

WILD ABOUT... ...BEEES

*Alexandria Farmer,
Mount Royal University*

**Thursday, April 23 @ 7:30pm
Kerry Wood Nature Centre
Red Deer**

**Learn about Alberta's Native Pollinators and
How We Can Help Them**

Alexandria Farmer has taught at Mount Royal University for the past 17 years. She recently completed an MSc in Ecology from the University of Calgary studying the impact of clear-cut logging on bumble bees, including colony success and flower visitation. She considers herself to be a native bee "evangelist," spreading the word about the importance of native bee diversity and about what we can do to help them.



*All photos provided by
Alexandria Farmer*

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- Free admission
- Open to the public

SEASONAL SIGHTS AND SOUNDS OF ALBERTA: HARMONISING SWANS

By Sally Stuart

By the time you read this newsletter, they will have started to arrive. One day you will look up into a beautiful azure sky and see the long trails of pure white swans. Most will be Tundra Swans (*Cygnus columbianus*).

It is usually early to mid-April when I start to record their activity, depending on whether or not there is still ice on Cygnet Lake. They will not land unless there is free water.

Early one morning, at around 5:45 AM, I will walk through the woods to the end of our land, climb up into the kids' old tree fort (it makes an excellent viewing platform, although it gets harder to negotiate the rope ladder with each passing year) and look out over the lake.

The swans will all be fairly quiet, with one occasionally calling. They will be bunched at the end of the lake where the water flows in from Sylvan Lake, their beaks buried in their feathers, dozing. Gradually they will start to wake up and I will hear that wonderful soft “woo” call they use to communicate. Soon, more and more voices will join in. Soon they will all be calling, joining the conversation and jostling for space. Suddenly and for no apparent reason, one will call out loudly and start to run across the water. Within seconds, they will all be calling and running. I cannot help but feel they are urging and cheering each other on. The noise of the wings is phenomenal. All will soon be airborne, circling around before heading off to their breeding grounds in the northern tundra.

Then the biologist in me kicks in, wanting to analyse the sound and how it is produced.

In humans, sounds are produced when we exhale; air leaves the lungs via the bronchial tubes, trachea and larynx. When air passes through the larynx, it vibrates the membranes (vocal chords) spread across it. The process is similar in birds, but far more sophisticated.

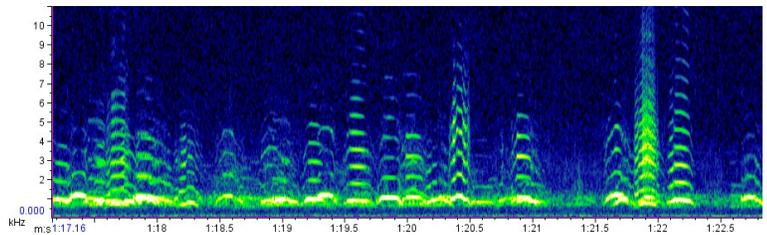
Located at the base of a bird's trachea and at the junction of the two bronchi is a structure called the syrinx. Membranes are located on both sides of the syrinx, folds of tissue that vibrate very quickly when air is exhaled. All parts of the syrinx and trachea are controlled by muscles, but the frequencies produced can be also be altered by the rapid opening and closing of the beak.

Many birds therefore have two voice boxes which they can alter-

nate between or use simultaneously. When used simultaneously, two different sounds of differing frequencies are produced.

Since the human ear cannot detect these differing frequencies, we rely on a process of generating pictures (sonograms) of the songs.

An analysis of the sonogram of a Tundra Swan (see below) reveals that that each “woo” call is a stack of harmonics, which we hear as one sound. This is similar to many other species (e.g., the call of the Sora or Pileated Woodpecker).



In sonograms, the brighter the band the louder the sound. Bird species with long necks, such as swans, also have long tracheas. They will use these tracheal tubes to filter and modify the sounds.

The typical bird hearing range is very similar to humans (about 0.5-6kHz). Research has shown that, in general, the larger the bird, the more sensitive they are to lower frequencies. Tundra swans weigh in at a fairly hefty 40-41kg and the dominant frequency from their sonogram falls in the range of 350-850 Hz. This suggests that they do indeed respond best to lower frequency sounds.

So enjoy the call of the Tundra Swan here in Central Alberta because we only have a narrow window of opportunity to enjoy them before they head further north to breed. Appreciate the complexity of the call and the fascinating syrinx.

Perhaps luck will be with us and we will hear the swans call once again as they journey south in the fall.



NATURE ALBERTA TURNS 45!!

April 4th, 2015 (11 AM – 3 PM) Royal Alberta Museum

CELEBRATE WITH US!



Local Celebration...

COME CELEBRATE NATURE ALBERTA'S 45TH BIRTHDAY WITH THE BUFFALO LAKE NATURALISTS!

APRIL 4TH 2:00 PM—4:00 PM

West Stettler Park, Stettler

Activities include a visit from Otis the Owl and Judy Boyd from MRWC, Tim Schowalter showing owl pellets, a nature scavenger hunt for children and birthday treats! Participants will be treated to a brief history of Nature Alberta and The Buffalo Lake Naturalists. Contact Claudia [587-877-2218](tel:587-877-2218) or clipskic@rttinc.com for more information. Registration not required.

BEAVERS IN OUR LANDSCAPE

Understanding and Living with Beavers



A workshop for resource managers, municipalities, landowners and anyone interested in beavers. Whether you love them, hate them, want to understand them, think you need them, or want to learn how to live with them, you will find this workshop useful. Topics covered:

- Beaver Basics
- Beaver Challenges
- Beaver Case Studies
- Beaver Banter
- Beaver Next Steps
- Tour of beaver pond at Ellis Bird Farm

**Attend this FREE workshop (10 am - 4:30 pm):
Monday, May 25 at the Ellis Bird Farm**

Pre-registration required before May 20, 2015
by emailing info@ellisbirdfarm.ca

We look forward to seeing you there!



Workshop Hosts:



Other Workshop Partners:



RUSTY BLACKBIRD SPRING MIGRATION BLITZ

Rusty Blackbirds are experiencing severe population declines. In 2014, the International Rusty Blackbird Working Group and its partners launched a three-year SPRING MIGRATION BLITZ that challenges birders to scour the landscape for Rusty Blackbirds during this species' northward migration. Year One was hugely successful, with 47,500 birders submitting 13,400 checklists containing Rusty Blackbird observations.

You can help us maintain this momentum – be part of Year TWO! Watch for Rusty Blackbirds passing through your area in late March and April. Please submit your sightings to [eBird Canada](http://eBirdCanada.org) using the observation type “Rusty Blackbird Spring Migration Blitz.” All Rusty Blackbird sightings are welcome, but whenever possible, please include the **Areas of Interest 2015** in your birding outings. <http://www.bsc-eoc.org/organization/bscnews.html>

BIRD FOCUS

Sunday, April 5: Hunting for owl nests south and east of Red Deer (rescheduled from March). Meet at noon at KWNC. Be prepared to carpool and bring snacks and drinks for the afternoon.

Sunday, April 12: Bird Walk at River Bend Golf Course perimeter trail. Meet at 1:00 PM at KWNC.

Sunday, April 26: Field Trip along Highway 36 in the Alliance area to look for migrating Sandhill Cranes and Snow Geese. We will leave at 8:00 AM. Be prepared to carpool and bring lunch, snacks and drinks for the day.

Call Judy at [403-358-1098](tel:403-358-1098) to register for all these events.

May 30, 31: May Species Count.

FLOWER FOCUS

April 15 10:00 AM

KWNC

Topic to be Announced

**Call Don Wales for
details**

403-343-2937



OWLS AT EBF! Ellie the Owl is now sitting on two eggs. She laid her first egg on March 16th and the second on March 19th. She patiently endured the big dump of snow on March 21-22, quietly incubating her eggs tucked into a deep snow pit!

Check the owls out at <http://www.ellisbirdfarm.ca/galleries/webcams>



The Red Deer River Naturalists, the first natural history organization to be established in Alberta, was incorporated as a society in 1906. The objectives of the society are to foster an increased knowledge, understanding and appreciation of natural history, and to support conservation measures dealing with our environment, wildlife and natural resources.

Annual membership is \$15.00 for individuals and \$20.00 for families.

Regular meetings are held at 7:30 p.m. on the fourth Thursday of most months at the Kerry Wood Nature Centre, 6300-45 Ave., Red Deer, AB. Non-members are welcome.

Members are encouraged to contribute to this newsletter. Deadline is the last Friday of the month.

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