



# **Beaverhill Bird Observatory**

## **Annual Report 2024**

**By Jana Teefy**

With contributions from Geoff Holroyd, Jon Van Arragon, Ethan Denton, Emelie Dykstra, and Xavier Quantz

January 13, 2025

## Notes from BBO Chair, Geoff Holroyd

What another great year for Beaverhill Bird Observatory. You expect me to say that, and it's true. With five terrific staff, an active board of directors, about 50 volunteers and generous donors, the BBO continues to grow in what it does, learning about birds and nature while introducing thousands of people to the outdoors and wildlife conservation.

The first four months of our year were busy with BirdSmart presentations to schools and other groups. Our program contacts thousands of people in northern Alberta (north of Red Deer) yet has only a small mention in our report. We have a much longer BirdSmart report available if you are interested. The majority of this annual report focuses on the summer program which includes a wide variety of activities and involves many people including volunteers, interns, young ornithologists, staff, directors and the public. All the while we are documenting the birds and other aspects of nature in the Beaverhill Natural Area and beyond. We have merged scientific research and public education into a seamless six months of action. Full credit to our tireless staff who catch birds, talk to the public, sweep the lab floor and everything in between.



*Geoff Holroyd removing dataloggers from a bat box*

The quality of our work is attracting university researchers to participate and diversify our activities from blood and ectoparasites to insects. Our MOTUS project on Saw-whet Owls, funded by YOU, has caught the attention of owl researchers across North America and beyond. We now participate in the OwlNet steering committee, and I gave a global webinar on our harness technique. The Least Flycatcher project had one research paper published and a second accepted for publication this year.

I thank all the board of directors for their support. Rose Scott works daily as our treasurer with almost endless entries to keep our books up to date, staff paid and tax receipts issues. Likewise, Phil and Helen Trefry work daily feeding and caring for our educational owls and raptors ready to mesmerize students and adults alike. In addition, Helen is the lead for Big Birding Breakfast, Young Ornithologist and Saw-whet Supper. Glen Hvenegaard organizes the internships and together with the mentors (page 13) provide hands on experience for budding biologists while collecting valuable monitoring data on many topics. Other board members, Christie, Darren, Emily, Julianne, Alyssa, Warren, Richard, Sian and Carmen, make major contributions.

The many contacts with visitors make all my efforts worthwhile. The young boy at the Snow Goose Festival who said "this is the best day ever" as Helen perched Keith, our Red-tailed Hawk on his arm; the visitors to our lab who stop mid-sentence when they see Tansi, our Great Horned Owl; the children who tremble with excitement as they release a warbler from their open palm, the repeat visitors who smile as we band another Saw-whet Owl, and the lady at the back door of the Tofield Arena at 8:05 waiting for an 8.30 tour who told me she had been waiting 20 years for another tour to see the geese. All these encounters are "Pebbles in our Shoes" as people experience birds and nature up close. We hope that they take these experience home and translate their new awareness into conservation action to benefit our overloaded planet.

Thank you for being part of the caring BBO community and doing your part to conserve nature and fight climate change. THINK GLOBALLY, ACT LOCALLY.

## Notes from Head Biologist, Jana Teefy

2024 was my second field season as Head Biologist with Jon Van Arragon alongside me as the Assistant Biologist. We had big shoes to fill following the super-humans Sara and Shane in the positions, but I feel like we're holding our own. This season's staff was extraordinary. Thank you, Jon, Emelie, Xavier, and Ethan for all you did to make this season a success! I am grateful for our experiences together this season. You were all an absolute joy to work with!

Our first (and my favourite) change to operations was digital data entry! Jon spent countless hours on a digital data template that we can enter directly into a cloud service as we are collecting the data (Thanks, Jon!). This was our second season using the digital template and what a change this has made to BBO! No longer are we spending, quite literally, hundreds of hours entering and double-checking data or having to read terrible handwriting.

Over the 2023/2024 winter season, Jon and I revamped and restructured our volunteer program. We created a structured program with online learning, hands-on training, and clear expectations and requirements for each position – general labour volunteer, event volunteer, scribe, net check assistant, bander assistant, and permitted bander. We have seen a positive shift in the calibre of volunteers and have received considerable positive feedback on the training program.

I once again was able to put my veterinary technician experience to work with our owl nano-tagging project as we continue to develop our custom-fit Spectra backpack technique. I look forward to the new nanotag projects in 2025.

Each year it becomes harder, or less likely, to band new species. However, I did get to band not one, but two Boreal Owls this year along with a Cooper's Hawk, a Common Grackle, and a Sedge Wren.

It is a pleasure to be a part of the BBO community and I cherish the connections made with our staff, board, visitors, members, volunteers, and interns. I had the pleasure of hosting Kirstin from the Mackenzie Nature Observatory at BBO and I enjoyed connecting with her, teaching our nanotag backpack harness technique, and learning banding tidbits from her. We are in the process of organizing a

bander exchange with another station and we look forward to the possibility of learning from other skilled banders at their station.

I am grateful for the opportunity to be Head Biologist at the Beaverhill Bird Observatory. Jewels and I can't wait to see what happens in the years to come.



*Jana with Nina, the Burrowing Owl*



*Jewels – Official greeter, morale officer and professional hand warmer*

## List of 2024 Executive, Staff, and Contact Information

<b>Board</b>	<b>Position</b>	<b>Year</b>
Geoff Holroyd	Chair	1984
Helen Trefry	Vice Chair	2014
Rose Scott	Treasurer	2016
Christie Campbell	Director at Large Fundraising	2022
Darren McGregor	Director at Large Web Designer	2005
Emily Gross	Director at Large Keela	2020
Julianne Hayes	Director at Large Willet Editor	2019
Glen Hvenegaard	Treasurer	2020
Alyssa Bohart	Director at Large	2018
Warren Finlay	Director at Large Willet Editor	2022
Brendan Casey	Director at Large	2022
Richard Hedley	Director at Large	2022
Sian Ford	Director at Large	2024
Carmen Patry	Director at Large	2024
<b>Staff</b>	<b>Position</b>	<b>Year</b>
Jana Teefy	Head Biologist	2021
Jon Van Arragon	Assistant Biologist	2020
Ethan Denton	Seasonal Biologist	2023
Xavier Quantz	Seasonal Biologist	2024
Emelie Dykstra	Seasonal Biologist	2024

Contact Information:

Geoff Holroyd, PhD, Chair of the Board of Directors - [chair@beaverhillbirds.com](mailto:chair@beaverhillbirds.com)

Jana Teefy, Head Biologist – [biologist@beaverhillbirds.com](mailto:biologist@beaverhillbirds.com)

# Table of Contents

Notes from BBO Chair, Geoff Holroyd .....	1
Notes from Head Biologist, Jana Teefy .....	2
List of 2024 Executive, Staff, and Contact Information .....	3
Overview .....	5
Songbird Migration Monitoring .....	6
MAPS Monitoring .....	7
BBO Lab (BLAB) .....	8
Sora Pond (SOPO) .....	8
Lister Lake (LILA) .....	8
Owl Migration Monitoring .....	9
MOTUS .....	10
Nestling Banding .....	11
Monitoring Projects .....	12
Least Flycatcher .....	12
Marsh Monitoring .....	12
Forest Breeding Bird Census .....	12
Shorebird Surveys .....	13
Nest Searching and monitoring .....	13
Mammal Monitoring .....	13
External Parasite Projects .....	14
Tree Swallow Monitoring .....	14
Student Internships .....	14
Events .....	16
Snow Goose Festival .....	16
Big Birding Day .....	16
Public Banding Events .....	18
Young Ornithologists Workshop .....	18
BirdSmart .....	20
Willet Newsletters .....	21
Acknowledgement of Volunteers and Members .....	21
Thank you to our sponsors and donors .....	22
Spring Songbird Monitoring .....	23
Fall Songbird Monitoring .....	25
MAPS Monitoring .....	27
BLAB .....	27
SOPO .....	28
LILA .....	29
Owl Migration Monitoring .....	30
Financials .....	31
Funders .....	32

## Overview

The 2024 field season started May 1 with 5 eager biologists – Jana, Jon, Ethan, Emelie, and Xavier, the majority of whom were previous Young Ornithologists! On April 27<sup>th</sup> & 28<sup>th</sup>, the BBO co-hosted another successful Snow Goose Festival and welcomed birders to the observatory for guided hikes and interpretive banding sessions. Spring showers brought June flowers and flooding! The main access road (Rowen’s Route) was flooded, rutted, and challenging to drive, which spurred the decision to limit site access and lower our event capacity in the hopes of not worsening the road conditions to maintain access for staff and interns.

Spring and Fall Songbird Migration Monitoring (May 1<sup>st</sup> to June 9<sup>th</sup> and July 20<sup>th</sup> to October 20<sup>th</sup>), MAPS banding (June 10<sup>th</sup> to August 9<sup>th</sup>), and Owl Migration Monitoring (September 1<sup>st</sup> to November 8<sup>th</sup>) were all successfully completed. Slight changes were made to the owl monitoring program such as upgraded audio equipment and establishing a second set of nets with a male Saw-whet breeding call. A total of 51 nanotags were deployed on owls this year, including 2 brooding female Saw-whets that Jana and Emelie captured and tagged during non-standard netting in June, assumed to be breeding parents from our occupied nest boxes. A small black bear was spotted at one of our lakeside stations and made a hasty exit, unfortunately running straight through one of our nets. This is the first bear ever reported in the natural area. Nestling banding took place over the summer as well, which included Tree Swallows, Purple Martins, Mountain Bluebirds, and Saw-whet Owls.

The BBO hosted 9 student interns to conduct long-term monitoring of the Tree Swallow and House Wren nest boxes, Grassland Breeding Bird Census, bats, and butterfly projects. This year we initiated a new Purple Martin intern project and installed 2 more colony nest boxes donated by John Scott.

We once again hosted 10 youths for the 8<sup>th</sup> annual Geoff Holroyd’s Young Ornithologist’s Workshop with youth from Alberta, British Columbia, California, Pennsylvania, and Massachusetts. Once the road conditions improved, we hosted 34 public songbird and owl banding events, including, Big Birding Breakfast and Supper and Saw-whets with a total of 629 attendees, hosted 7 school groups for guided hikes and banding demonstrations for 165 students, and welcomed 1073 incidental visitors to the natural area for a total of 2071 visitors in the 2024 field season.

With the owl capture rates dwindling and the busy BirdSmart season looming, the station was winterized and shut down for the season on November 8<sup>th</sup>. In addition to classroom presentations, the staff will be attending store events, birthday parties, hockey games, and once again attempting to study Snow Buntings.



*Staff Xavier Quants, Jana Teefy, Emelie Dykstra, and Jon Van Arragon, and Jewels (dog) on the last day of the field season*



# Songbird Migration Monitoring

Songbird Migration Monitoring was operated from May 1<sup>st</sup> to June 9<sup>th</sup>. The weather continued to be rainy and windy throughout the spring, lowering our net-hours (2219 NH in 2024 vs 2826 NH in 2023) and total captures (937 in 2024 vs 1073 in 2023), however, capture rates were higher this year (155 captures/100 NH in 2024 vs 104 captures/100 NH in 2023). 17 nets were opened daily, when the weather allowed, capturing 47 species and 937 individuals. Highlight captures include a Black-throated Green Warbler, many Grey-cheeked Thrush, an Eastern Kingbird and a Sharp-shinned Hawk, which is a rare spring capture for us!

Fall songbird migration monitoring ran from July 20<sup>th</sup> to October 20<sup>th</sup>. A total of 20 nets were operated in the fall with 3 additional experimental nets being opened for the Young Ornithologists Workshop in August. Total captures were lower with fewer individuals (2267 in 2024 vs 3072 in 2023) captured in higher net-hours (7,081.5 NH in 2024 vs 5846 NH in 2023) giving a lower capture rate (129.4 captures/100 NH in 2024 vs 160.1 captures/100 NH in 2023). However, an impressive 65 species were captured in 2024 compared to the 47 species captured in 2023. Highlight captures include a Nashville Warbler, a Connecticut Warbler, and a Northern Shrike.



*Juvenile Northern Shrike captured this fall  
Photo by Sian Ford*

As usual, our experimental nets outperformed our standard nets with 1,408 captures in just 1,228 net-hours for a rate of 114.7 captures/100 net-hours. This leaves our 13 standard nets with 859 captures in 5,853.5 net-hours for 14.7 captures/100 net-hours. Regarding diversity, 58 of the 65 species were captured in experimental nets and 49 in standard nets, with significant overlap. As usual, the majority of our captures were made up of our most common species with the top three comprising over half of our captures: 480 Yellow-rumped Warblers (Myrtle), 365



*Black-throated Green Warbler*

Yellow Warblers, and 360 Least Flycatchers. While there were no exceptionally rare species captured this fall our 19 warbler species did include some infrequent visitors including Connecticut Warbler and Nashville Warbler. Otherwise, some of the standout species include a Sedge Wren, Gray-cheeked Thrush, Brown Creeper, Red-shafted Flicker, and Northern Shrike. Also, our daily census revealed many songbird species that were migrating through the area but never managed to hit one of our nets; these species include Black-throated Green Warbler, Vesper Sparrow, countless high-flying Lapland Longspurs and American Pipits.

## MAPS Monitoring

Summer was hot and buggy! Thanks to the spring rains, staff and volunteers were accosted by mosquitoes, flies, and wasps for the duration of the MAPS season. MAPS (Monitoring Avian Productivity and Survivorship) is a standardized program that operates across North America to track the productivity of nesting birds and their survival rates. It also helps identify trends in both local and widespread breeding populations. With over 1,400 MAPS stations throughout North America, a vast amount of data has been collected. This data has been crucial for numerous research studies and conservation initiatives led by universities, government agencies, and non-profit organizations. Since the program began in 1989, the BBO has been involved in MAPS banding and currently manages three stations: BLAB, SOPO, and LILA. MAPS stations are run according to the protocols set by the Institute for Bird Populations. Each station operates ten mist nets for up to 60 net-hours, with a minimum of 30 net-hours, once every ten days. All 6 rounds of MAPS banding were completed without issue and between the 3 MAPS stations (BLAB, SOPO, LILA) 785 individuals and 33 species were captured in 853 net-hours, averaging 92 captures/ 100 net-hours. The most frequent species were Yellow Warblers (187 captures), accounting for 24.1% of captures, and Least Flycatchers (184 captures), accounting for 23.7% of captures. This means almost half of the total captures this summer were these two species! The runner-up for most caught was Red-winged Blackbird (48 for 6.2%). Standout species include a Cooper's Hawk, a Yellow-bellied Flycatcher, and a few Sedge Wrens, but the highlight of the MAPS season was the small black bear that greeted us at our SOPO station. Fortunately, it didn't stick around long and was not seen again for the remainder of the field season.

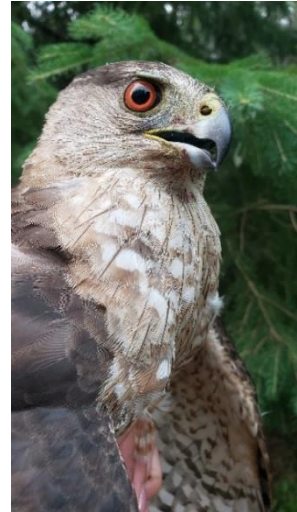


*The sunrise from our Lister Lake (LILA) MAPS station*



## BBO Lab (BLAB)

The BBO Lab (BLAB) station is the longest-operating MAPS station at the BBO. This summer, it marked its 35th year of operation, making it one of the longest-running MAPS sites in North America. As the surrounding forest continues to mature, BLAB is now surrounded by a young poplar forest with sparse undergrowth, resulting in fewer bird captures than historically and compared to the other two BBO stations. Subsequently, it is monitoring the changes in bird populations as the plant succession evolves and the forest matures. BLAB operated on June 13th and 22nd, July 2nd, 13th, and 20th, and August 3rd. In total, BLAB caught 70 birds in 310 net-hours (22.6 captures/100 NH) and was comprised of 13 species. The most common species caught were Least Flycatchers, with 40 captures (57.1% of captures), distantly followed by Baltimore Orioles with 7 captures (17.5% of captures).



*A Cooper's Hawk captured at our BBO Lab (BLAB) MAPS station*

## Sora Pond (SOPO)

The Sora Pond (SOPO) MAPS station is located on the southwest side of Sora Pond, positioned between the pond and Lister Lake. This station covers a mix of young poplar forest and wetland areas vegetated with dense willows, creating a habitat that supports a diverse bird population and consistently higher capture rates than the other two stations. SOPO was run on June 10th and 20th, July 4th, 11th, and 21st, and August 4th. In total, SOPO caught 390 birds in 259.5 net-hours (150.3 captures/100 NH) and 27 species. The most common species was Yellow Warblers at 123 captures (31.5% of captures), followed by Least Flycatchers with 84 captures (21.5%). Notable captures at SOPO this year included a Nelson's Sparrow and a Sedge Wren.

## Lister Lake (LILA)

The Lister Lake (LILA) station is situated on the northwest shore of Lister Lake, where the young poplar forest meets the dense willows and cattails along the lakeshore. LILA was run on June 11th and 21st, July 7th, 12th, 22nd, and August 6th. LILA caught 325 birds total in 283.5 net-hours (114.6 captures/100 NH) with 28 species. The most common species was Yellow Warblers with 69 captures (21.2% of captures), closely followed by Least Flycatchers with 65 captures (20.0% of captures). LILA caught the first and only Philadelphia Vireo of the year, and a Swamp Sparrow.



*A scruffy fledgling Yellow Warbler from our Lister Lake (LILA) MAPS station*

## Owl Migration Monitoring

As always, the autumn songbird migration monitoring was accompanied by owl migration monitoring. The owl program ran from September 1st until November 7th. The mild weather and extraordinary aurora borealis along with all the owls helped to make this an excellent fall.

Some slight changes were made to the program this year, including upgrading the audio equipment to small Bluetooth speakers that can use SD cards that store the audio file and play the calls right from the speaker without being connected to Bluetooth devices or large rechargeable batteries. We also dismantled the sub-active net S2, which catches primarily flying squirrels, and established a set of 2 nets on the north side of the clearing with a second male audio lure for a total of ten owl nets and five audio lures - male Saw-whet Owl, female Saw-whet Owl, Long-eared Owl, and Boreal Owl. Overall, owl captures were similar to previous seasons with a total of 307 owls in 1,752 hours of playback for a rate of 17.5 captures/100 playback hours. As per usual, Northern Saw-whet Owls made up the vast majority of the captures with one fewer Northern Saw-whet Owl (293 in 2024 vs 294 in 2023) and 2 fewer Long-eared Owls (9 in 2024 vs 11 in 2023) captured than last year. Interestingly, most of the Long-eared Owls (7) were captured in short succession during the super-harvest moon. The staff were very excited to capture 5 Boreal Owls this season! The most we've caught in a season since 2016 and more than we've caught in total since 2016. The newly established nets were highly productive, catching 8 of the 9 Long-eared Owls and 132 owls (43%) compared to 175 captured in the other 8 nets. The Long-eared net was disappointingly unproductive, only capturing 1 Long-eared Owl and 1 Saw-whet Owl. Aside from owls, our nets turned up a Little Brown Bat and more Northern Flying Squirrels than we would have liked.

In addition to banding, the Motus project continued this year and even expanded to include Long-eared Owls! A total of 51 nanotags were deployed, 49 on Northern Saw-whet Owls, including the 2 brooding females tagged in the spring, and 2 on Long-eared Owls and Jana continued to perfect the attachment technique.



*A tiny Northern Saw-whet Owl*

These tags can be detected by Motus towers located across North and South America. As with last year, each of these tags was sponsored by you, our member and organizations like the Edmonton Nature Club and the Calgary Bird Banding Society. We look forward to watching the migration path of these nano-tagged owls in the coming two years.

Non-banding highlights of the owl season include spectacular aurora borealis and a Barred Owl that was perched atop our Motus tower giving its iconic hoot.

## MOTUS

Thanks to the diligent work of Jana Teefy our head biologist, in 2024 we deployed another 51 MOTUS nanotags on 49 Saw-whet Owls and 2 Long-eared Owls. The general pattern of movements from BBO this year is curiously dissimilar to last year's cohort. While the general pattern this year was south, the trend was to the southeast rather than the southwest trend noted last autumn.

Excitedly, a few owls from last season were detected again this season. One Saw-whet Owl was tagged at BBO in September 2023 and was detected in June 2024 in Cranbrook BC and another BBO September owl was detected in southern Saskatchewan in April 2024. One of our first owl movements travelled from BBO, was detected in October 2023 at Sylvan Lake, was heading north in April 2024 at the south end of Koochanosa Lake in southern BC, and then was detected again at the same station in October 2024, again headed south along the same migration route. Lastly, an owl tagged in September 2023 was detected in central Washington in November 2023, then again at the same station in March 2024, presumably headed north. It was detected again in October 2024 by two of the stations south of Saskatoon migrating way east of its movement in 2023. Interestingly, it was detected at two stations 23 km apart in 32 minutes. It was flying at 43 kph that evening.

An exciting development this year was 6 Saw-whet Owls detected on the north shore of Pigeon Lake at a station installed earlier this year by our retired engineer friend, Rick Cunduit. These records point to a more westerly movement from BBO this autumn migration season. This begs the question of how many owls passed there in 2023 undetected. Likewise, there are few MOTUS stations or banding stations in the interior of BC. Maybe more of our owls head west rather than south but have yet to be detected.

Not every owl left BBO immediately. 9 owls stayed within the range of our station for 10 or more days. One, a breeding female tagged by Jana and Emelie in June and stuck around until mid-December with a total of 166 days of detections, is still in the natural area. Other owls have stayed for up to two months or more before moving on. Some of these owls may be winter residents in the region who aren't in a rush to head south. This leads to another benefit of our owl project.

The BBO biologists have banded 103 Long-eared Owls since the monitoring program's inception in 2016, but



*One of BBO's first nano-tagged Long-eared Owls*

we've never had a band recovery. Thanks to a generous donation by Mark and Jana's perseverance, we nano-tagged two Long-eared Owls this autumn. And the result is spectacular. The tag was attached on September 22 at BBO and was detected by two MOTUS towers in western North Dakota on 6 October - a distance of 923 km southeast of BBO in 13 days! These two towers are 120 km apart and the owl covered the distance in 3 hours and 41 minutes at an average of 32 km/hr! The owl then went due south and was detected in southeast Colorado, travelling an additional 925 km in 12 days at an average of 74 km per day; not as fast as the short leg in North Dakota. We haven't heard from the second owl; fingers crossed it will pass by a MOTUS tower in the next two years. This immediate success leads to a new project. We propose to get 20 tags for Long-eared Owls in 2025. We don't know how many long-eared Owls we will trap next season, but we want to be ready to track as many as possible.

Although the MOTUS system is 10 years old it is not well developed in western Canada except along the BC coast and Fraser Valley. Our project has directly stimulated researchers, teachers and volunteers to set up more stations in the past year. At least 5 new stations and maybe more are the direct result of our project's results in the autumn of 2023. Coincidentally, Birds Canada and some universities received a large grant to establish more stations in the three prairie provinces. Hopefully, some of these stations will be in place within the two-year lifespan of our owl transmitters. Stand by for more interesting news on these owls' movements. Thank you again for sponsoring a tag and owl. Our members made this project possible.

In 2025 we hope to tag Purple Martins to track their movements to the Amazon in South America and back. The main purpose is to learn about the recruitment of young into the breeding population and their movements away from their natal site. Additionally, we plan to nanotag a handful of Yellow Rails to learn more about this secretive and elusive species.

## Nestling Banding

With the craftsmanship and dedication of BBO volunteer, John Scott, two new Purple Martin colony nest boxes were constructed and installed in the grassland. The breeding colony



*Northern Saw-whet Owl nestlings*

continues to grow and, with the original nest boxes at full capacity, the Purple Martins took up residence in the new nest boxes almost immediately.

Nestling banding took place over the summer months, which included 251 Tree Swallows from the 3 breeding grids, 69 Purple Martins from the now 4 nest boxes, 6 Mountain Bluebirds, and 7 Northern Saw-whet Owls.



## Monitoring Projects

Several field projects were conducted at the BBO this season. Emelie Dykstra continued the Least Flycatcher nest survey study, Xavier Quantz completed the Marsh Monitoring Protocol surveys along Lister Lake, Jon Van Arragon resumed the Forest Breeding Bird Census, and Ethan Denton continued Shorebird Surveys along the shoreline of Beaverhill Lake.

### Least Flycatcher

The third year of Least Flycatcher Nest Monitoring, led by Emelie, revealed interesting nesting strategies of Least Flycatchers. 38 nests were located and regularly monitored over the breeding season, including 16 active nests. Of the active nests, eight were reused from previous years, indicating that the Least Flycatchers in the Beaverhill Natural Area are regularly reusing old nesting structures. The complete report discussing the potential advantages and implications of nest reuse in Least Flycatchers can be found [here](#).



*Emelie Dykstra conducting a nest survey with a pole camera*

### Marsh Monitoring

The Marsh Monitoring Protocol, established in 2022, consists of four callback surveys conducted throughout June and a fifth survey for vegetation/habitat assessment. Each callback survey includes eight standardized point counts along the shoreline of Lister Lake, where audio playback is used to target specific wetland species. Xavier conducted both day and night surveys and was rewarded with several of the target species, including the first detection of Yellow Rails ever during the Marsh Monitoring. A full report of the surveys and the species detected can be found [here](#).



*Xavier Quantz during a Marsh Monitoring survey*

### Forest Breeding Bird Census

Jon once again completed the Forest Breeding Bird Census surveys where he conducted point counts at standardized survey points ~50 m apart within a 25-hectare grid listening for calls and counter calls to identify breeding territories of local birds. Interestingly, he found evidence of old forest-selecting species establishing breeding territories, indicating that the succession of the young poplar forest is progressing to allow for new species to become local breeders. White-throated Sparrows and Yellow-rumped Warblers are two such species, and evidence of the presence of Pileated Woodpeckers and Barred Owls has similar implications. A full report of the surveys and the species detected can be found [here](#).



*Jon Van Arragon captured on a trail camera during a survey*



## Shorebird Surveys

Beaverhill Lake is a designated Western Hemispheric Reserve Network based on large numbers of shorebirds seen during surveys in the 1980s. Numbers decreased in the early 2000s as the lake dried, but since then it has partially refilled. With the return of larger numbers of shorebirds, BBO undertook surveys in 2022.

Shorebird surveys took place again this year, starting May 1st. A look at the spring migration results shows a significant change from last year. Long-billed Dowitchers were much less numerous this year than they were last spring, with 582 individuals as the spring high count in 2024 compared to 9,139 in 2023. In contrast, the classic 'peeps' (Least and Semipalmated Sandpipers) have been observed in much higher numbers this year than last year. This change may be due to lower water levels, as peeps are quite small and short-legged and water levels have dropped and mudflats expanded this spring compared to last year.

Species diversity has been similar, down by two from 23 to 21. The lake continued to dry up over the summer and water levels receded significantly.

## Nest Searching and monitoring

BBO staff and volunteers successfully located and monitored 48 natural nests including those of Least Flycatcher, Common Goldeneye, House Wren, and Mallard. Several Baltimore Oriole nests were found once the leaves fell from the trees but were not monitored as the young had already fledged.



*Common Goldeneye on her nest.  
Photo by Alan Foster*

## Mammal Monitoring

Three motion-activated trail cameras positioned around the Beaverhill Natural Area continued to passively photograph the comings and goings of the local mammals this year. These cameras were serviced once in the spring and once in the fall to collect photos and insert new batteries. After assessing these photos and counting the number of individuals and species, the data was submitted to WildTrax and Alberta Parks. The majority of the animals on the camera were White-tailed Deer and Coyotes with the occasional Mule Deer and Moose. Also, several of the White-tailed Deer and Moose were accompanied by young. Excitedly, a Porcupine was observed waddling through the forest!



*A deer checking out the trail camera*

## External Parasite Projects

The BBO once again assisted researcher, Dechen Edwards, from the Heather Proctor lab at the University of Alberta to collect feather mites, microbes, and preen oil. She is studying the feather mite diet to test their hypothesis that their diet consists of microbes and preen oil. The Proctor lab collected samples for other projects in the natural area including goldenrod galls, soil fungi, and carrion beetles.



*Researcher Dechen Edwards collecting feather mites from a bird*

## Tree Swallow Monitoring



*An adult Tree Swallow captured at the best box site*

The BBO maintains three grids of Tree Swallow nest boxes, with nearly 200 boxes. Dr. Ivy Schoepf, a professor at the University of Alberta Augustana Campus, conducted banding in the road and spiral grids, while BBO staff concentrated on the new grid. Ivy's research focuses on *haemosporidian* infections and their effect on the nestlings and explores a possible correlation between parasites carrying avian malaria and nest site selection and success. In total, 219 Tree Swallow nestlings were banded, along with 32 adult Tree Swallows.

## Student Internships

This year the BBO facilitated six internship programs, providing nine students with field projects over the course of the season. Five of the programs are continuations of long-term monitoring projects: the monitoring and maintenance of Tree Swallow and House Wren nest boxes, butterfly surveys, bat occupancy surveys and acoustic detection, and the Grassland Breeding Bird Census. With the increasing breeding population of Purple Martins, and the installment of two more colony nest boxes this year, an additional project was introduced to monitor the local Purple Martin population.

Thank you to all of the interns and mentors! These long-term monitoring projects wouldn't be possible without the dedicated work of the interns and their mentors throughout the summer.

### Tree Swallow Nest Box Surveys

Interns: Michelle Turgeon

Mentor: Ivy Schoepf

Michelle's report can be found [here](#)  
or on our website

### House Wren Nest Box Surveys

Intern: Billie Bilodeau

Mentor: Zach Antoniow

Billie's report can be found [here](#)  
or on our website

### Purple Martin Nest Box Surveys

Intern: Addison Komarnisky

Mentor: Glen Hvenegaard

Addison's report can be found [here](#)  
or on our website

### Butterfly Surveys

Intern: Rylan Smigorowsky

Mentor: John Acorn

Rylan's report can be found [here](#)  
or on our website

### Grassland Breeding Bird Census

Intern: Caitlyn McLaughlin

Mentor: Karin Snyder

Caitlin's report can be found [here](#)  
or on our website

### Bat Surveys

Interns: Rayna Gilfillan & Francesca Uy

Mentor: Doris Audet

Francesca's Occupancy report can be  
found [here](#) or on our website

Rayna's acoustic report can be found  
[here](#) or on our website



*Purple Martins on BBO's Motus tower*

## Events

### Snow Goose Festival

Pleasant temperatures, calm winds, and tens of thousands of geese greeted the public that attended this second consecutive Snow Goose Festival, the 12th counting those from 1993 to 2002. The BBO was proud to once again co-chair and co-host the two-day event, which was based out of the Tofield Arena. More than 1500 people purchased tickets for the various activities, including bus tours around Beaver County to visit the large flocks of Snow Geese, bus tours, guided hikes, and interpretive banding demonstrations at the BBO, a tradeshow and presentations on Avian Flu, Snow Goose Management, Bird Trends and Trumpeter Swan recovery in the Tofield Arena, and a banquet with a catered dinner, silent auction, live music and a presentation by Geoff Holroyd on Tree Swallow breeding populations at the BBO, Swallows, the 21st Century's Canary in a Coal Mine. The event brought over 300 visitors to the BBO over the 2 days of the event.

Before the festival, the Tofield Mercury produced a 16-page newspaper souvenir issue with interesting articles about spring, geese, and avian flu among other topics. Over 6,000 copies were distributed throughout the region and the festival was promoted to the public with radio and TV interviews.

Nature Alberta, with funding from the Edmonton Community Foundation, hosted 6 buses for Edmonton-based new Canadians and inner-city families. They took a hike at the Strathcona Wilderness Center and visited the Tofield Arena, the headquarters of the event for lunch. Afterwards, they headed out to see geese before returning to the city with a full day of new adventures to remember.

### Big Birding Day

Each year, the Beaverhill Bird Observatory staff participate in a full day of birdwatching with the goal of seeing as many species of birds as possible while raising money to support bird conservation. This year's fundraiser took place on May 20th, a day of rainy and miserable weather. Despite the poor conditions, our team was able to see a total of 134 species of birds in just 24 hours!

We started in the early morning hours around the Beaverhill Natural Area, quickly picking up most of our duck species at the weir and a handful of shorebirds out on Beaverhill Lake and at Francis Point. One unexpected visitor was a Sandhill Crane that hadn't yet migrated foraging out in the lakebed, as well as some lingering flocks of Snow Geese and Greater White-fronted Geese.

We continued onwards to Amisk Creek, stopping to appreciate the local Mountain Bluebirds and identifying a few more shorebirds foraging in the mud along the way. At the creek, we saw Cliff Swallows and Barn Swallows, along with some Wilson's Phalaropes spinning away on the open water. After much effort we found a Cinnamon Teal at a roadside pond; a Western Meadowlark sighting put us at 100 species for the day before lunch!

We went into Tofield for a quick lunch, noting some California Gulls and Ring-billed Gulls in the parking lot. We then ventured towards Elk Island National Park, where we quickly got to 110 species thanks to sightings of Western Grebes, American White Pelicans, and a Barrows Goldeneye. We then trekked around the forest, spotting some Solitary Sandpipers and a Western Wood-Pewee. On our way out of the park we spotted a group of Surf Scoters, and with that sighting our species total was at 125!

On the way back to the observatory we spotted a Loggerhead Shrike that had eluded us earlier in the day, so we decided to keep birding even though the light was leaving the sky. We headed over to Lister Lake and were delighted to hear the rhythmic clicking of some Yellow Rails coming from the marsh! Some Great Horned Owls and American Bitterns were also heard calling, and just before midnight, we located a Black-crowned Night Heron at the weir bringing the total to 134!

Thanks to volunteers Allan, Irene, and Jay who participated alongside the staff! An equally big thank you to everyone who donated as we raised \$1379.87 for our Motus projects.



*Staff and volunteers Alan Foster, Julia Froese, Xavier Quantz, Jon Van Arragon, Jana Teefy, and Emelie Dykstra during their Big Birding Day.*



## Public Banding Events

Our banding days were also supplemented with many exciting education and fundraising events with the public. This season we hosted 34 public banding events, including songbird and owl banding events, Big Birding Breakfast, and Supper and Saw-whets with a total of 629 event attendees. Owl banding events continue to be in high demand with every single night being sold out. Additionally, we hosted 165 students from the Tofield Summer Program, Red Deer Polytechnic, University of Alberta, MacEwan Ecology and Conservation Club, and Lakeland College for private events, including guided hikes and banding demonstrations.

We also welcomed 1073 incidental visitors to the natural area for a total of 2071 visitors interacted with in the 2024 field season.

The Supper and Saw-whets event was well attended, as usual, with 101 visitors over the two evenings. Visitors were offered a variety of home-cooked vegetarian meals and snacks and had the opportunity to meet our education ambassador birds Nina, the Burrowing Owl, Tansi, the Great Horned Owl, and Keith, the Red-tailed Hawk. Colouring activities, crafts, and face painting were also offered to kids and adults alike. The event saw some of our busiest owl nights with nearly 30 Northern Saw-whet Owls captured over the two evenings.

Big Birding Breakfast was similarly well attended with 71 visitors over the two mornings. Event attendees were treated to a home-cooked crepe breakfast by Janos Kovacs, who has been cooking crepe breakfasts for BBO since our inception in 1984. Guests were treated to interpretive songbird banding demonstrations, guided hikes, feather tosses for the nesting Tree Swallows, colouring activities, crafts, and face painting, and our education ambassador birds were on site to greet the visitors.

## Young Ornithologists Workshop

The Geoff Holroyd Young Ornithologists' Workshop saw its eighth year, with ten youths from around the continent joining the staff for a week to experience bird banding hands-on. The youth came from Alberta, BC, California, Pennsylvania and Massachusetts. Young birders learned to age, sex, and identify local birds at both MAPS stations and Migration Monitoring nets. They also learned how to band and extract passerines, and experienced life as field biologists from BBO biologists and NABC certified banders and trainers, Jana Teefy and Jon Van Arragon. From camping in the clearing and waking up early to touring the Trefry falconry farm, the Young Ornithologists experienced several aspects of working with birds. They also had the opportunity to learn from experts, such as Dr. Geoff Holroyd, Dave Lawrie, and Helen and Phil Trefry, who taught the youth about Tree Swallows, butterflies, and falconry, respectively.

The young birders also participated in an iNaturalist Bioblitz, led by Xavier and Emelie, identifying arthropods, fungi, plants, and other living things in the natural area. In total, they

observed more than 250 species over three hours. Additionally, they completed a shorebird survey with Ethan as well as a Big Birding Day with Ethan, Irene Crosland, and Helen Trefry. Their efforts were rewarded with a total of 113 species for the day, and canoeing and pizza at Geoff's home. Overall, the week was a great success, with an incredible group of youths and new experiences gained.

A big THANKS to the staff whose hard work goes a long way to teach and host the youth and THANK YOU to the volunteers who helped with meal preparation, birding trips, and event coordination. A HUGE THANK YOU to Helen Trefry who recruits and selects the students, makes travel arrangements for the out-of-towners, organizes the schedule and guest speakers, arranges the bird specimens from Ottawa, makes a lot of food and coordinates all the friends who make the rest. She coordinates the delivery of food to BBO, hosts an afternoon with her husband Phil at their farm, and generally makes sure the workshop runs smoothly.



*Eighth annual Young Ornithologists' Workshop. From left to right: (Top) Geoff Holroyd, Helen Trefry, Emelie Dykstra, Mariana Prado Garcia, (middle) Anna Reichenbach, Casey Elliott, Jana Teefy, Jewels (dog), Jon van Arragon, Xavier Quantz, Ethan Denton, Cohen Seatter, (bottom) Jocelyn Pyne, Bently Colwill, Anna Heming, Andrew Tymchuk, Blake Gervais, Evan Gervais, Niko Dmytriw*

## BirdSmart

With the field season now behind us, you might be wondering what our busy biologists will be getting up to this winter. During the winter we deliver our BirdSmart education program, which has us doing educational presentations about birds and conservation throughout central and northern Alberta. Last year the program hit new highs in the number of presentations given and the number of students reached. Over 250 educational presentations were given, and over 20,000 students were reached by the program! BirdSmart expanded its geographic reach as well, with more presentations being given farther from Edmonton in communities like Lac La Biche and Wabasca.

This year will feature some exciting new changes to the program. Our existing presentation topics and content have been revamped to match the new Alberta science curriculum, and new presentation topics have been added as well! Our presentations are also now available in French, which will help us reach even more schools than before. Thanks to generous grants provided by Beaver County and the Battle River Community Foundation, we will also be offering presentations to schools in the Battle River School Division at a reduced price. Thanks to an anonymous donation, we are also offering presentation circuits to communities in rural or remote areas that reduce the cost for individual schools!

We have 4 ambassador birds who accompany us during presentations, each with their own adorable personalities. Nina the Burrowing Owl will be joining us once again. Her friendly personality and small size make her perfect for presentations to younger age groups! Keith the Red-tailed Hawk is returning as well. He is an extremely handsome boy with a stoic personality. He is blind in one eye and sits so still that some people mistake him for a statue! Tansi the Great Horned Owl is our largest ambassador bird, both in size and personality. She often shows off her large wingspan, and her overall plumage is stunning and majestic.

Joining us for the first time this year is Kali, the Prairie Falcon. Kali is a retired hunting falcon from a local falconer. She has 10 years of hunting experience under her belt and is now ready to make her debut as an ambassador bird!

In addition to classroom presentations, the staff will be attending store events, birthday parties, Oilers and Oil Kings games, and once again attempting to study Snow Buntings. Wish us luck!



*Tansi the Great Horned Owl eating a mouse.  
Photo by Emelie Dykstra*

## Willet Newsletters

The Willet is the official newsletter of the Beaverhill Bird Observatory. Three editions are produced annually, containing information about upcoming events, stories from the field and more. In 2024, these were produced by BBO board members Richard Hedley and Julianne Hayes and were sent out to our lifetime members. They did a wonderful job of keeping you informed of all the work we do. Past editions of the Willet from 2024 or earlier, can be found by visiting our website [HERE](#).

## Acknowledgement of Volunteers and Members

The BBO extends a huge THANK YOU to our staff, board members, volunteers, and visitors who help make each season a success! As always, the BBO relies on the time, effort, and skill of our many incredible volunteers. We'd like to extend a big THANK YOU to everyone who gave their time to the BBO this year with banding efforts, stewardship, event help, meal preparation, and work bees. With over 1700 volunteer hours logged this year, not counting our board of directors, operations at the BBO are only possible with the dedication, effort, and skills of volunteers.

We thank our volunteers throughout the season— Adara, Allan, Camile, Charlotte, Christie, David, Elise, Elyse, Emily, Gabby, Hazel, Irene, Jacqueline, Jasper, Jay, Jenelle, Jordyn, Julia, Kelsey, Kendra, Kirstin, Kylli, Madi, Matt, Matthew, Millie, Nik, Patrick, Quinn, Sam, Sian, Sophia, Stefanie, Trish, Willow.

A special thank you to John Scott for constructing and installing the original two and the two new Purple Martin colony nest boxes as well as Glen Hvenegaard, Doris Audet, John Acorn, Ivy Schoepf, Zach Antoniow, and Karin Snyder for their time and expertise as intern mentors. Thank you to our interns, Michelle, Angie, Addison, Aidan, Billie, Caitlyn, Rylan, Rayna, and Cheska for your dedication and hard work.

Thank you to our incredible board members: Geoff Holroyd, the chair, for his expertise and leadership, Helen Trefry, vice-chair and Phil Trefry for housing and caring for our ambassador birds, coordinating the Young Ornithologists Workshop, Supper and Saw-whets, and their work on the Volunteer Appreciation night; Rose Scott for her role as treasurer and dedicated efforts behind the scenes to ensure the work in the natural area runs smoothly; Julianne Hayes and Richard Hedley, editors of The Willet; Emily McLellan heading the fundraising committee; Glen Hvenegaard for organizing the internship program and the strategic plan committee; Darren McGregor for managing our website; and board members Sian Ford, Carmen Patry, Alyssa Bohart, Christie Campbell, Warren Finlay, and Brendan Casey for all their amazing work and contributions to our organizations.

Lastly, the BBO would like to thank our staff this year for their contributions to the field season: Thank you to Head Biologist Jana Teefy and Assistant biologist Jon Van Arragon, and seasonal biologists Ethan Denton, Emelie Dykstra, and Xavier Quantz for all of their efforts. Thank you to Jewels, the dog and official greeter, for always warmly greeting our volunteers and guests. Lastly, the BBO would not be possible without the generous support from our members and sponsors featured below.



## Thank you to our sponsors and donors

The BBO can only continue its long-term monitoring and public engagement programs thanks to the generosity and support of our sponsors. We sincerely thank the following organizations for helping to fund our research and education programs: Alberta Conservation Association, Alberta Gaming Liquor & Cannabis Commission, Canva, Backyard Birds, Beaver County, Bass Pro Shops and Cabela's Outdoor Fund, Birds Canada, Canada Summer Jobs, Edmonton Community Foundation, Eco Canada, Edmonton Oilers Community Foundation, Edmonton Oil Kings, Edmonton Nature Club, Environment and Climate Change Canada, Link Tree, MCS Net, Nature Canada's Charles Labatiuk Nature Endowment Fund, Spencer Environmental, TD Friends of the Environment Fund, Wainwright Wildlife Society, and Wildbird General Store. We are also grateful for the many personal donations made by our members including in memory of Mary Hughes Weir and John Honsaker

Without your support, BBO would not be able to continue to do the vital research and programming we offer the public. Thank You!

### Donors \$1000+

Carole & Gary Dodd  
Geoff Holroyd  
Helen & Phil Trefry  
Joanne McDonald  
Joe and Elizabeth Miller  
Lewis & Elizabeth Hodgkinson  
Mark Boyce  
Mark Cundict  
Memorial Endowment Fund  
Robert Beck  
In memory of Mary Hughes Weir  
In memory of John Leonard Honsaker

### Donors \$500-\$999

Andra Bismanis  
Anna Daku  
Burkhard Eibich  
Gerald McKeating  
James Barrie  
Jim Dennett  
Kristy Tiampo  
Michele Eickholt  
Natalie Tymchuk  
Rebecca Dmytriw  
Silas Fuellbrandt  
Stella Gillespie

### Donors \$50-\$499

Alyssa Bohart  
Amelie Roberto-Charron  
Ana Benz  
Andriko Lozowy  
Anna Heming  
Bonnie Hodgson  
Brent Flesher  
Brian Nicolai  
Cameron Morris  
Carol & Gary Marcellus  
Chrissy McAnally  
Elizabeth & Peter Zuberbuhler  
Genevieve Carolan  
Glen Bowe

### Donors \$50-\$499

Angela Endres  
Anne McIntosh  
Audrey Cherevaty  
Barbara McGuire  
Bill and Inger Paulsen  
Brian Stephens  
Carol Lounsbury  
Glenda Rowley  
Graeme MacLellan  
Gretchen and Gary VanArragon  
Irene and Bob Crosland  
Janis Vos  
Jody Rintoul  
John and Janice Holroyd  
Karen Gray  
Karen Koroluk  
Laura Darling  
Leigh Maxwell  
Leslie Duncan  
Leslie Preston  
Linda G Gray  
Lorraine Proudfoot  
Marshall Netherwood  
Martin Hill  
Michael DeMoor  
Myrna Pearman  
Natalia Labatiuk  
Pat Dunn  
Patricia Crossley  
Patty Holowaychuk  
Peter Kaiser  
Philip Mingay  
Randi Lees  
Robert Sabulka  
Ruth & Richard Keogh  
Scarlet Wong  
Sheila Luther  
Shirley Zylstra  
Sondra Dunbar Goplen  
Stacey Dunn  
Susan McKenzie  
Sylvia Titchener

### Donors \$50-\$499

Chris Clarke  
Christine Suominen  
Dariel Cole  
Dave Ealey  
Emelie Dkystra  
Gay Erickson  
Gerry and Robin Beyersbergen  
Glen and Pam Hvenegaard  
Henry Sanders  
Henry Schlogel  
Henry Van Arragon Dengerink  
Janice Michaels  
Jennifer Froese  
Jennifer Lovallo  
John Charles Chapman  
John Plas  
Karen Gervais  
Kirsten Goa  
Les and Teri Holroyd  
Linda/Pete Kershaw  
Lynn Maslen  
Lynne Dickson  
Margaret Ackman  
Martin Kennedy  
Monique Bielech  
Paul Maas  
Portia Lloyd  
Rebecca Warren  
Rick Kilford  
Robert Peart  
Rose Scott  
Rosemarie Franke  
Ruth and Ron Ball  
Ruth Sesink Bott  
Sherrilyn Job  
Stan Nordstrom  
The Teefy Family  
Vanessa Moore  
Wenda Salomons  
Wendy & Grant Garner  
Wilma Schultz

### Companies and Organizations \$1000+

Alberta Conservation Association  
Alberta Environment and Parks  
Alberta Gaming Liquor & Cannabis Commission  
Backyard Birds  
Bass Pro Shops and Cabela's Outdoor Fund  
Beaver County  
Birds Canada  
Canada Summer Jobs  
Compliant Environmental Services  
Eco-Canada  
Edmonton Community Foundation  
Edmonton Nature Club  
Edmonton Oil Kings  
Employment and Social Development Canada  
MCS Net  
Nature Canada's Charles Labatiuk Nature Endowment Fund  
Portage College  
TD Friends of the Environment Fund  
The High Level Moving Picture Company Ltd.  
The Wildbird General Store

### Companies and Organizations \$50-\$499

Busy B Bargains  
Edmonton Oilers Community Foundation  
MCS Net  
Spencer Environmental  
Wainwright Wildlife Society



Appendix –

## Spring Songbird Monitoring

Table 1 Spring Songbird Migration Monitoring totals from the Standard Nets

Species	Banded	Repeat	Return	Unbanded	Total
Alder Flycatcher	1				1
American Redstart	6				6
American Robin	5		4		9
Baltimore Oriole	32	24	9	1	66
Black-and-white Warbler	5				5
Black-capped Chickadee		3	3		6
Black-throated Green Warbler	1				1
Blackpoll Warbler	10				10
Brown-headed Cowbird	8	4	2		14
Chipping Sparrow	12			1	13
Clay-colored Sparrow	18	3			21
Common Grackle	1				1
Downy Woodpecker	1	3			4
Eastern Kingbird	1				1
Gambel's White-crowned Sparrow	2				2
Gray-cheeked Thrush	8				8
House Wren	14	9	1	5	29
Least Flycatcher	53	30	15	3	101
Lincoln's Sparrow	8			1	9
Magnolia Warbler	1				1
Myrtle Warbler	50				50
Northern Waterthrush	2				2
Orange-crowned Warbler	4				4
Ovenbird	3				3
Red-eyed Vireo	2				2
Rose-breasted Grosbeak	3	5	3		11
Ruby-crowned Kinglet	1				1
Sharp-shinned Hawk	1				1
Slate-colored Junco	2				2
Song Sparrow	2				2
Swainson's Thrush	86	1		1	88
Tennessee Warbler	11			1	12
Traill's Flycatcher	2				2
Tree Swallow	1		1		2
Unspecified Yellow-rumped Warbler	4				4
Warbling Vireo	1	1			2
Western Palm Warbler	1				1
White-throated Sparrow	16	3	2	2	23
Yellow Warbler	18	13	10		41
Yellow-bellied Sapsucker	2	3	1		6
<b>Total</b>	<b>399</b>	<b>102</b>	<b>51</b>	<b>15</b>	<b>567</b>

1932 net-hours

27.5 captures per 100 net-hours

*Repeat: banded 90 or fewer days ago, at the BBO*

*Return: banded over 90 days ago, at the BBO*

*Unbanded: caught but not banded (e.g. escaped)*

Table 2 Spring Songbird Migration Monitoring totals from the Experimental Nets

Species	Banded	Repeat	Return	Unbanded	Total
American Goldfinch	1	2	3		6
American Redstart	5				5
Baltimore Oriole	13	6			19
Black-capped Chickadee		3	4		7
Blackpoll Warbler	2				2
Brown-headed Cowbird				1	1
Chipping Sparrow	6				6
Clay-colored Sparrow	105	29	6	7	147
Common Yellowthroat	3		1		4
Gray Catbird	3				3
House Wren	4	2	1		7
Least Flycatcher	30	3	1		34
LeConte's Sparrow	1				1
Lincoln's Sparrow	3				3
Magnolia Warbler	1				1
Myrtle Warbler	1				1
Northern Waterthrush	2				2
Orange-crowned Warbler	4				4
Red-winged Blackbird	1			1	2
Rose-breasted Grosbeak	3				3
Ruby-crowned Kinglet				1	1
Ruby-throated Hummingbird				1	1
Savannah Sparrow	2				2
Song Sparrow	1				1
Swainson's Thrush	12				12
Tennessee Warbler	4				4
Traill's Flycatcher	7		1		8
Tree Swallow	3		1		4
Warbling Vireo	4				5
White-throated Sparrow	2		1		3
Yellow Warbler	43	15	11	1	70
Yellow-bellied Sapsucker		1			1
<b>Total</b>	<b>266</b>	<b>61</b>	<b>30</b>	<b>12</b>	<b>370</b>

287.5 net-hours

128.3 captures per 100 net-hours

*Repeat: banded 90 or fewer days ago, at the BBO*

*Return: banded over 90 days ago, at the BBO*

*Unbanded: caught but not banded (e.g. escaped)*

## Fall Songbird Monitoring

Table 3 Fall Songbird Migration Monitoring totals from the Standard Nets

Species	Banded	Repeat	Return	Unbanded	Total
American Redstart	6				6
American Robin	4				4
American Tree Sparrow	4	3			7
Baltimore Oriole	4				4
Black-and-white Warbler	4				4
Bay-breasted Warbler	2				2
Black-capped Chickadee	17	65	4	1	87
Blackpoll Warbler	4				4
Brow Creeper	1				1
Canada Warbler	3				3
Clay-colored Sparrow	1				1
Cedar Waxwing	2				2
Common Yellowthroat	2				2
Downy Woodpecker	9	10	2		21
Golden-crowned Kinglet	9				9
Grey-cheeked Thrush	1				1
Gray Catbird	1				1
Gambell's White-crowned Sparrow	2				2
Hairy Woodpecker	1		1		2
Hermit Thrush	3	2			5
House Wren	11	11		1	23
Least Flycatcher	139	26		6	171
Lincoln's Sparrow	3				3
Magnolia Warbler	3				3
Mourning Warbler	1				1
Myrtle Warbler	265	21		2	288
Northern Waterthrush	3				3
Orange-crowned Warbler	15				15
Ovenbird	14			1	15
Rose-breasted Grosbeak	2				2
Red-breasted Nuthatch	8				8
Ruby-crowned Kinglet	2				2
Red-eyed Vireo	2	1			3
Red-shafted Flicker	1				1
Ruby-throated Hummingbird				5	5
Slate-colored Junco	9				9
Song Sparrow	2				2
Sharp-shinned Hawk	3			1	4
Swainson's Thrush	15				15
Tennessee Warbler	25	4			29
Trail's Flycatcher	7				7
Warbling Vireo	7	1	2		10
White-breasted Nuthatch	3	2			5
Wilson's Warbler	1				1
Western-palm Warbler	3				3
White-throated Sparrow	10	1			11
Yellow-bellied Flycatcher	2				2
Yellow Warbler	40	8			48
Yellow-shafted Flicker	2				2
<b>Total</b>	<b>678</b>	<b>155</b>	<b>9</b>	<b>17</b>	<b>859</b>

5853.5 net-hours

14.7 captures/100 net-hours

Repeat: banded 90 or fewer days ago, at the BBO

Return: banded over 90 days ago, at the BBO

Unbanded: caught but not banded (e.g. escaped)

Table 4 Fall Songbird Migration Monitoring totals from the Experimental Nets

Species	Banded	Repeat	Return	Unbanded	Total
American Goldfinch	3		1		4
American Redstart	13				13
American Tree Sparrow	60	2		2	64
Baltimore Oriole	1				1
Black-and-white Warbler	1				1
Bay-breasted Warbler	3			1	4
Black-capped Chickadee	32	22	1	1	56
Brown-headed Cowbird	1				1
Blue-headed Vireo	2				2
Blackpoll Warbler	8	1			9
Canada Warbler	2				2
Clay-colored Sparrow	91	9	1	2	103
Cedar Waxwing	3				3
Chipping Sparrow	3				3
Cape May Warbler	2				2
Connecticut Warbler	1				1
Common Yellowthroat	9				9
Downy Woodpecker	1	3			4
Golden-crowned Kinglet	3				3
Gray Catbird	1	1			2
Gambell's White-crowned Sparrow	15	1			16
Hermit Thrush	1				1
House Wren	47	6		3	56
Leconte's Sparrow	11				11
Least Flycatcher	170	14	1	4	189
Lincoln's Sparrow	9				9
Mourning Warbler	14				14
Marsh Wren	2				2
Mourning Warbler	1				1
Myrtle Warbler	178	12		2	192
Nashville Warbler	1				1
Northern Waterthrush	2				2
Northern Shrike	1				1
Orange-crowned Warbler	38	1		2	41
Oregon Junco	1				1
Ovenbird	5				5
Philadelphia Vireo	2				2
Purple Finch	1				1
Rose-breasted Grosbeak	1				1
Red-breasted Nuthatch	4				4
Ruby-crowned Kinglet	16			1	17
Red-eyed Vireo	7	1		1	9
Ruby-throated Hummingbird				1	1
Savanna Sparrow	3				3
Slate-colored Junco	8			1	9
edge Wren	1				1
Song Sparrow	12				12
Swamp Sparrow	1				1
Swainson's Thrush	2				2
Tennessee Warbler	91	14		4	109
Traill's Flycatcher	32	2		1	35
Unidentified Sparrow				1	1
Warbling Vireo	17	2	2	1	22
Wilson's Warbler	16				16
Western-palm Warbler	9				9
White-throated Sparrow	5	1			6
Yellow-bellied Sapsucker	1				1
Yellow Warbler	276	34	1	6	317
<b>Total</b>	<b>1241</b>	<b>126</b>	<b>7</b>	<b>34</b>	<b>1408</b>

1228 net-hours

114.7 captures/100 net-hours

Repeat: banded 90 or fewer days ago, at the BBO

Return: banded over 90 days ago, at the BBO

Unbanded: caught but not banded (e.g. escaped)

## MAPS Monitoring

### BLAB

Table 5 MAPS Monitoring totals from BBO Lab (BLAB)

Species	Banded	Recaptured	Unbanded	Total
American Robin	4	2		6
Baltimore Oriole	2	5		7
Black-capped Chickadee	3	2		5
Brown-headed Cowbird	1	1		2
Cooper's Hawk	1			1
Downy Woodpecker		1		1
Hairy Woodpecker	1			1
House Wren	1			1
Least Flycatcher	19	20		39
Rose-breasted Grosbeak		1		1
Warbling Vireo	1			1
White-throated Sparrow	1	3		4
Yellow Warbler		1		1
<b>Total</b>	<b>34</b>	<b>36</b>		<b>70</b>

310 net-hours

22.6 captures per 100 net-hours

*Recapture: captured previously*

*Unbanded: caught but not banded (e.g. escaped)*



## SOPO

Table 6 MAPS Monitoring totals from Sora Pond (SOPO)

Species	Banded	Recaptured	Unbanded	Total
American Goldfinch	2			2
American Robin	2	3		5
Baltimore Oriole	2	1	1	4
Black-and-white Warbler	2			2
Black-capped Chickadee	15	5		20
Brown-headed Cowbird	4	3		7
Clay-colored Sparrow	16	2		18
Cedar Waxwing	1	1		2
Common Yellowthroat	5	1	1	7
Downy Woodpecker	2			2
Gray Catbird	2	4		6
House Wren	7	2		9
Least Flycatcher	60	21	1	82
Marsh Wren	3			3
Nelson's Sparrow	1			1
Northern Waterthrush	1			1
Rose-breasted Grosbeak	1			1
Red-winged Blackbird	24	4	4	32
Sedge Wren	1			1
Song Sparrow	12	5		17
Swamp Sparrow	1			1
Swainson's Thrush	2			2
Tennessee Warbler	17			17
Traill's Flycatcher	5	1		6
Warbling Vireo	10	2		12
White-throated Sparrow		1		1
Yellow-bellied Sapsucker	1	2		3
Yellow Warbler	97	23		120
<b>Total</b>	<b>296</b>	<b>81</b>	<b>7</b>	<b>384</b>

259.5 net-hours  
 150.3 captures per 100  
 net-hours

*Recapture: captured previously*  
*Unbanded: caught but not banded*  
*(e.g. escaped)*

## LILA

Table 7 MAPS Monitoring totals from Lister Lake (LILA)

Species	Banded	Recaptured	Unbanded	Total
American Goldfinch	2			2
American Robin	5	1		6
Baltimore Oriole	17	1		18
Black-capped Chickadee	12	2		14
Brown-headed Cowbird	1	2		3
Clay-colored Sparrow	9			9
Cedar Waxwing	5			5
Common Yellowthroat	3	1	1	5
Downy Woodpecker	1			1
Gray Catbird	5			5
House Wren	9	5		14
Least Flycatcher	55	9		64
Marsh Wren	3			3
Northern Waterthrush	1			1
Philadelphia Vireo	1			1
Red-eyed Vireo	4			4
Red-winged Blackbird	17	3		20
Song Sparrow	9	6	1	16
Swamp Sparrow	1			1
Swainson's Thrush	1			1
Tennessee Warbler	16			16
Traill's Flycatcher	2			2
Warbling Vireo	7			7
White-throated Sparrow	1			1
Yellow-bellied Flycatcher	1			1
Yellow-bellied Sapsucker	4	14		18
Yellow Warbler	58	8		66
<b>Total</b>	<b>250</b>	<b>52</b>	<b>2</b>	<b>304</b>

283.5 net-hours

114.6 captures per 100 net-hours

*Recapture: captured previously*

*Unbanded: caught but not banded (e.g. escaped)*

## Owl Migration Monitoring

Table 8 Owl Migration Monitoring totals

Species Name	Banded	Foreign	Repeat	Return	Unbanded	Total
Boreal Owl	5					5
Long-eared Owl	9					9
Northern Saw-whet Owl	271	1	18	1	2	293
<b>Total</b>	<b>285</b>	<b>1</b>	<b>18</b>	<b>1</b>	<b>2</b>	<b>307</b>

NSWO Male 1 (Old) (126 captures)  
 397.5 playback hours  
 31.7 captures/100 playback hours

*Repeat: banded 90 or fewer days ago, at the BBO*

*Return: banded over 90 days ago, at the BBO*

*Foreign: originally banded elsewhere*

*Unbanded: caught but not banded (e.g. escaped)*

NSWO Male 2 (New) (132 captures)  
 393 playback hours  
 33.6 captures/100 playback hours

NSWO Female (27 captures)  
 393 playback hours  
 6.9 captures/100 playback hours

Long-eared Owl (2 captures)  
 334.5 playback hours  
 0.6 captures/100 playback hours

Boreal Owl (20 capture)  
 234 playback hours  
 8.5 captures/100 playback hours

Table 9 Owl Migration Monitoring Capture Breakdown

Captures Species Name (Autofill)	Net / Nest / Cavity Number										Total
	1A	1B	A1	A2	A3	A4	F3	F4	LO1	S1	
Boreal Owl	2	2							1		5
Long-eared Owl			1		3	3			1	1	9
Northern Saw-whet Owl	6	10	38	52	60	66	17	8	1	35	293
<b>Total</b>	<b>8</b>	<b>12</b>	<b>39</b>	<b>52</b>	<b>63</b>	<b>69</b>	<b>17</b>	<b>10</b>	<b>2</b>	<b>35</b>	<b>307</b>

## Financials



## **Beaverhill Bird Observatory Society** Financial Statements

\*\*\* Available in May 2025 after our AGM \*\*\*

# Funders



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 along with personal donations including in memory of Mary Hughes Weir and the Wainwright Wildlife Society. Visit [www.beaverhillbirds.com](http://www.beaverhillbirds.com) for more information.



TD Friends of the Environment Foundation



Environment and Climate Change Canada

