



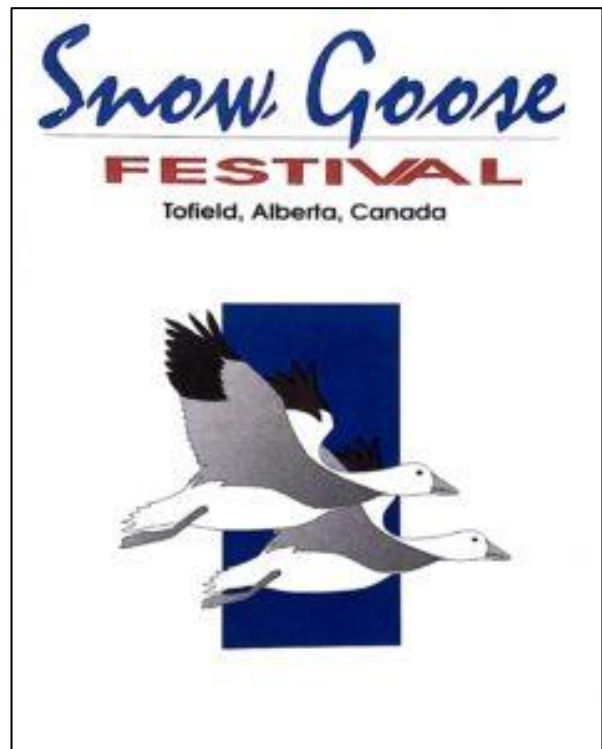
Editor Richard Hedley

Volunteers Needed for the Snow Goose Festival

BBO NEEDS YOUR HELP! The Snow Goose Festival based out of Tofield will be resuming on 22-23 April 2023. In the past the Festival attracted over 4,000 people to visit Beaver County to view the spring migration spectacle of geese and other birds. Shuttle buses will be operating between the Tofield Arena and the Beaverhill Natural Area for folks that want to tour to BBO. We need leaders to guide the public on these three-hour tours, up to 8 leaders per day.

The public are also taken by bus to migration hot spots. The festival will be running buses Apr 22 and 23 which need volunteer guides to help people with bird id and to manage sightings and stops. Up to 16 buses will run each day. Buses will be running 2-hour and 3-hour trips from the Tofield Arena.

We encourage you to volunteer to help with these tours to introduce the public to birds and bird conservation. You can self-register here <https://volunteersignup.org/RH3PM>. A training session will be held on April 17/18 to inform you about the tours and birds. Another related need is for volunteers to lead bus tours and hikes to BBO – sign up for those tours here <https://volunteersignup.org/BYAE4>



If you are interested or would like further information please let BBO know at biologist@beaverhillbirds.com. Please put Snow Goose Volunteer in the subject line.

Territorial Acknowledgement: Beaverhill Bird Observatory is located within Treaty 6 territory, a traditional gathering place for diverse Indigenous Nations, including the Plains Cree, Metis, Blackfoot, Saulteaux and Nakoda Sioux People, who are the original stewards of the Beaverhill Lake area since time immemorial.

Other Upcoming BBO Events, Spring 2023

World Migratory Bird Day

When: May 13, 2023 from 1:00 – 4:00 pm

About: This year's theme for the World Migratory Bird Day is water! This is a free event that is open to the public. No tickets required. Join the BBO biologists for a fun filled afternoon to celebrate the return of our feathery friends.

Schedule of events

1:00 pm – Interpretive banding demonstration, kids activities and meet Maple the Peregrine Falcon

2:00 pm - Guided Nature Hike to the Weir and water sampling demonstration

3:00 pm - Toss feathers for the nesting Tree Swallows and Purple Martins

3:30 pm - Bird Conservation Presentation

Great Canadian Birdathon

When: May 22, 2023

About: On May 22, 2023 BBO staff will be participating in Birds Canada's Great Canadian Birdathon. This is a national event raising crucial funds to support bird conservation efforts throughout Canada conservation with part of the proceeds coming back to the BBO. All contributions to the Great Canadian Birdathon are tax-creditable. Click [here](#) to donate to our team, the Beaverhill Bird Nerds!

Songbird Banding Events

When: May 18 to June 9, 2023

About: The BBO will once again host ticketed songbird banding events this spring. The events run from May 19 to June 9, 2023 and start 30 minutes before sunrise. Birds captured include warblers, nuthatches, woodpeckers, thrushes, blackbirds, orioles, sparrows and more! Join our biologists for a morning in the woods to learn about the research being conducted on our feathery friends and see live birds up close and personal!

Hot drinks and snacks will be provided and between net checks our biologists will lead discussions about the importance of bird research, conservation, and how we can all make simple changes in our lives to become more environmentally friendly.

TICKET PRICES (available on EventBrite in May) - limit of 20 tickets per morning.

General Admission: \$25/person

Child (6-16 years of age): \$10/child

Children age 5 and under are FREE when accompanied by parents

WHAT TO BRING:

- Warm clothing and rubber boots– dress for the outdoors!
- A thermos/travel mug with your choice of warm beverage (you will want it!)
- Binoculars if you have them!

BBO's Annual Big Birding Breakfast

When: May 27 and May 28, 2023

About: Celebrate the return of songbirds migrating at the Beaverhill Bird Observatory while enjoying a fantastic crepe breakfast in the woods. Walk the net lanes with our biologists, see birds being banded up close and personal, and learn about our feathered friends. Birds captured include warblers, nuthatches, woodpeckers, thrushes, blackbirds, orioles, sparrows and more!

SCHEDULE

5am - 11 am - Mist netting and bird banding

7am - 11 am - Breakfast of crepes, bacon, fresh fruit and more!

9 am - Guided nature walk, children's activities and crafts

TICKET PRICES (available on EventBrite in May)

Adult: \$30 each

Youth (6-16 years): \$10 each

Children age 5 and under are FREE when accompanied by parents



WHAT TO BRING:

- Warm clothing and rubber boots– dress for the outdoors!
- A thermos/travel mug with your choice of warm beverage (you will want it!)
- Binoculars if you have them!



A Fond Farewell: 10 Years of Memories at the BBO

By Sara Pearce Meijerink

Believe it or not, it's been over 10 years that I have been involved at the BBO, one way or another. It's amazing how fast time flies. Starting off as an eager volunteer in the fall of 2012, I moved to Alberta from Ontario as a recent graduate and was honestly just looking for somewhere to go that would provide me housing while I volunteered and learned something new. That autumn I worked beside the BBO head biologist for an entire month, learning how to handle and band my first bird ever: the Northern Saw-whet Owl. Oh, how cute Saw-whets are! I quickly fell in love with them and with the work the BBO does.



Sara in her first year of owl banding (2012).

Over the next few years, I would regularly return to BBO in the fall as a full time volunteer to band songbirds and owls with the biologists. It was always the highlight of my year and a magical time to be in a cabin in the woods, heated by a wood stove, staying up late in the evening capturing our feathery friends. Often in the early years it was just me and the head biologist working those evenings together. We spent time between net checks learning how to knit mittens and watching movies! If we were lucky enough to have a visitor join us, we would invite them into the small living space inside and everyone would relax on the couches, enjoying hot cocoa while we waited for the owls.

BBO has often felt like a secondary family to me. Everyone who works here has always been so welcoming and eager to share experiences with new people. So when a job position opened up in 2017, you bet I jumped on it instantly! Thankfully, since BBO realized they weren't getting rid of me anytime soon, they decided to employ me.

The last 6 years of working at the BBO have been absolutely phenomenal. I have watched our organization go from a little shack in the woods that few people knew existed to this beautiful organization that hosts over 1,500 visitors annually and reaches an additional



Sara with a Red-tailed Hawk.

10,000+ students every winter about the importance of bird conservation and climate change. I've seen our 30+ year old lab building that used to house weasels in the cupboards, flying squirrels and wasps in the attic, mice in the wall, and – oh yeah – biologists storing their food in the kitchen, be replaced with a new 2 story research and education centre! What are these luxuries known as cell reception and Wi-Fi? You mean staff no longer need to drive into town daily to answer emails? Oh, how times have changed (and for the better!).

I've had so many memorable moments spent in the Beaverhill Natural Area and Tofield Area over the years. There was Frank the porcupine, who was a nightly visitor at our bird feeders for many years, eating all the spilled seeds underneath. Mom's Ice Cream Corral has always been a staple of the BBO lifestyle, with staff and volunteers stopping by to enjoy a nice cold snack on a hot sunny day. The best northern lights I've seen in my entire life happened when I was owl banding at the BBO. The northern lights were dancing non-stop for at least 6 hours and during that period, we had 2 SPECTACULAR showings! Vivid ropes of greens with highlights of purple danced and swirled above us, with 2 Great-Horned Owls silhouetted on our Motus tower in the foreground hooting for joy at such a magical evening. I've also banded some amazing birds over the years, including a Barred Owl (See the BirdByte video with my overflowing enthusiasm!), a Pileated Woodpecker (another wonderful BirdByte video!), a Black-throated Blue Warbler, an Evening Grosbeak and of course the Great Horned Owls.

It has been an absolute privilege to be involved with the BBO for so many years. I have met many wonderful people through this work and made so many beautiful friendships which have brought joy and laughter to my life. I have, in return, tried to share that joy with everyone I meet! After 2 years of being the assistant biologist and 4 years working as Head Biologist, though, it is now time for a change in my life. So it is with bittersweet memories that Taiga (my dog) and I leave BBO to continue my career out east working with wildlife. Thank you to all the staff, board members, volunteers and visitors who make the BBO such a magical place. You are all amazing, keep sharing the love of our feathery friends with others and I will miss you all so much!



Sara over the years. Top left: Sara learning to band her first Hairy Woodpecker (2012). Top right: Sara banding BBO's first ever Barred Owl (2021). Bottom left: Sara celebrating ten years of Northern Saw-whet Owl banding (2021). Bottom right: Sara and her dog Taiga.

2022 Intern Reports available now

BBO hosted eight undergraduate interns in 2022. Each intern carried out a project about some aspect of the natural history of the Beaverhill area, and wrote a final report summarizing their findings. Final reports are now available on the BBO website – [click here to read them \(search for 2022 in the search bar\)](#).

The breadth of topics covered in the reports is testament to the great diversity of wildlife that resides in the Beaverhill Natural Area; this year's reports covered everything from birds to bats to butterflies.

- Tessa Frisky studied the effects of rainfall on clutch size in Tree Swallows.
- Jana Teefy (field staff) initiated a marshbird monitoring program focusing on several species of secretive wetland birds.
- Amelia Murray and Madison Pusch examined competition for nest boxes by House Wrens and Tree Swallows.
- Raegan Giesbrecht undertook a bird census along the edge of Beaverhill Lake.
- Jon Van Arragon (field staff) summarized the forest breeding bird census in 25 hectares of forest.
- Dylan Perrott examined the phenology of butterfly observations across three years' of monitoring data.
- Grace Wagram used acoustic monitoring to examine the effects of construction activity on bat activity.
- Hailey Lewicki studied the influence of weather and proximity to water on bat house occupancy.

Congratulations to the interns on a job well done. We look forward to seeing what exciting projects will be completed in summer 2023.



Read the BBO Annual Report!

After a busy 2022, BBO staff worked hard to produce the latest installment of BBO's annual report. It summarizes the many activities and initiatives that BBO was involved with in 2022. Highlights include:

- Exciting migration monitoring seasons in spring and fall, which were as hectic as they've ever been thanks to the decision to open new nets along the shore of Beaverhill Lake.
- A new Marsh Bird Monitoring program initiated by staff member (current head biologist) Jana Teefy.
- Another year of BBO's popular Owl Migration Monitoring program.
- Several events and programs including the Young Ornithologists' Workshop, the Big Birding Breakfast, and the BirdSmart Education Program, as well as contributions from several interns.

For a more detailed summary of activities in 2022, [click here to read the full report](#).

BBO Members Now Qualify for a FREE Lifetime Membership with Nature Alberta.

Nature Alberta has announced that members of BBO and other Nature Alberta member clubs are now eligible for a FREE lifetime membership with Nature Alberta. Don't miss out on this great opportunity to add your voice on the issues facing Alberta's environment. To sign up, [just click this link and fill out the form](#).

New Bunkhouse Will Be Ready for 2023 Season

Thanks to the hard work of Colin Maclellan of Maclellan Carpentry, Camrose, our new bunkhouse will be ready for our opening on May 1. With three separate rooms, each with a bunk bed, this new Nuthatch Nest will allow staff to sleep comfortably when they are on different schedules for morning songbirds and evening owls in the autumn. We thank Colin and Graeme, for persevering through the winter to have the bunkhouse ready for spring.



The new bunkhouse, ready for spring activities.



Geoff Holroyd's Young Ornithologists' Workshop

A Natural History Camp

July 31- August 6th 2023

Are you 15-18 years old and interested in birds?

Would you like to experience hands-on learning on how to identify, sex, age and band birds at Alberta's oldest bird banding station?

Would you like to spend a week living in a camp setting with other teens with similar outdoor interests, learning from biologists and going on field trips? Apply for this **FREE** one-week workshop (travel to the station not included).

Location: Beaverhill Bird Observatory, near Tofield, AB.

Visit www.beaverhillbirds.com for more details and to download your application form!

Questions and applications to:
helentrefry@gmail.com

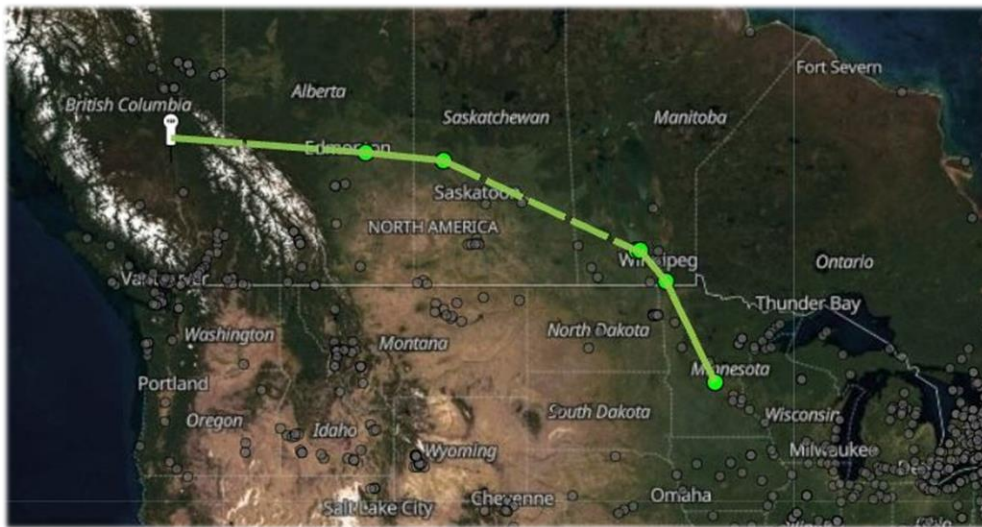


BBO's Motus tower has tracked its first bird.

You can help support future migration tracking studies.

With many migratory bird populations in decline, it is important to know how birds move through various landscapes during their annual cycle. The Motus (Latin for 'movement') Wildlife Tracking System is a collaboration of researchers maintaining a network of automated receiving stations throughout North America to track the movements of radio-tagged wildlife. The Motus system enables a community of researchers, educators, organizations, and citizens to undertake impactful research on the ecology and conservation of migratory animals, including birds, bats, and insects.

Motus stations allow us to detect the passage of a bird that might have been tagged in Central or South America on its route to nest in northern Alberta. In turn, birds tagged in Canada might be detected on its travels to other parts of the world.



The flight path taken by White-throated Sparrow #39722, which was detected near BBO's Motus tower on September 26, 2022. Stations where the bird was detected are shown with green dots, and other stations across Canada and the US are shown in gray.

The BBO powered up its Motus tower in 2022, and on September 26, 2022 the station detected its first bird – a White-throated Sparrow banded in Prince George, BC, in late May, 2022. It flew past BBO at about 1:55 am. Better yet, the bird carried on and was detected four more times in Saskatchewan, Manitoba, and Minnesota, where it was last detected on October 15, 2022. A second White-throated Sparrow was detected following a very similar path a few days later and ended up in Missouri.

These results highlight the fantastic potential of Motus to uncover the mysteries of bird migration. BBO is excited to build upon these early successes and start to deploy tags of our own. If you want to support BBO's Motus project, your gifts will allow us to attach Motus tags (~\$200 per tag) to target birds, such as the Northern Saw-whet Owl and Least Flycatcher. In addition, a gift of about \$2000 will allow us to add more stations in the region to more accurately track bird movements. All of this research by BBO staff, students, researchers, and professors will increase our understanding of the ecology of bird populations and support their conservation.

Attracting and keeping Purple Martins at your colony

By Braeden Kelly and Glen Hvenegaard, University of Alberta - Augustana Campus,
Camrose, AB

Purple martins are unique because most individuals nesting east of the Rocky Mountains use human-made cavity nest boxes. In the past, Indigenous Peoples hollowed out gourds for martins to nest in to deter insect pests from destroying crops. Since then, martins have become dependent on nest boxes and can thrive by living and nesting nearby human settlements.

However, like most aerial insectivores across North America, eastern purple martin populations have decreased. From 1966 to 2015, populations dropped by 0.69%/year in Canada and 0.91%/year in the USA, likely due a decrease in insect populations brought on by climate change and pesticide use. Nevertheless, martin populations in Alberta have fared better, by comparison, increasing by 2.69%/year during the same period.

Today, many people get satisfaction from acting as “landlords” for Purple Martins, by building and maintaining nest boxes. The proper design, location, and management of martin nest boxes is critical to attract nesting martins. Therefore, successful martin colonies require knowledgeable and committed landlords to manage nest boxes. Landlords have varying levels of knowledge, engagement, and methods to support martins, based on martin guides, anecdotes, and shared wisdom about best practices to attract martins. To date, however, we have little scientific knowledge about which methods work best to maximize on martin occupancy in managed colonies. Ultimately, if landlords do not put up nest boxes or manage them poorly, martin populations will likely decline. It is also important for landlords to know that their efforts are making a difference for martin conservation.



A Purple Martin landlord proudly displays a clutch of eggs.

Therefore, we conducted a study in central Alberta to test for relationships between martin occupancy and various landlord stewardship activities that are commonly practiced. In the fall of 2019, we asked 31 martin landlords in Camrose (who supported 45 martin nest boxes) if, over the past 3 years, they conducted any of 8 listed management practices.

We were able to compare these management practices with our annual records of nest box occupancy by martins in those nest boxes. We calculated the percent of years a nest box was occupied, the average percent of nesting holes occupied, and whether martins were present or not during those 3 years.



Two landlords attend to a Purple Martin nest box.

Among the landlords, 52% were male and 48% were female. The average age of landlords was 63.3 years. Landlords had an average of 8.7 years of experience managing martin colonies.

We found that nest boxes whose landlords cleaned nests, removed blowfly larvae, removed competitor nests, and added nest material had higher martin occupancy rates than nest boxes without those stewardship practices. Overall, removing blowfly larvae and cleaning nests were the most important practices to increase occupancy. Other practices, such as trapping competitor species, excluding predators, feeding martins, and adding eggshells, did not have a significant relationship with martin occupancy.

Fortunately, 60% the landlords cleaned nests, and 50% removed blowfly larvae, the most critical practices. Otherwise, 43% added nest material, 20% excluded predators, 60% removed competitor nests, 17% added eggshells, 17% fed martins, and 33% trapped competitors. On average, landlords conducted 3 of these stewardship activities; 10% of landlords conducted all 8 stewardship activities, whereas 37% conducted none. The frequency of nest checks was positively associated with all martin occupancy variables.

We asked landlords about the most effective management practice; the most common responses from landlords were unsure (41%), predator control (18%), active management (12%), cleaning nests (12%), removing nests of competitors (12%), and adding nest material (6%). The most common responses for key constraints were none (28%), sparrows or starlings (28%), not having any nesting martins (17%), Merlins (11%; a predator of martins in the region), time or forgetfulness (11%), and not wanting to disturb young (6%). Landlord age, gender, and years of postsecondary education were not associated with martin occupancy.

We hope that these results can help landlords feel confident that their efforts can increase martin occupancy, especially for cleaning nests, removing blowfly larvae, and conducting

frequent nest checks. If martin landlords improve their management, they can help reduce the decline of this charismatic and ecologically valuable species.

Adapted from Kelly, B.D. and G.T. Hvenegaard. 2022. Impacts of purple martin landlord stewardship activities on nest box occupancy. *Wildlife Society Bulletin* 49(1): e1247. <https://wildlife.onlinelibrary.wiley.com/doi/epdf/10.1002/wsb.1247>

Congratulations to BBO Chair Geoff Holroyd, winner of the 2023 Jamie Smith Memorial Mentoring Award

The BBO is delighted to announce that our current chair of the Board of Directors, Dr. Geoff Holroyd, has won the 2023 Jamie Smith Memorial Mentoring Award from the Society of Canadian Ornithologists. The award will be presented at the SCO annual meeting in London, Ontario, August. This award honours established ornithologists (professional or amateur) from academia, industry, non-government, or government agencies in recognition of displayed excellence in mentoring a new generation of professional or amateur biologists. Geoff exhibits all of the traits required for the award: consistent motivator, diligent in pushing students and colleagues to excel, passion for the discipline, and instilling a sense of integrity in those that he/she mentors.



Geoff kayaking on Islet Lake (photo by Nicolette Doucet).

Geoff benefited from mentors when he was a teenager banding birds at the Long Point Bird Observatory in the 1960's. He banded his first bird in August 1961, yet published his first two scientific articles in 1963 and 1965 while still in high school thanks to the mentoring of the banders at LPBO.

Geoff spent his entire working career with the Canadian Wildlife Service, starting as a wildlife technician and biologist, and then finishing as a Research Scientist and Program Manager (1976-2012) with his research focused on the conservation of endangered bird species. As Program Manager, he mentored countless staff members, inside the CWS and beyond, as direct supervisor, chair of conservation committees, and conference organizer. His many conservation successes included chairing the Peregrine Falcon Recovery Team for 26 years, involving collaborations with, and mentoring of, staff members of the CWS and other conservation organizations, resulting in the eventual downgrading the species from endangered to threatened to special concern.

His 23-year involvement on the Burrowing Owl Recovery Team (as chair for 8 years) resulted in 5 graduate student theses on the topics of survival, dispersal, and food limitations for the species. During this time, he initiated the first Prairie Conservation and Endangered Species Workshops (held triennially). Each workshop provided opportunities for local, young, and emerging researchers, conservationists, and ornithologists to share their findings to the broader community. Many of these workshop participants are now playing leadership roles for bird conservation in various research, park, resource management, and wildlife agencies across Canada.

As an Adjunct Professor at the University of Alberta (1985-2013), Geoff supervised 14 graduate students, and created a new course on the conservation of endangered species that is still taught today. As a result, Geoff inspired many students to integrate a passion for bird conservation into their jobs as wildlife conservationists and natural resource managers across Canada.

His pace in mentoring continued as co-founder of the BBO. He has been Board chair for several periods, actively mentors 3-5 staff each year, supports the BBO internship program, and participates in the Geoffrey L. Holroyd Young Ornithologists' Workshop. Many of the staff members, volunteers, and student interns have entered careers in bird conservation, through further study, research, or additional volunteering. Geoff encourages many of his mentees to share their bird conservation research results with the wider scientific community and public, though, for example, internship reports, scientific papers in top tier bird ecology and conservation journals, and presentations at conservation conferences and public outreach meetings.

Congratulations to Geoff for this award recognizing his outstanding mentoring efforts!

BBO Fundraiser

TRU EARTH SUITE OF
ECO-FRIENDLY CLEANERS

Working to eliminate single-use plastic from the home

LAUNDRY DETERGENT
Clean up your clothes and cut out the plastic - in your home and in the ocean - one Eco-Strip at a time.

DISHWASHER DETERGENT
With a built-in rinse aid, our dishwasher tablets have the best wishes for your dishes.

TOILET BOWL CLEANER
Keep your porcelain throne pristine and the waterways clean.

MULTI-SURFACE CLEANER
Multi-surface cleaner for your multi-purpose needs.

Please consider supporting the Environment and BBO by visiting <https://fundraising.tru.earth/BBO> or Scan QR code to place an order. BBO earns 20% on all purchases made through this link.

You will not be disappointed with their products.

TRU EARTH



The Beaverhill Bird Observatory is a proud member of the Beaver County and Tofield communities. We thank our many supporters and funders that are shown below personal donations including in memory of Mary Hughes Weir. Visit www.beaverhillbirds.com for more information.



Environment and Climate Change Canada



Employment and Social Development Canada



Claystone Waste Ltd