Nature Exploring and Art in Nature for Ages 6-13 March 19-21

Don't sit at home bored ---Join us for the Spring Break Program that will have you outside exploring, playing games and having adventures every day. Each day will be different, so you will want to be part of the fun all three days.

- Spring birds
- Animal tracks
- Signs of spring
- Carnivores, herbivores, and omnivores using skulls and more
- Using microscopes
- You feed the Nature House animals
- Finding Art in nature

The cost is $25 a day

Call 398 8532 or shemphill@netbistro.com to register

Great Back Yard Bird Count 2014

By Julianne Trelenberg

The Williams Lake Young Naturalists participated in the Great Back Yard Bird Count on February 16, 2014 for the 3rd consecutive year. The weather was beautiful and on a short walk 7 species and 71 individual birds were sighted. Part way through the walk we took a break to play a game (coyote and grouse). This encourages children to interact with nature in a fun way, and makes them think about successful survival techniques of different animals. We concluded our count back at the nature house where we made cone feeders to take home. The next event will be Saturday March 22nd from 1:00-3:00pm at the nature centre where we will be celebrating World Forestry Day. The day will consist of nature house discussion about how both animals and people use the forest. We will then go on a walk to see the different ways the forest is used at Scout Island. The session will conclude with a group craft to show the different parts that make up a forest.

Jessabelle Atkinson-Trelenberg and Alexis McComber coming out of their hiding place during the Great Backyard Bird Count 2014.

Nesika Elementary Kindergarten Class Visits Scout Island

By Kirsten Hamm

Our Kindergarten class from Nesika Elementary visits Scout Island about every month this school year. We go for the full day. We have 22 students in the class and they love our Scout Island days!

We take the city bus. They are very accommodating. If I phone ahead to let them know we are coming, the driver actually foregoes his break to drop us off near the causeway, which is not on the usual bus route. It is interesting for the kids to ride a big bus and it only cost each child $2.oo return. (School busses are much more expensive).

Julianne Trelenberg, who works with Scout Island as a naturalist, meets us at the bus. We walk to the Nature Centre to eat our recess snack, then we head out for all kinds of adventures. Julianne plans fun, engaging activities for the students. A few weeks ago we were studying snow and learning about the animals that live under the snow. We used a brush to find the layers of snow, and investigated how the snow is sugary and lofty at the bottom. The students used magnifying glasses to look at snow crystals on black paper. We measured the temperature at the bottom and at the surface, discovering that it was indeed several degrees warmer under the blanket of snow.

Nesika Kindergarten Class

When the ice is safe to walk on, we go to the island to play a predator/prey hiding game. Many students rarely have the opportunity to simply lie on the ground quietly noticing the natural things around them.

The students are focused and intensely interested in everything they do. It is wonderful to watch the excitement and joy on their faces as they make discoveries – listening to birds, observing live creatures in the Nature house, digging holes

in the snow to snuggle into, looking at pinecones . . . .

Never has a child complained about being bored. Nobody ever "goofs around". They participate in everything with their full heart with minds completely engaged. As brain research is now telling us, it is absolutely essential for normal healthy brain development for children to spend time in Nature. They make positive emotional connections to their surroundings. Their physical dexterity and fitness level improves as they take risks jumping off stumps and balancing on rocks. As they observe the changing seasons, the weather, cycles of life and death, children gain an understanding of their place in the world.

I am grateful for our days at Scout Island. It is offered to us free of charge. It is one of the richest, most fun learning environments available to children. My most fulfilling and uplifting experiences as a teacher are our days at Scout Island. Thank you, Scout Island Nature Centre and all the volunteers and staff who make our field trips so enjoyable.

This is Not About Birds (It is about Propagating Alpine Flowers)

By Jurgen Homburg

No indeed! This is about much more exciting natural phenomena: ***How to grow special flowers-alpines***. I would like to share with you some of the successes I have had over the years growing these beautiful plants which are adapted to alpine conditions, but thrive in my garden.

First, I would suggest a look at the Lone Pine book "Alpine Plants of BC, Alberta, and N.W. North America. Pojar and Mackinnon give amazing insight to the treasures growing in our local mountains. Some of you may have been lucky enough to see these treasures in their natural environment and some lucky enough to grow them in a their garden.

Alpine seeds are easy to propagate. Seeds can be purchased from "Alplains." (see www.alplains.com for how). You can also become a member of the Alpine Garden Club of BC (www.agc-bc.ca) or the Scottish Rock Garden Club (info@srgc.org.uk) and participate in their seed exchanges. Another source of seeds and alpine plants is Beaver Creek Green Houses (bvcreek@netidea.com).

Pots can be of any size, provided they have drain holes. I use 2.5x2.5x3 inch pots. The medium for seeding is 1/3 good garden loam, 1/3 mix of humus and vermiculite, 1/3 sharp sand or grit. Rock garden soils are not very rich Two handfuls of well-rotted manure for 3 cubic feet of soil mix is sufficient.

After the pot has been filled to within ½ inch of the rim, scatter the seed as **thinly** as possible. Then cover the seed with a light layer of course chicken grit (Beaver Valley Feeds has this), and water thoroughly. Cover the pots with a clear piece of plastic to maintain moisture and let germinate at 70 degrees in the light (seeds need light to germinate). The layer of grit is necessary to prevent compacting of the soil when watering and to stop the seeds from washing into the corners of the pot. Later, the grit will support the delicate seedlings, prevent damping off and stop the formation of moss.

Moss Campion *Silene acaulis*

Species I have had good success with are: *Lewesia tweedyii, Townsendia parryii (*Easter Daisy), *Silene acaulis (*moss campion), *Penstemon lupicola swarf, Erigeron aureus,* and *Phlox pulvinata.*

I seeded my first seeds early in January and some are already showing. But some seeds can take their jolly time to come up (up to a year).

That gives you plenty of time to think about where these treasures can go in your garden. That will be the subject of the next article. I am also happy to share surplus seeds that I have as I collect from my own plants. If you want more information, contact Jurgen at 250 620 3498.

Bluebird Routes (this is about Birds)

By Phil Ranson

Late last year Sandy Proulx and I were out on Becher's Prairie where Sandy is incapable of passing a Bluebird box without checking for nests and providing impromptu maintenance. While Sandy cleaned out the boxes and made the necessary repairs we discussed whether there needs to be an inventory and mapping of all the routes, or at minimum, a list with the name of the 'owner' and the number of boxes monitored. Sandy had twice been in the position of enquiring about the ownership of seemingly long abandoned routes and not finding an answer, fixed up the boxes only to learn that it was indeed claimed.

I have contacted most of the known owners and in the process discovered several more names. I also learned from Anna Roberts the history of our local routes going back to 1978. Anna had been the keeper of the routes and compiler of the data for many years but routes changed hands, new routes were created and old routes abandoned until the complete picture was lost.

Prior to 1978, it was usual for specific grasslands of BC to be spot sprayed with pesticide to control grasshoppers in outbreak years. This had been in effect since 1933 and the annual budget was then up to $100,000 to spray dimethoate, which was not only lethal to pre-adult grasshoppers but also the birds that feed on them. Once the grasshoppers reached the adult stage the treatment was no longer effective. In 1978, the committee for the Becher's Prairie Resource Management Plan had requested funding from the Agricultural Regional Development Authority (ARDA) to carry out biological controls by installing nest boxes to increase Mountain Bluebird populations. This experiment had been initiated the previous year in the Kamloops and N. Okanagan regions.

Kris and Sandy Install Nest Box on Becher's Prairie

During that spring, 474 boxes were installed at 5 locations on Becher's Prairie by the Williams Lake Field Naturalists. They were constructed by the Summit Workshop at a cost of $2.61 per box and installed for a further $0.50 each. Monitoring was conducted by two summer students hired by the Scout Island Nature Centre with funding from the Dept. of Agriculture. That first year 36 boxes were used by Mountain Bluebirds of which 29 were successful, 22 by Mountain Chickadees, 135 by Tree Swallows, 12 by Red Squirrels with 253 boxes unused with the remainder damaged or not found.

This was pioneering work and there was much to learn about the design and positioning of boxes. The following year 914 boxes were monitored occupied by 86 pairs of Bluebirds. In 1980, 120 Bluebird broods were fledged. By 1983 Anna was reporting bluebird occupancy rates of 28% and with improved placement of boxes, including paired boxes to reduce competition with Tree Swallows, felt that figure could reach 40%. The program had been deemed a success and was embraced by the ranching community. Pesticide applications had been discontinued and Bluebird trails were expanding and becoming an annual rite of spring for naturalists to monitor their routes.

Ever the pragmatist, Anna confides that although the nest box program was certainly beneficial, it was equally plausible that the cessation of the spray program also allowed other insects which likely prey on the eggs and nymphs of the grasshopper to proliferate and maintain their own biological control.

This coming summer there are likely to be about 28-30 people monitoring anywhere from 35-40 routes stretching from Narcosli to Empire Valley. Since the early days, the research component of the project has diminished, but nesting information can still be recorded as part of the BC Nest Record Scheme or on the form used by the Southern Interior Bluebird Trail Society and submitted to that organization. The society also has a website where a lot of good information can be found: http://www.bcbluebirds.org/ Sandy is a Director and is always happy to provide information.

I'm planning on coordinating the mapping of all the routes on Google Earth and eventually GPS'ing the box locations. Several people already have this information and 9 of the routes have been completed so far. Jim Sims Thompson's Corral route is one of the original trails and provides a good example of information that can be readily disseminated on Google Earth.

Google Earth View of Jim's Bluebird Route

Sharp-tailed Grouse (*Tympanuchus phasianellus*)

Research by Jim Sims
Sources Checklist of Cariboo Chilcotin Birds, Birds of British Columbia vol. 2 and
http://www.env.gov.bc.ca/wld/frpa/iwms/documents/Birds/b_columbiansharptailedgrouse.pdf

Recently there have been a couple of interesting sightings of Sharp-tailed Grouse. This one comes to us from Chilco Choate at Gaspard Lake in the South Chilcotin via an email to Sharron: "*Something I forgot to mention last week, about 2 wks. ago a flock of about 100+ Sharptails flew thru the yard. That was the biggest flock I have ever seen here. I hope it means something. Such flocks used to be common at the Maindley Ranch N. of Alexis Creek in the '50's.*" and there is this one from Sandi "*Rita & I have a snowshoe trail out at Riske Cr. and we walked by about a doz. of them the first 2 times out, looked like they were feeding on the Juniper berries and hanging out under the cover of Douglas Fir where the heavy branches come down close to the ground. We had some wheat & corn mix seed at home so we took it out and spread it around a few of the D-fir that the where hanging out and when we went back a couple days later the seed was gone, there was a fresh skiff of new snow and fresh Grouse tracks around the trees where we put out the seed, we put out more seed and every time we went back the seed would be gone, maybe 5 or 6 times in a span of about a month. We did see the grouse a few times but they are very wild and we didn't get close, so no pictures of them actually feeding.*"

One of Sandi and Rita's Sharpe-tailed Grouse

During the winter several Sharpe-tailed Grouse families will gather together in larger flocks like the ones Chilco reported (usually not this large). Normally they do not move far from their nesting territory in winter (perhaps less than a few kilometres) in spite of the fact that they are capable of relatively long flight. During winter they will reside in habitat similar to that described by Sandi; deciduous shrub and tree species that provide berries and palatable catkins and twigs. Sharpe-tails will also roost in snow to conserve energy.

Displaying male Sharpe-tailed Grouse Photo by Jared Hobbes

The Sharpe-tailed grouse is the only British Columbia Grouse that makes use of leks, dancing grounds. In the spring males congregate at these breeding sites. The leks are located in open areas to enable detection of predators and in attracting grouse to the lek by seeing and hearing displaying males. The males display on the lek by stamping their feet rapidly, about 20 times per second, and rattle their tail feathers while turning in circles or dancing forward. Purple

neck sacs are inflated and deflated during display. The males use "cooing" calls also to attract and compete for females. When I heard these cooing calls for the first time at Chilanko Marsh I went off in the opposite direction looking for the cooing owl. The female will make up to 10 visits to the lek and will pick a mate from the dominant males that usually display at the centre of the lek. Occasionally a less dominant male will sneak into the centre of the lek and get lucky by acting like a female. This helps the gene pool to diversify. The lek, if not disturbed will be used over again for several years. The males will tolerate a fair level of disturbance however the females will avoid disturbed leks so it is very important that we do not disturb these sites.

The female will make her nest close to the lek and does all the nest building, incubating and raising of the young. She can lay up to a dozen eggs almost all of which will be fertile. If a nest fails she may lay new nests. Almost all of the females that visit a lek will lay eggs. The nest is located on the ground in the grassland so protection by taller grasses is essential for brood success. Grazing practices can impact available nest sites. The young leave the nest shortly after hatching and the female will lead her chicks to food where they will feed themselves. Fall counts of family groups indicate great variability in brood success.

The Checklist of Cariboo Chilcotin Birds designates the Sharpe-tailed Grouse as an uncommon species with 1 to six individuals per day per locality. Sharpe-tailed grouse are blue listed in British Columbia. The population in the southern part of the province has decreased considerably and they have been extirpated in the Okanogan for the past 50 years. The largest concentrations are now found in the central interior. Lek counts in grasslands of the Cariboo Basin and Chilcotin Plateau from 1993 through 2000 showed a decline in numbers. Counts at seven leks fell from an average of 18 birds/lek in 1993 to 10 birds/lek in 2000 (i.e., 44% decline in numbers). However, of eight leks known in 1993 and revisited in 2000, all remained active. New leks are being found each year in clear cuts that usually border riparian zones with willow and birch shrubs. Urban and agricultural development, as well as forest encroachment into grasslands continues to degrade Sharpe-tail's habitat.

Our View of the Night Sky – March / April 2014.

By Steve Capling

Planet Review

Jupiter is visible as a very bright yellowish object high in the evening sky in the constellation Gemini.
Venus is visible as a very bright morning object before sunrise, low in the south-east.
Mercury is visible in the morning twilight very low in the east.
Saturn is visible in the late evening sky low in the south-east in the constellation Libra.
Mars rises in the east after sunset in April in the constellation Virgo. It is closest to earth on Apr. 14th (but still a long, long way from us).

Meteor showers

April 22 – Lyrid meteor shower. Estimated at 20 per hour from a dark sky – light from the moon will wash out many of the smaller meteors.

Lunar eclipse – night of April 14/15. The entire eclipse process is quite long. Note that the totality part of the eclipse starts just after midnight on the 14th and lasts for a little over an hour. The moon should dim and have a red-orange glow during totality. If you do get up to view it, see if you can notice that the north half of the moon appears darker than the south half.

Vernal Equinox - Spring begins – March 20th!!!

Asteroid 2 Pallas.

In late February through March, the asteroid 2 Pallas may become visible in small telescopes at mag 6.3. On Feb. 26th it will be at its closest to earth and will pass within 1.233 Astronomical Units. (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. In astronomy, an astronomical unit is defined as the average distance from the Sun to the Earth, or about 150 million kilometers. You can abbreviate astronomical unit as AU. 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.
Check this web site for an up to date finder map.
http://heavens-above.com/MinorPlanet.aspx?desig=2&
And if you happen to be in Antarctica on April 29th, be sure to check out the annular solar eclipse!

Evening Sky Map at Skymaps.com - http://www.skymaps.com/skymaps/tesmn1403.pdf .