

A Big Weekend!

May Species Count and Birding Guide Launch

MAY SPECIES COUNT

Count between 9 AM and 5 PM
Saturday May 30 and/or
Sunday May 31

Participate in the important wildlife census by counting birds, mammals, amphibians, reptiles, insects, spiders and flowering plants.

Come to Kerry Wood Nature Centre on Sunday for the official launch of RDRN's new Central Alberta Birding Trail Guide, watch a falconry demonstration and meet Otis and Sophia from MRWC.

At 7:30 PM, Dr. Gordon Court, the Provincial Wildlife Status Biologist for Alberta Fish and Wildlife, will talk about **Owls, Owling and Owlers in Alberta**.

His talk will feature an introduction to the owl species of Alberta (and their habitats), with notes on conservation concerns, owl banding and owl monitoring in the province. He will be joined by Colonel Slade, a tame Barred Owl.

CENTRAL ALBERTA BIRDING TRAIL GUIDE LAUNCH

Sunday, May 31 KWNC
Falconry Display — 2:00 PM
Meet Otis and Sophia
Owl Presentation — 7:30 PM
Dr. Gordon Court



Photo by Myrna Pearman

HOW TO CONDUCT A MAY SPECIES COUNT

The May Species Count is a census of all living organisms. Individual animal numbers (example: Mule Deer - 6) are to be tallied during the course of the count. Species names for blooming flowers are also documented. In the case of rarities, photographs to confirm identification will also be required. Odd or unusual situations (e.g., profuse numbers of a species one year; rare the next) should also be noted.

Please count between 9:00 a.m. and 5:00 p.m. on either Saturday May 30 or Sunday May 31. If you are counting both days, please use separate tally sheets and count in a different location on the second day.

Please make sure that you fill in ALL blanks in the information section of the bird tally sheet. May Species



count information will be submitted to Nature Alberta, so please be sure that all count information is complete.

It is important to know who is participating in the count so no overlap occurs. Please contact Judy Boyd at 403-358-1098 before May 24 if you will be counting or if you need a flower tally sheet. Your bird tally sheet is included with this newsletter. Please mail your tally sheet to the RDRN office: Box 785, Red Deer, Alberta, T4N 5H2 before June 15 or drop it off at the Nature Centre, attention: Judy.

There will be no potluck this year as we are having the Central Alberta Birding Trail Guide Launch on Sunday, May 31 instead (see below). Come out for this very special event.



SUMMER EVENTS AND FIELD TRIPS



There will be no May Flower Focus.

Sunday, May 31: CENTRAL ALBERTA BIRDING TRAIL GUIDE LAUNCH—Come out for a falconry display at 2 :00 p.m. at the Kerry Wood Nature Centre, followed by a “Meet the Owls.” Otis (Great Horned Owl) and Sophia (Great Gray Owl) from Medicine River Wildlife Centre will be there along with Colonel Slade, a Barred Owl. At 7:30 p.m. Dr. Gordon Court will give a presentation about owls and the owls will also be in attendance.

Saturday June 13: RAVEN BROOD TROUT FARM—We will carpool to the Raven Brood Trout Farm to spend the day hiking, looking specifically for otters and wood ducks. We leave Red Deer at 9:00 a.m. and will leave the Trout Farm at 3 p.m. Bring food and drinks. It is advisable to wear good hiking boots with gators or rubber boots. This field trip involves some bushwhacking. Call Judy at 403-358-1098 to confirm attendance.

Saturday June 20 and Sunday 21: BJORGE FARM IN THE BATTLE RIVER HILLS—We will car pool to the Bjorge property on June 20, stopping enroute at their old homestead to check for Turkey Vultures. This trip will involve a three-hour easy to medium hike through the Battle River Hills.

You have two ways to participate in this trip:

1. Go out on Saturday and camp overnight at the Ferry Point Campground. (Some tents will be available if you don't have your own. Bring your own food and sleeping gear. There is a minimal cost for the campsite.)
2. Meet at Meeting Creek (approximately a two hour drive from Red Deer) at 10:00 a.m. on June 21. On Saturday night there will be a Potluck Supper.

Bonnie Mullin photographed this female Black-backed Woodpecker spotted at River Bend perimeter trail on April 12, during a Sunday Bird Walk with the Bird Focus group.



FREEZE —TOLERANT FROGS AWAKE

by Sally Stuart

It's that time of year; the ice on the dugout has melted and the chorus of the amphibians has started. We have two species on our land, one is the somewhat larger Wood Frog (*Rana sylvatica*), which is about 6 cm in length, and the other is the very small Boreal Chorus Frog (*Pseudacris maculata*) which measures only about 4 cm. Usually it is late April to early May when I first hear the frogs.

Both species are quite remarkable in that they undergo a complex series of physiological adaptations in the fall which allow them to freeze solid for the winter. As the temperatures rise in spring, they thaw out. This is an amazing physiological adaptation because tissue cell membranes usually break and rupture when they freeze. Not so in these frogs.

Why do frogs call? Most people understand that frogs call in the breeding season when they are returning to the water to breed. Although vocalization indicates sexual receptivity, the behaviour is actually more complicated. It also advertises location and allows individuals to communicate with other members of their species. Frogs often call as part of a group chorus, resulting in a large number of interactions. Males are competing to out-signal their competitors. Females may make decisions as to which male to breed with based on an individual's vocalizations.

The sounds of our two Alberta species are quite different: Wood Frogs make a duck-like "quacking" while Boreal Chorus Frogs make a "trill," a bit like running your fingers down the teeth of a comb.

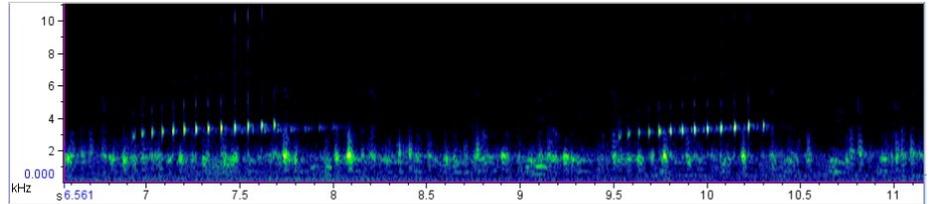
How do frogs produce their calls? As always, structure is related to function and, like most vertebrates, frogs tend to produce calls when expiring. However, in order to force air out of the lungs, males contract specialized trunk muscles which are not used for respiration. They close their mouth and nostrils, then force air from their lungs through the trachea and larynx and across small but well developed vocal chords. The cords vibrate and produce sounds.

Frogs also have inflatable vocal sacs, which are chambers off the mouth (buccal) cavity. The entrance to the buccal cavity is controlled by a muscular slit, so as air enters it, it acts as a resonating chamber. This process increases the efficiency of the sound production.

Interestingly, the vocal sacs differ between the species: they are paired in the Wood Frog and single in the Boreal Chorus (shown here). Note

that the inflated vocal sac is huge when compared to their body size. Its yellowish colour may act as a visual signal.

It is interesting to see frog song in sonogram. When you hear the single "trill" of the Boreal Chorus Frog (as seen between 6.9-7.7s and 9.5-10.3s) it is actually made up of 13 vertical frequency bands in a time period of approx. 0.8s. The predominant frequency is about 3000 Hz, which is somewhat higher than the 1500 Hz found in the Wood Frog. If they call at a rate of about 24 per minute, they are able to issue about 1,440 trills per hour. Imagine the energy required to contract the abdominal muscles in order to call continually for several hours!



To help with these energy demands, research has shown that some frogs have physiological adaptations such as highly aerobic muscle fibres with a fantastic blood supply and large energy supplies.

Both Wood Frogs and Boreal Chorus Frogs are often heard calling at the same time. It appears that amphibian auditory systems are tuned to the frequency only of their species; hence, they filter out calls at different frequencies. Presumably Wood Frogs would hear best at the lower frequencies and Boreal Chorus Frogs at the slightly higher ranges.

I heard the first frogs this year on April 15th. The last few moist years have been incredibly successful in terms of breeding. This spring is considerably drier so let's cross our fingers and hope that there will be enough water, and that it will last long enough for them to complete their breeding cycle.



HIGHWAY 36 FIELD TRIP A SUCCESS!

by Judy Boyd

The Highway 36 field trip was a roaring success. Nine people went out to the Alliance area for a grand total of 14.25 hours of spring nature watching! They drove 457 km and saw 73 animal species (16,040 individual critters): 61 bird species (15,972 individual birds), nine mammal species (50 individuals), two amphibians and two plant species in bloom.

Mammal watching was especially great, as the group saw such interesting species as pronghorns badger, skunk, fox and beaver.

Sandhill Cranes (total of 9,830 seen) filled the skies and the fields but Snow Geese numbers seemed to be down from previous years. Other notable sightings include Hudsonian Godwits, Gyrfalcon, American White Pelicans and Sharp-shinned Hawk.



Photo by Judy Boyd



Dennis Cressman has a chickadee at his feeders that sports a totally white tail. He lives on new the Little Red Deer River about seven km east of Eagle Hill.

BIRD FOCUS

Keith Kline will be leading early morning bird walks. The walks will start at 7:00 am. Contact Keith for more information: [403-347-6883](tel:403-347-6883)

May 2: Behind the College. Meet in the southwest parking lot by the weather station.

May 9: Heritage Ranch. Meet in the first parking lot.

May 23: Bower Woods. Meet in the North east corner of the Bower Mall parking lot

May 30 Kin Canyon. Meet in the upper parking area across from Twilight homes (lodge)

June 6: Gaetz Lakes Sanctuary. Meet in the KWNC parking lot

June 13: Riverbend Golf Course. Meet in the first parking lot at the bottom of the hill.

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:



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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