

One Hundred Years in the Life of a Central Alberta Forest

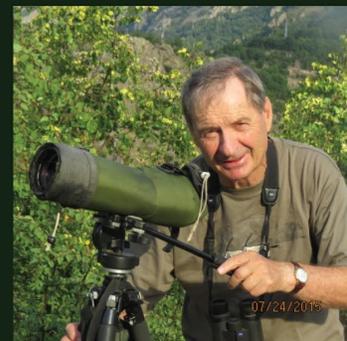
**Thursday, November 26 @ 7:30pm
Kerry Wood Nature Centre
Red Deer**

Humankind's evolving impact on biodiversity is not often well documented, and our concepts and perceptions of biodiversity are usually based on the HERE, the NOW and on predictions of the FUTURE. In addition to local influences, the biodiversity of the modern world is also being greatly impacted by man's ever increasingly heavy footprint on the globe's resources. Naturalists can easily become discouraged with the gloomy prospects before us.

Through aerial photo interpretation, Dr. Carbyn will tell the story of a 320-acre tract of land by tracing the changing impacts on the landscape over a 100-year period. Through this story, he proposes that resignation of the inevitable is not a way to face the future. We need to be both proactive and reactive, depending on the possibilities that present themselves.



photos by
Lu Carbyn



Lu Carbyn is an internationally recognized wildlife biologist who specializes in the ecology, conservation and management of mammalian carnivores and their prey. He is an Emeritus Research Scientist with Science and Technology (Department of Environment, Ottawa), and Adjunct Professor at the University of Alberta. He became a biologist with the Canadian Wildlife Service in 1967 and a research scientist in 1974. Carbyn has published and edited 5 books, published numerous papers, on canid ecology, conservation and natural history. He has been a member of the (IUCN) Wolf and Canid Specialist Groups since 1978. In retirement he has pursued his interests in wildlife research, conservation and nature education. Recent awards included the Distinguished Service Award (2015) from TWS and the Queen's Medal (2013) for significant achievements by Canadians.

Read more about Dr Carbyn by visiting his website: <http://www.lucarbyn.com/>

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SEASONAL SIGHTS AND SOUNDS OF ALBERTA: CHICKADEE-INSPIRED BOOK RECOMMENDATIONS

By Sally Stuart

It's November and most birds have migrated. I am listening to the cheerful "chick-a-dee-dee-dee" song of the Black-capped Chickadee (*Poecile atricapillus*). One has to admire the tenacity of these birds, which are one of our smallest winter residents. Chickadees are also the first harbingers of spring—in early January they sense the lengthening of the days and begin to sing more of their alternative "Hey-Sweet-ie" song.

Chickadees remind me of several of my favourite books, all of which reference this incredible bird. Although these books, written by experts, have been around for several years, I highly recommend them for the wildlife enthusiast.

The Singing Life of Birds: The Art and Science of Listening to Birdsong by Donald Kroodsma is an absolute must. If you are interested in learning to record and analyse bird songs, Kroodsma can help. He will introduce you to the fascinating world of sonograms and birds will never quite sound the same again. It was from Kroodsma that I learned that the "Hey- sweet-ie" song is not coded for in the genes but, as in most song birds, must be learned.

Interestingly, nearly all chickadees in North America produce a similar song. There are some exceptions, such as birds in Martha's Vineyard which sing a slightly different song. When I run the local Sylvan Lake chickadee song through the sonogram (as shown below) I discover—just as Kroodsma said—that the "Hey" is a much higher pitch (predominant frequency about 3800 Hz) than the lower "sweet-ie" (predominant frequency about 3300Hz). This seems fairly consistent from bird to bird, although the timing seems to vary, from 0.4 to 0.5s. Interestingly the "sweet-ie" as we hear it appears to

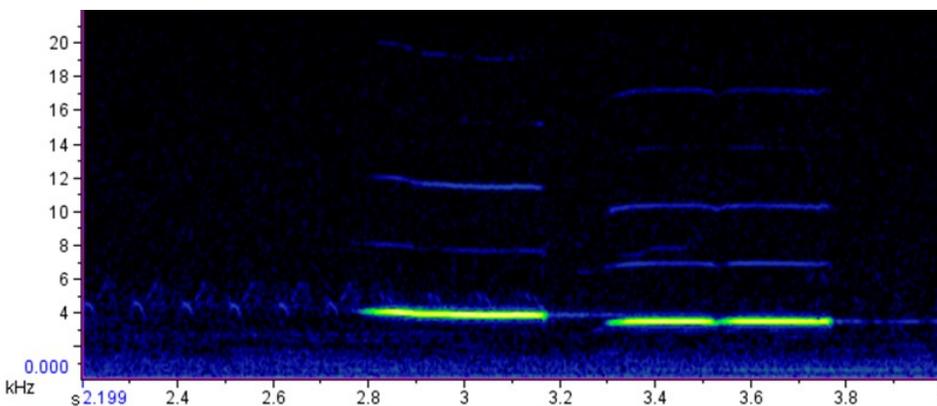
be two sounds, sweet-ie, but in reality it's actually a single sound, which part way through becomes an imperceptible whisper (see the sonogram at about 3.5 seconds), therefore sounding as if it is two separate sounds.

Another favourite book is **Winter World: The Ingenuity of Animal Survival** by Bernd Heinrich. In addition to being beautifully illustrated, this book discusses the incredible physiological adaptations which animals have evolved to allow them to survive winter's extremes.

Heinrich explains that, in order for chickadees to survive the extreme cold, they have fantastically dense plumage which they fluff up. However, in order to survive the colder temperature at night it's much more complicated. They find roost sites and huddle together but as they're so small they must also enter a state of torpor. This means they drop their body temperature, shiver violently, and become slightly hypothermic. To do this requires constant feeding in the day time as they burn through large amount of energy reserves (fat) at night.

Another recommended book is Tim Birkhead's **Bird Sense: What It's Like to Be a Bird**. In this book, which centres on the anatomy and physiology of birds, Birkhead explains how the ability of the chickadee to hear and interpret sounds actually varies with the seasons.

Hormones in spring affect birds in many different ways, the most surprising of which relates to their hearing ability. This change does make sense, as most birds are depend on their spring songs to attract mates, communicate etc. (He also explains that experiments with humans show that female hearing is affected by estrogen levels. Male voices actually take on a different tone just at ovulation time! Interpret this as you will!)



So, as I listen and watch this tiny resilient bird, I am struck by how perilous and fragile their lives are, especially with the approaching winter.

It's incredible how much research has been conducted on this tiny creature. Scientists owe much to the chickadee for the advancement in our understanding of bird physiology.



WATERWALKER FILM FESTIVAL

The Wilderness Ventures Club of Burman University will be sponsoring the 2015 **WaterWalker Film Festival**, to be held on November 28 and 29 beginning at 7:00 PM in the Admin Building Auditorium. Tickets are \$10/advance or \$12/door. You can reserve tickets by contacting David Delafie (ddelafie@burmanu.ca).

<http://www.paddlingcanada.com/waterwalker-film-festival/1063-waterwalker-film-festival.html>
<http://www.paddlingcanada.com/waterwalker-film-festival/1067-waterwalker-film-festival-winners.html>

BIRDING WEBSITE LAUNCHED!

RDRN's very popular Birding Trail Guides (City of Red Deer and Central Alberta) are now available online! Check them out at birdingtrailsalberta.com or access it via the link on the RDRN website.

There is an active component to this website, with all birders encouraged to submit their sightings to the RDRN. Sightings can be submitted to rd.rn@hotmail.com or at <http://birdingtrailsalberta.com/bird-sightings> (click on the "submit sightings" tab).

Congratulations to Judy Boyd and Doug Pederson for their tireless efforts in getting this website up and running!

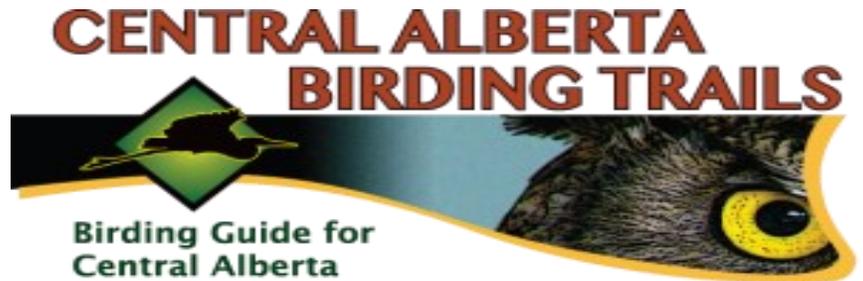


Photo by Myrna Pearman



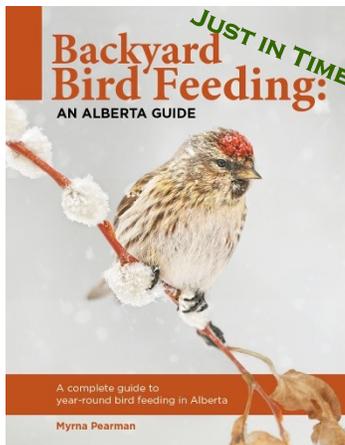
MEMBER'S PHOTOS: Spruce Grouse by Bonnie Mullin, Ruby-throated Hummingbird by John Cad- dy, Sticky Purple Geranium with visitor by Don Wales.

NATURE WALKS

Keith Kline leads Sunday nature walks to interesting places in Red Deer. Contact Keith for information (403-347-6883 or redkline@hotmail.com). Meet at 2:00 PM.

November 8 and November 15—Gaetz Lakes Sanctuary. Meet at KWNC.

November 22 — McKenzie Trails. Meet in the parking lot by the washrooms.



Ellis Bird Farm's newest publication, **Backyard Bird Feeding: An Alberta Guide** is hot off the press!

This book is a revised and expanded version of **Winter Bird Feeding: An Alberta Guide**. It is full of great information and beautiful images. The book is available at Peavey Mart and Kerry Wood Nature Centre.

All proceeds from the sale of this book support the conservation, education and research programs of Ellis Bird Farm.

FLOWER FOCUS

10:00 AM—November 24

KWNC

SPRING WILDFLOWERS OF IRELAND

Tony Blake

Check out the spectacular flora of Ireland from Tony's spring trip to Ireland!



Photos by Don Wales

REMEMBERING RAY CROMIE: Ray Cromie, a long-time and very beloved member of Alberta's naturalist community, passed away on October 24.

Besides being an expert on owls, Ray was a very knowledgeable all-around naturalist. He could just as easily talk about warblers, butterflies and plants, as about the nesting habitat of Saw-whet Owls. Ray banded thousands of owls over the years. Ray was also a tireless volunteer, giving presentations to many different groups. Most importantly, Ray showed us, by shining example, how to be a great leader, mentor and teacher. And how to be a good, generous person. And he did it all with an awesome and charming sense of humour. *Gerald Romanchuk*



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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