

MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS
MARCH 2011 NEWSLETTER

off we go to all the
Spring Activities
Coming Soon



march 22 Field Trip Planning
March 25 AGM + Pot Luck
April 8 Banquet Evening
April 9 Tree ID Morning
May BC Naturalists



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

Membership fees: Family (\$30), single (\$25) or student (\$10) memberships can be mailed to the above address. Please complete the membership and waiver forms available at the Nature Centre (250) 398-8532, muskrat@midbc.com 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 Web Site <http://www.williamslakefieldnaturalists.ca>
Scout Island Nature Centre Web Site <http://www.scoutislandnaturecentre.ca/>

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

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

2011 Field Trip Planning Meeting

Tuesday March 22nd 5:00pm at the Nature Centre
Please bring your plans to this important meeting so we can prepare for another season of grand adventures. If you can't attend but have a good idea please contact Fred or Jim at the above phone numbers or email addresses.

Williams Lake Field Naturalist Social and AGM

March 25th 6:00pm at the Nature Centre
Please try your best to attend this important social and short meeting. Pot-luck supper is to start at 6:00pm, this will be followed by the AGM and the evening will wind up with a grand slide show. Fred promises the food will be plentiful and delicious, the business meeting will be very brief and painless and the entertainment will add the final spice to the evening.

If anybody wishes to volunteer to be on the executive please contact Fred McMechan at fred_mcmechan@telus.net or 250 392 7680

Katharine VanSpall will provide the entertainment as she presents "**The Bowron Lakes Canoe Circuit**"— a **virtual tour**. During mid-September of 2010, Katharine and her partner Dex Porter canoed the Bowron Lake Provincial Park chain of lakes for the first time. This multi-day paddling trip into the heart of the Cariboo wilderness offers stunning scenery, placid



Potatoe Range summer 2010



lakes, soaring mountains and upraised spirits. Sit back and enjoy a virtual tour of the chain and laugh at the minor adventures that were had en route.

WHOOO gives a HOOT about OWLS?

**@ Scout Island Nature Centre
Saturday March 26th 12-2pm**

You might associate Owls with haunted houses or wisdom, but the last Saturday in March you will learn that while Owls are absolutely amazing there are many myths about Owls that have recently been proven untrue. **For example; Owls have amazing low light vision but, they are so**



good at flying in the dark because they MEMORIZE THEIR TERRITORY! Hear all the amazing facts and meet some Owls in a fun afternoon for Families and their kids ages 5-14 hosted by the Young Naturalists Club.

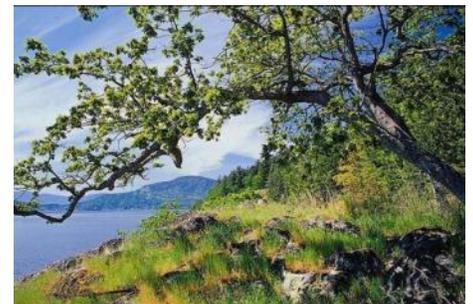
Call Scout Island Nature House if you have any questions about this free special event 250.398.8532 or email yncwilliamslake@gmail.com

Annual Fund Raising Banquet

The annual Scout Island Nature Centre banquet will be held on Friday evening, April 8 at Saint Andrew’s United Church Hall. Tickets are available from The Open Book or from members of the Williams Lake Field Naturalists.

There will be two events at the banquet, a presentation by our guest speaker and the 40th anniversary celebration for The Nature Trust of BC. Dr. Rob Butler, a well-known BC biologist, will be the guest speaker and Carl MacNaughton, Acting Land Manager for The Nature Trust, will provide a short illustrated presentation on the conservation of lands in BC by this organization since 1971.

The title of Dr. Rob Butler’s talk will be “Optimism for the Future”. He says “if there is one heroic deed in your life, let it be to save wild places”. Dr. Butler explains that although our world is facing some large environmental issues, there is reason for optimism. His talk illustrated with award winning photographs will show the important role British Columbia and The Nature Trust will play in the survival and recovery of many large animals. He describes the latest research on how the effects of predators can cascade through ecosystems, why nature is good for your health and your child’s development.



Gary Oak from Rob's collection

Dr. Rob Butler is an ornithologist with over 40 years of experience in research and conservation of birds in the Americas and Asia. For many years he was a senior scientist with the Canadian Wildlife Service. He is presently BC Program’s Scientist for Bird Studies Canada, President of



the Pacific Wildlife Foundation and an Adjunct Professor of Biological Sciences at Simon Fraser University. He has been a Director for The Nature Trust since June 2010. He writes widely in the scientific and popular literature on ecology and conservation issues. He wrote two books and over 120 scientific and popular articles. Recently he has contributed to the launch of Canada's Important Bird Areas program, the Breeding Bird Atlas in BC, the Young Naturalists Club of BC and the Pacific Wildlife Foundation. He is a frequent guest on radio and television and in the print media where he writes a blog, "Bird Watch", for the Vancouver Sun.

Columbia Valley

The Nature Trust of BC was formed during British Columbia's centenary in 1971. The principle objective of this land conservancy organization is to purchase lands of ecological significance in our province. It has protected properties throughout BC. One of the first properties obtained by The Nature Trust was the Scout Island Nature Centre. It was designated by The Nature Trust as a nature education area for the people of the Cariboo. The presentation by Carl MacNaughton will give people an opportunity to be aware of the conservation of some of these lands and their rich biodiversity over the past 40 years.

The money raised from this banquet will be used to provide nature educational programs at the Nature Centre for our community, especially for children. Also the funds will go toward benefits such as providing services for visitors, including tourists, maintaining the trail system, and protecting or enhancing the variety of habitats.

Identification of Trees and shrubs in their winter 'plumage'

Saturday, April 9, 2011. 9 a.m. to 12 noon.

Rosamund Pojar will give a workshop on how to identify trees and shrubs when they don't have any leaves. This is a hands-on activity where we will learn about the main features of winter twigs that are important for identifying them. Using Rosamund's new book "Trees and Shrubs in Winter" (Creekstone Press, Smithers) we will practice using keys to identify different species of both deciduous and evergreen plants. We will spend some time inside and then go outside to practice with local plants. Learning how to identify plants in winter is fun, adds to the enjoyment of winter activities, and can be very useful for everyday life. Come and find out why, bring suitable clothing and meet at Scout Island Nature Centre at 9 a.m.



Can you identify this tree/shrub?

BC Nature Spring Conference and AGM

Registrations for this event have started to come through February. Most of the registrations will be received during the month of March. Teresa Myers and Nola Daintith are doing an admirable job processing the registrations. The field trips and evening programs will provide an exceptional opportunity for our membership. Please register and take advantage of participating

in this program here in the Cariboo-Chilcotin

For the silent auction, the Committee of Jenny Noble, Stan Navratil and Fred McMechan has met to plan this fund raising activity. The procedure for setting up displays by a variety of clubs and organizations is being developed.

Details about the Conference and AGM are on either the BC Nature website, www.bcnature.ca or our club website, www.williamslakefieldnaturalists.ca

Scout Island Nature Centre Report

By Sue Hemphill

It feels like spring is close. Last night there was a beautiful crescent moon hanging in the sky and the geese were honking. It was the first honking of the year. Of course, the geese had to make do with water in the frozen form. You can still ski on the lake as long as you stay off the “ice” at the west end of the marsh. My skis and I broke through last week and had to struggle back to the Nature House to defrost.

In addition to the winter outdoor programs we are offering, Mary is taking ideas about shrinking your Ecoprint into high school classes. In Home economic classes, she is showing students how to make “less mess kits” and how to use natural cleaners. She is even presenting in Auto Shop classes to help students think about tire stewardship, animal friendly antifreeze and using waterborne paints.

The Nature Centre has been encouraging schools to consider integrating more environmental education into their daily programs. We are pleased to have classes come to the Nature Centre for programs, but we want to help schools use their own physical setting to be outside exploring with students a lot more. We are working with the school district to help plan the April 15 Pro D. The focus will be environmental education across the grades and curriculum. David Zandvliet, an Associate Professor, Science and Environmental Education at SFU will be the main speaker. You can learn more about David at http://www.educ.sfu.ca/profiles/?page_id=376. Sue, Mary and teacher volunteers will facilitate discussions for teachers at primary, intermediate, and high school levels. If you are interested in taking part, please contact Sue.

The long awaited Scout Island Nature Centre web site is up and running (www.scoutislandnaturecentre.ca). Take a stroll through it. There is even a page where you can stroll around the nature center (virtually). You can connect to the video we made and even go on our Face Book page to ask the “naturalist” a question.

Thank-you to Jean Wellburn, Mike Bird, Carmen Mutschele, Francesca Winger, Brent Holland, and Savana Nata who helped with the Scout Island “booths” at the Science World/TRU Science Celebration on March 5. We didn’t get to stop the whole day as people came to enjoy the creatures from the Nature Centre and children/salmon



Children doing the Salmon Obstacle Course

“swam” up the river to lay their eggs.

Bird Feeding – the Dark Side

By: Phil Ranson

I've been feeding birds in the back yard for over 30 years and when I was set to leave the Forest Service, the response I gave to the oft asked question about what exciting things I had planned for my retirement was to sit in the kitchen with a cup of coffee and watch the birds at my feeder. As lofty as these ambitions were, I now have to look for something else.



On April 27th, 2009, there was a brief commotion then a crash at my dining room window. The White-crowned Sparrows which had filled my yard were nowhere to be seen. Below the window lay a large sandy brown bird quivering beside the roses. I went outside and picked up a female Merlin which trembled in my hands for a few seconds then died. That day was the last time I put bird seed in the feeders, filled the logs with suet or sprinkled sunflower seeds under the trees. Merlin's had nested in the neighbourhood for a couple of years, either in a grove of tall Douglas Firs or the thick Spruce where I had recently heard the Merlin's calling. A pair frequently called in the area during this time of year but I never heard them after that.

The Merlin was not the first bird to die at my feeder and not the first time I had misgivings about feeding birds. Window strikes were not uncommon particularly in spring. In the winter of 2002 several Redpolls showing symptoms of Salmonellosis were found dead or dying either in or around the feeder. There have also been similar outbreaks involving Siskin's, and House Finches and Evening Grosbeaks have appeared showing deformities on head and feet. Most of this is attributable to the abnormal concentration of birds at feeding stations.

The most troubling aspect of the bird feeder was my cat. She is known affectionately as 'Over my dead body' following my response to family pleas to bring home a very cute black and white kitten from the SPCA. I have to confess to becoming quite fond of her now but besides destroying the furniture she is also an accomplished hunter of birds and mice. Since the first time she unwisely showed up at the screen door proudly holding a junco in her mouth, OMDB has learned to become more secretive with her victims. I often find a pile of feathers here and there in the garden and under the deck, and she has become particularly adept at taking Hummingbirds at the Bee balm.

Something else that troubled me was the notion that as a professed naturalist, I should know better than to induce wild creatures into my yard and subject them to these perils strictly for my own enjoyment. I can really no longer fall back on the argument that I'm lending a helping hand to these small creatures in times of hardship, or that in some small way I'm atoning for the sins that humanity has inflicted on the natural world.

A well-known naturalist and author from north west BC said the following recently on a topic that had drifted to feeding deer; *".....also it is unhealthy for the animals and un-natural. As good naturalists we should all let them find their own good healthy food out in the bush. If there is not enough food then so be it - at least the genetically strong ones will survive and their populations*

will be better adapted to their natural environment.”

There are few who would argue with this reasoning and by extension apply it to all wild creatures. Yet for some reason there is a reluctance to include wild birds. This subject has become quite a heated and divisive topic on several birding email forums with opponents often quickly overwhelmed. Moderators have been stepping in to separate the warring factions or even put an end to discussion as soon as it rears its head.

As we all know, there are none more self-righteous than the recently reformed but I found the most rational (and sometimes overzealous) arguments coming from those who invoked issues such as the European Blackcaps which no longer migrated to N. Africa but remained at feeders and were already becoming genetically distinct from those that did migrate; or the amount of agricultural land that was being turned over to sunflower and millet production to satisfy a burgeoning market; or Goldfinches getting gout from an oversupply of enriched suet. The list is extensive.

So is switching my attentions to observing birds at the Scout Island feeders slightly hypocritical? Quite possibly, but my backyard has been a dreary place the last two winters and in my defense the only thing I can say is it's difficult to quit a 30 year addiction cold turkey.

The Truth about Owls

From Canadian Wildlife March/April 2010 (prepared by Sue)

1. Myth: Owls hear better than other birds

Reality: Owls' ability to perceive a spectrum of sounds is well within the range perceived by other birds.

For hundreds of years, humans have thought owls have astounding night vision and acute auditory powers. Studies in the 1940s concluded that the eyes of owls were up to 100 times more sensitive than human eyes. The hearing of owls was believed to be just as outstanding as their vision.

Author Allan W. Eckert, in his 1974 book *The Owls of North America*, wrote that the short eared owl's hearing "is so acute that it can hear the footfalls of a beetle at upwards of 100 yards, the running of a mouse at 250 yards, and the squeaking of a mouse at an eighth of a mile." Claims of owls' almost supernatural nighttime senses have been accepted without critical analysis and are repeated as scientifically proven facts even today. As it turns out, the truth is more exciting and satisfying than those time-honoured (and largely inaccurate) assumptions.

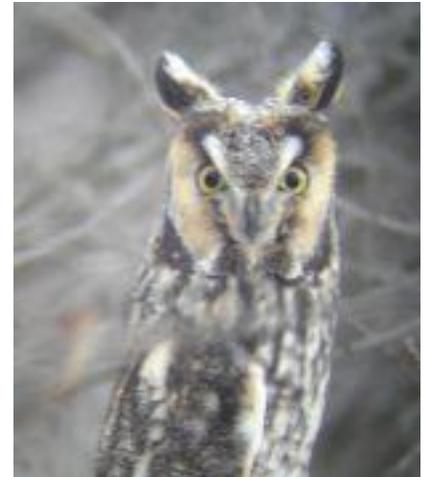
To get technical for a moment, there are three aspects of the physiology of hearing in a bird or mammal: the frequency range of detectible sounds (measured in cycles per second or hertz), the minimum threshold or loudness of a sound that can be perceived (measured in decibels) and the ability to determine the direction from which a sound originates and pinpoint its location. Think of yourself catching snippets of a radio broadcast from another room- you're detecting the highs and lows of the announcer's tones, the volume of the music and the location of the radio itself.

When it comes to frequency range, no creatures can match the ability of mammals. Human hearing spans a range from 20 to 20,000 hertz (a higher number indicates a higher frequency), and some bats can hear frequencies as high as 210,000 Hz. Among the few bird species that have

been tested, hearing ranges from 30 to 10,000 Hz, and most have their greatest sensitivity in the 1,000 to 5,000-Hz range, where owls' hearing falls. For example, long eared owls hear sounds between 500 and 8,000 Hz, a span thought to apply to many species of owls.

2. Myth: Owls can perceive much quieter sounds than other birds or mammals.

Reality: Although owls have sharper hearing at low levels than other birds, their ability to pick up sounds in the lower range is comparable to that of humans.



Long-eared Owl

Let's move on to minimum auditory sensitivity, or the faintest sound owls can perceive. Because human's hearing threshold can be easily and thoroughly evaluated, it has become the standard used to measure the loudness of sounds in decibels.

The point at which an average young adult can detect a sound from silence is zero decibels. Rustling leaves rate 15, normal conversations 45, crowd noise 60, a vacuum cleaner 75 and a pneumatic drill 90. Graham Martin, a professor at England's University of Birmingham, has been studying the sensory world of owls and other birds for more than three decades. He concludes that owls' low-end hearing threshold is about 25 decibels lower than in other bird species tested so far. That may not sound like much, but 25 decibels roughly translates into 300-fold differences in sensitivity.

One reason owls hear better than other birds is the disc shaped arrangement of the feathers on their face. The great grey owl's large, conspicuous facial disc is 16.5 cm in diameter, while the barn owl is sometimes called the sweetheart owl because of its heart-shaped disk. The barn owl has a disk of loose facial feathers called the facial ruff, which form a concave wall behind the opening of the ear. Biologists believe the ruff acts like a parabolic antenna, collecting sound waves and focusing them at the ear opening, amplifying them by about 10 decibels. It has the same effects that you get when you cup your hand behind your ear.



The Sweetheart Barn Owl

Although the lower hearing threshold in owls is superior to other birds, it doesn't appear to be that different from ours. Martin suggests that the auditory sensitivity in owls and humans may have gone as low as it can go, perhaps even reaching the physiological limits of the vertebrate ear. He argues that the ever-present background noise such as rustling leaves and animal vocalizations have probably existed throughout evolutionary history and might have dictated the ultimate lower limit on hearing sensitivity. In other words, even if owls or humans were capable of hearing fainter sounds.

True Winter Insects

Winter Stonefly. In the latter part of January and early February, the winter stonefly nymph emerges from its water habitat. Its last nymphal skin has become tight. Once the insect reaches the bank of the pond, its nymphal skin splits down the back and the adult emerges. It feeds on algae found on trees and other plants. Males and females then mate. When mating has been completed, the females crawl or fly back to the water to lay their eggs. Larger varieties of stoneflies emerge in late February or early March. These varieties feed on the buds of trees.



Stonefly

The winter stonefly is less than ½ inch long and is dark gray in color. It has chewing mouth parts that enable it to feed on algae and tree buds. The stonefly has two slender antennae and two tails attached to the abdomen.

If you find a stonefly while exploring in winter, pick it up and carefully observe it. Use a hand magnifying glass to examine it closely. Is it a nymph or an adult? Can you observe the mouth parts? Can you locate any nymphal skins (shucks) left behind? Where would be the best place to look for the discarded skins?

Springtails. Springtails, or snow fleas, are the most common true winter insects found by investigators. They are particularly abundant on days in late winter when the temperature rises above freezing. Springtails are the oldest known fossil insects. Fossils 300 million years old have been discovered in Scotland. They have also been found in amber (tree sap hardened millions of years ago) in Canada. Springtails follow the series-of-molts life cycle; they have no wings. They travel by means of a tail that contains two spines. This tail is folded forward on the underside of the abdomen and held forced down against the ground, propelling the insect in a springing manner. Because springtails are very small (most are less than 6 millimeters long), they are rarely seen, except on sunny days in mid- to late winter when they appear to flock in large numbers to the snow surface. Masses of these tiny insects can be seen in snow-shoe tracks or footprints. They feed on decaying vegetation, sap, algae, and fungi spores. The best place to locate springtails is at the base of a decaying tree that has fungus growing from its trunk and branches. When you locate a group of springtails, observe their behavior for a short time. Look closely at their body structure, using a hand magnifying lens. Place one or more in a plastic container with sides at least 1 inch high and observe how the insect travels. Locate its tail and watch it move.



Springtail or Snow Flea

Winter Crane Fly. The winter crane fly looks like a very large mosquito with long slender legs. The crane fly emerges from the snow to mate. The female returns immediately under the snow and lays her eggs in dead leaves and other decaying matter that covers the ground. The crane flies walk on the snow because they have no true wings at this stage of development. Their mouth parts are designed for sucking. They do not bite. If you are lucky enough to see one in late winter, look closely at its mouth parts, using a hand magnifying lens. How does the structure of the mouth differ from the chewing parts of the winter stonefly? Are



Winter Crane Fly

the body parts similar to or different from the other winter insects you have found? Make a sketch of each and compare.

Winter Scorpionfly. The winter scorpionfly emerges from the snow, and from decaying logs that are covered with moss, from November to March. It has a long beak-type nose that comes to a point; the nose contains the mouth parts. The males have a pair of claspers on the rear of the abdomen. These are used for mating. The females never develop wings, while the males have an imperfectly formed pair and rarely fly.



Winter Scorpionfly

Eurasian Kestrel

Research by Jim Sims

While confirming data for our new “Checklist of Cariboo-Chilcotin Birds” with Volume two of “The Birds of British Columbia” Phil discovered the Eurasian Kestrel was recorded as an accidental species. This is a species that breeds throughout much of Eurasia to southern Africa, India, China and Japan. It winters south to the East Indies and the Philippines.

This immature female was collected on December 10th, 1946 at Alkali Lake. This is the first Canadian and second North American record. We have included the Eurasian Kestrel in the new Checklist that will soon be available.



Eurasian Kestrel from "The Birds of BC"

My internet research indicates that there have been more sightings so keep your eyes open and your camera ready you never know when or where you might find another Eurasian Kestrel that you first thought was an American Kestrel.



Eurasian Kestrel



American Kestrel