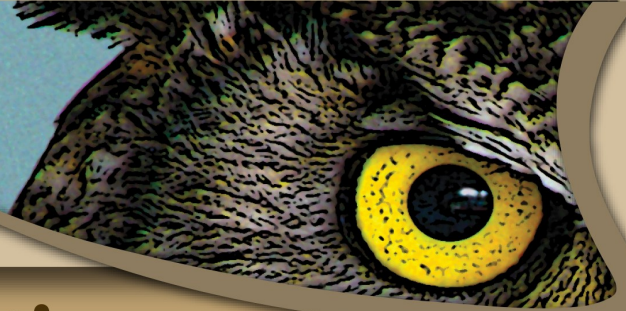


# The Red Deer River Naturalist



March 2026

Editors: Myrna Pearman & Susan van der Hoek



## Research Presentations by Red Deer Polytechnic Students

Senior-level science students from RDP Biology degree program will discuss various 2025 research projects.

**26**  
**March**  
**2026**  
**7:00 PM**  
**Kerry Wood**  
**Nature Centre**  
**Red Deer**



Photo Parks Canada



### Exploring Utilization of a Highway Overpass in the Bow Valley Region, AB

Arynn Sideritsch



Photo by Jade Good

### Occurrence and Temporal Activity of Urban Moose in the City of Red Deer, AB

Eric Wolstenholme-Schmidt



Photo by Myrna Pearman

### Exploring Urban Coyote Ecology in the City of Red Deer, AB

Meghan Heistad

### The Use of Environmental Samples to Assess Cortisol and other Factors in Moose

Julia Butcher and Brandon Kalinowski



Photo by Myrna Pearman



Photo Nature Alberta

### Identifying Alberta Bat Species using Bioacoustics

Madi Mackee

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**All are Welcome**

# SEASONAL SIGHTS AND SOUNDS OF ALBERTA

## WITH DR. SALLY STUART

### THE SNOWY OWL

To glimpse an apex arctic predator in Alberta is a privilege. My first encounter with such a predator, the Snowy Owl (*Bubo scandiacus*), was about 22 years ago. While skiing down an inlet of Cygnet Lake, we came across a magnificent white male owl perched on a fence post by the canal, surveying the desolate marsh. Since then, I had seen them only rarely until December 2025, when one – an immature bird or a female – spent about a week close to our home.

Snowy Owls breed in the Arctic Tundra. Some individuals, mostly females, remain in the arctic overwinter, but juveniles (birds in their first year of life) typically migrate south. Small numbers are regularly spotted in Alberta each winter, with “irruptive migrations” occasionally occurring. Irruptions indicate successful breeding seasons, resulting in a high number of juveniles migrating south.

Originally placed in the Genus *Nyctea*, genetic analysis determined that they were closely related to Great Horned Owls, so they are now classified with them in the *Bubo* genus. Not all scientists agree with this reclassification.

All owls possess certain anatomical and physiological traits which include specialized eyes, an acute sense of hearing, and feathers modified for silent flight.

The harsh tundra environment requires additional adaptations. Insulation is provided by incredibly dense feathers, which also protect their legs. In 1992, David Parmelee determined that, since even moderate wind speeds of 27 km/hr. intensifies heat loss, Snowy Owls also have an insulating layer of fat. This additional fat makes them the heaviest owl in North America weighing up to 2.4 kg.

The open tundra environment allows owls to communicate both visually and acoustically over long distances. Acoustic communications include whistles, hissing, bill snapping and low-frequency throaty hoots that can travel up to 11 km.

Snowy Owls are nomadic, travelling huge distances on an annual basis, especially when looking for suitable breeding sites. Migration is also exhausting for heavy and well-insulated birds, so it is not surprising that stories of fatigued owls date back to 1872. Rev Wood observed, in his book (*The Illustrated Natural History*), Snowy Owls sitting in the rigging of ships. On one

occasion, no less than 60 exhausted birds were found. Once, a sailor who had been sent aloft was terrified when he spotted the glowing yellow eyes of a Snowy Owl and declared that “Davy Jones was sitting in the main yard!”

Snowy Owls eat primarily small mammals, with one study by Denver Holt et al. (2024) determining that lemmings were by far the most important prey species. Voles and other small mammals are also taken, and there have also been rare observations of them eating fish.

Breeding success is determined by the population of lemmings. A pair of owls can assess lemming breeding density when searching for a nest site and will move on if it is too low. When lemmings are plentiful, owls lay up to eleven eggs, but in a poor year as few as three. Some years they do not breed. *The Encyclopedia of Mammals*, edited by David Macdonald (1999), includes a picture of a wood carving from 1555 depicting a lemming migration. What is fascinating is that they are falling out of the sky! The same book describes how according to legend they “are spontaneously generated from foul matter in the clouds and fall to earth during storms.” They do not hibernate in winter, but live and breed below the snow, with some species even growing extra-large claws on digits of the forelimbs to help scrape through the snow.

There is no doubt that Snowy Owls are extremely sensitive to human disturbance. In recent years, they have been plagued by a warming climate, and incursions onto their territories by humans for resource extraction and military bases. In 2017, the International Union for Conservation of Nature classified *Bubo scandiacus* as a vulnerable species. Subsequently, Rebecca McCabe et al. (2024) estimated the world population of breeding adults to be less than 28,000, an estimated population decline of about 30% over the past 30 years. Will these owls be able to recover from this?

To learn more about these extraordinary birds, be sure to watch some of the phenomenal videos posted on *YouTube* by the Russian scientist Vasily Baranyuk, who has studied them extensively over many years.



## DID YOU KNOW WITH SUSAN VAN DER HOEK

A group of geese is called a gaggle when they are on land or in water. When in flight, they may be referred to as a skein, team or wedge when seen in the traditional V shape. These terms reflect the different behaviours and formations of geese, whether they are resting, migrating or flying together. There are five species of Geese that frequent Alberta: Canada Goose (*Branta canadensis*), Snow Goose (*Anser caerulescens*) [shown at left], Ross's Goose (*Anser rossii*), Cackling Goose (*Branta hutchinsii*) and Greater White-fronted Goose (*Anser albifrons*). Only one, the Canada Goose, breeds in the province while the others migrate through in the spring to breed in the high Arctic and in the fall going south.



Geese feed on grasses, aquatic plants, grains, vegetables and insects. In Alberta, they are commonly found on and near lakes, wetlands, ponds and agricultural fields. Migration periods offer the best opportunities for observing large flocks. Alberta's annual Snow Goose Festival in Tofield, Alberta celebrates the spring migration, offering a chance to witness thousands of geese on their northward migration. This year's Snow Goose Festival will take place on April 25-26, 2026.

## WINTER BUG COUNT – CHERIE APPLEBY

On Sunday, February 1, 16 volunteers gathered at Kerry Wood Nature Centre as part of a citizen science initiative known as the Winter Bug Count. The group was led by renowned expert Alberta naturalist John “the Nature



Nut” Acorn, Nature Alberta’s Nick Carter and Benny Acorn (*shown left, photo by Cherie Appleby*). The project began in 2011 out of simple curiosity when John wondered how many arthropod species could be found during the depths of winter; and from that question the Winter Bug Count was born. The rules are simple: any “wild” bug, found either inside or outside a building, counts.

After a brief introduction, participants spread out across the sanctuary to begin their search. Inside the building, a small false widow spider and several box-elder beetles were found. Outside, another box-elder beetle was sighted along with a nearby cobweb spider. A running crab spider was also spotted perched on the siding, blending almost perfectly with its surroundings. Despite the  $-2^{\circ}\text{C}$  temperature, the day proved to be a great reminder that insects remain active year-round despite frigid temperatures. Other citizen science projects coming up can be found at <https://rdn.ca/programs/may-species-count/>.

<https://rdn.ca/programs/may-species-count/>.



## NATURE CENTRAL WITH ABBEY VAN HEUVEL

In addition to leading monthly trips, I continue to plan our summer events, post a *Site of the Week* and have been busy updating [naturecentral.org](http://naturecentral.org) to enable easier navigation. Ed Karpuk (*right*) is working diligently to update our Story Map and will showcase it at the April meeting. Check our FB page and website for updated information. If you would like to get on our mailing list, please email me at [nir.rdrn@gmail.com](mailto:nir.rdrn@gmail.com). We will post the March field trip soon!



The Buffalo Lake Nature Club would like to thank RDRN for a grant that enabled us to purchase our own projector, screen and storage cart, and to print both bookmarks and brochures.



**Speaker: Dr. Jessica Haines — Ground Squirrels of Alberta**  
**Thursday, March 19 @ 7:00 PM**

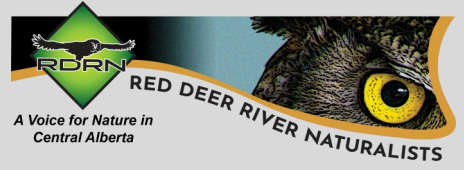
Lower Hall of St. George's Anglican Church on 4817- 51 Street, Stettler



# UPCOMING EVENTS AND SPEAKERS

April 23, 2026: Ed Karpuk: Nature Central Story Map and Lorne Fitch reading from *Conservation Confidential: A Biologist Investigates the Clash between Progress and Nature*

May 2026: May Species Count



**NATURE ALBERTA:** Nature Alberta hosts interesting monthly zoom presentations—<https://naturealberta.ca/events/>

## IN THE ALBERTA WILDERNESS WITH DON AUTEN: GREAT HORNED OWL

My trail cameras are set up mostly for mammals but since wildlife share the same territories in the Alberta wilderness, I've also captured photos of birds. This month's photo is of Alberta's provincial bird, the Great Horned Owl.

Great Horned Owls are the most common owl species in Alberta and second only to the Snowy Owl in weight. They are found throughout the province and are the owl species most often seen and heard. Despite their name, their "horns" are actually feather tufts. These tufts, which are thought to help provide camouflage, can be raised or lowered at will. Notice that the "horns" in this photo are not erect.

Great Horned Owls are very successful because they are adaptable and because they have a highly varied diet. Alt-

hough mammals constitute about 90% of their diet, they will also catch and eat birds, reptiles, amphibians and insects. They are highly aggressive, powerful predators and are not afraid of tackling prey much larger than themselves. It's interesting that about 50% of adult turkeys are taken by these owls! Geese, ducks, skunks, porcupines and other owls and hawks are not safe from a hungry Great Horned Owl.

Great Horned Owls mate for life and are early nesters. Like all owls, they do not build their own nests but use nests built by other species such as Red-tailed Hawks. At this time (early March), Great Horned Owls are already sitting on eggs, with some close to hatching!



*RDRN has added our voice to a chorus of concerned Canadians who recently learned that a small group of hunters have been petitioning the Canadian Wildlife Service to open up a Tundra Swan and Mourning Dove hunting season across the Prairies, and to increase the hunting locations for Sandhill Cranes in Alberta. We have sent letters and await a decision.*

**Social Media: 6501 Facebook Members; 301 X Followers; 562 Instagram Followers**

The Red Deer River Naturalists, the first natural history organization to be established in Alberta, was founded in 1898 and incorporated 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 7:00 PM on the fourth Thursday of most months at Kerry Wood Nature Centre. Non-members are welcome.

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

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