



**Beaverhill Bird Observatory
Summer Report 2025**

by Willow Zilliox

September 2025

Introduction

Summer at the Beaverhill Bird Observatory is a flurry of numerous bird banding, wildlife monitoring and educational endeavours. M.A.P.S, nestling, and migration banding, staff and intern monitoring projects, and the annual Young Ornithologist Workshop are the highlights of the season. All 2025 summertime happenings were led by Jana Teefy, our Head Biologist, with support from Jon Van Arragon, Assistant Biologist, and Field Biologists Emelie Dykstra, Xavier Quantz, and Willow Zilliox. Many exceptional long-term volunteers called the BBO ‘home’ throughout the summer: El Whitby, Jocelyn Pyne, Anna Reichenbach, Anna Heming, and Aaron Gomperts.

In early July, a new shower, dubbed the “Bison Wallow” was implemented at the BBO! It was kindly constructed by Wes Olson with help from Johane Janelle and Geoff Holroyd!

Accompanying the staff throughout the summer was Keith, the Red-tailed Hawk, one of our four ambassador birds, all the while capturing the minds and hearts of our visitors.



One of our amazing education birds, Keith!

M.A.P.S. Banding

Standard banding operations this season included the entirety of the Monitoring Avian Productivity and Survivorship (M.A.P.S.) program, designed to collect data on bird species breeding in the natural area. M.A.P.S. banding has occurred annually at the BBO since 1989, commencing again this year on June 10th and continuing until August 1st.

At the Beaverhill Bird Observatory, M.A.P.S. banding occurred at three stations: Sora Pond (SOPO), Lister Lake (LILA), and at the BBO Lab (BLAB). The sampling time was divided into 10-day “periods”. Every period contained three days of banding, one day at each station. Every station was composed of 10 mist nets, standardized nylon mist nets measuring 12m long by 2.6m tall and having a mesh size of 30mm. These nets are designed specifically to catch songbirds and ensure their safety while caught, and staff check all nets every 30 minutes and closed nets or increased checking frequency if weather conditions (strong winds, any precipitation, and temperatures above 27°C) become unsafe for the birds. Nets were opened at sunrise and, ideally, were kept open for 6 hours every banding day. This generates a total of 60 net-hours per day under ideal conditions, although a minimum effort of 3 banding hours (30 net-hours) was allowable should weather prevent full hours from being achieved.

SOPO Banding

The SOPO banding station is located amongst the willows, aspens, and grasses of the northwest shore of Lister Lake, extending southwest into the aspen forest and bordering a smaller wetland called Sora Pond. SOPO boasted the highest number of captures, 305 out of 656 (46.5%). SOPO was run on June 10th, 20th, 30th, July 11th, 23rd, and 31st, for a total of 328.5 net-hours (Table 1). The most common species captured were Yellow Warblers, accounting for 95 of the captures (31.1%), followed by Least Flycatchers (87 captures, 28.5%) and Black-capped Chickadees (19 captures, 6.2%). An exciting capture from this station was a Mourning Warbler, banded on the first day of M.A.P.S., June 10th!

LILA Banding

The LILA banding station also spans a variety of habitats, from the willows and grasses along Lister Lake to the thicker aspen forests further west. LILA was run on June 11th, 24th, July 2nd, 10th, 24th, and August 1st, compiling 305.5 total net-hours and yielding the second highest number of captures, 271 out of 656 (41.3%; Table 2). At LILA, the most common species captured were Least Flycatchers (69 captures, 25.5%), followed closely by Yellow Warblers (65 captures, 24.0%) and then equal captures of Song Sparrows, Traill's Flycatchers, and Warbling Vireos (13 captures each, 4.5% each). On August 1st, a Long-eared Owl was caught in one of the nets at LILA, making for a spectacular final day of M.A.P.S. banding!



A young Yellow Warbler banded at the SOPO station!

BLAB Banding

The BLAB banding station shares the aspen forests with our migration and owl banding nets. BLAB was run on June 12th, 21st, July 1st, 12th, 22nd, and 30th, amassing 292.5 total net-hours this season as well as the fewest captures, 80 out of 656 (12.2%; Table 3). The species most frequently captured were Least Flycatchers (42 captures, 52.5%). American Robins were a common capture at this station (11 captures, 13.8%), followed by Warbling Vireos and Yellow Warblers, which were both captured 6 times (7.5% each). A Ruby-throated Hummingbird was captured in one of the nets on July 22nd and, despite being released unbanded, was still a beautiful sight.

Geoff Holroyd's Young Ornithologist Workshop

Every August, the BBO welcomes a group of keen birders aged 15-18 to gain and sharpen their banding skills, as well as participate in a number of fun activities. This year, our 10 attendees learned the fundamentals of scribing, extraction, and processing birds in our songbird migration nets, at our SOPO banding station, and in some experimental nets set up along Duck Drive (DUDR).

Other activities included learning about Tree Swallow and Purple Martin biology with Geoff Holroyd, searching for butterflies with the exceptional David Lawrie, watching presentations about ageing/sexing and looking at specimens with Jon and Jana, participating in a "BioBlitz" where they identified as many species of flora and fauna as possible, and touring nearby birding hotspots in a "Big Day" with Irene and Andra. An extra event was to autopsy unhatched Purple Martin eggs to determine why they didn't hatch. They also got the opportunity to visit Helen and Phil Trefry's falconry and Geoff Holroyd's home for supper.

Additionally, experimental nights of catching owls were conducted on August 11th and 14th, before the typical season, and the YOs were able to watch the banding process of two Northern Saw-whet Owls and one Long-eared Owl! On these nights, the capture of young owls raised questions about the presence of other nesting owls in the area. As a result, owl banding was continued through the remainder of August as an experimental pursuit before commencing as a standard operation on September 1st.

Meals and transportation were facilitated by numerous wonderful individuals; Ruth & Ron Ball, Geoff Holroyd, Helen & Phil Trefry, Brenda Dale, Irene & Bob Crosland, Andra Bismanis, Brenda Dale, Mariana Prado, and Jana Teefy.



Attendees of the 2025 Young Ornithologist Workshop! From left to right: (top) Adam Ross, Mathias Bitter, Adrien Currier, Kalia Vigen, Bannor McEwen, Jewels & Jana Teefy, Emelie Dykstra, Willow Zilliox, Kalum Srochenski, Griffen Lepage, (bottom) Mariana Prado, Raymond Liu, Jordan Vigen, Jon Van Arragon, Xavier Quantz, and Raven & Geoff Holroyd. Not pictured: Selise Frolov.

Staff Monitoring Projects

Four staff monitoring projects were conducted and concluded in the summer months. Emelie Dykstra monitored an extensive grid of Least Flycatcher nests in continuation of her 2024 Least Flycatcher project, Xavier Quantz mapped out territories in his Forest Breeding Bird Census project, Jon Van Arragon scouted for shorebirds in his Shorebird Surveys on the south and east shores of Beaverhill Lake, and Willow Zilliox performed playback surveys in her Marsh Monitoring project on the shores of Lister Lake.

Summaries of these projects can be found in Volume 38(2) of *The Willet*, and full reports will soon be available on our website!

Nest Monitoring & Nestling Banding

Throughout the spring and summer seasons, nest boxes and natural nests were monitored by the biologists, including three duck boxes and 18 owl nest boxes. Forty-seven other nests were found and checked upon during the months, one of a Ruby-throated Hummingbird, one of a Cedar Waxwing, one of a Mallard, and 44 of Least Flycatchers (LEFL). Most of the LEFL nests (43/44) were part of Emelie's LEFL monitoring project and 14 of them were active nests. Of the owl boxes, one hosted a family of Saw-whet Owls who were banded in the spring and all 4 successfully fledged the nest. None of the other nest boxes were occupied. Seven LEFL nests were successful, as were the Ruby-throated Hummingbird, Cedar Waxwing, and Mallard nests!

In addition to the staff-monitored boxes, student interns monitor 206 Tree Swallow boxes and four Purple Martin boxes. During a window of time when they are of the right age, the nestlings in these boxes were banded by staff. 186 Tree Swallows and 87 Purple Martins were banded this summer.



*A nestling Purple Martin getting banded!
Photograph courtesy of Johane Janelle.*

Student Internships

In addition to the projects conducted by staff, the BBO also supported eight student internships this year: Bat Monitoring (2), Butterfly Monitoring, Tree Swallow Monitoring (2), Purple Martin Monitoring, and House Wren Monitoring (2). Nine interns covered these projects this year. Damek Rivera and Kai Dunkley monitored Tree Swallows, mentored by Ivana Schoepf. Hailey Chalifoux monitored Purple Martins, mentored by Glen Hvenegaard. Lauren Undheim and Judah Flynn monitored House Wrens, mentored by Zach Antoniow. Casey Elliott

monitored butterflies, mentored by John Acorn. Finally, Adara Cable and Sarah Sonnefeld monitored bats, mentored by Jody Rintoul. Their final papers will soon be available to read on our website!

Gratitudes

A massive community of people have generously dedicated their time and effort to helping with banding operations, events, and improvements at the Beaverhill Bird Observatory. A heartfelt thank-you goes to Jana Teefy, Wes Olson & Johane Janelle, Helen & Phil, Ruth & Ron, Geoff, Irene & Bob, Brenda, Andra, Matthew, Charlotte, Mariana, Jacqueline, Sam, Ethan, Maud, and Gabby. Thank-you, as well, to the BBO's incredible Board of Directors: Geoff Holroyd, Helen Trefry, Rose Scott, Sian Ford, Darren McGregor, Emily MacLellan, Glen Hvenegaard, Alyssa Bohart, Julianne Hayes, Richard Hedley, Christine Campbell, and Carmen Patry.

Table 1. SOPO Banding Totals

Species	Banded	Recapture ¹	Other ²	Total
American Goldfinch	1	1	0	2
American Redstart	1	0	0	1
American Robin	4	1	0	5
Baltimore Oriole	4	2	0	6
Black-and-white Warbler	2	1	0	3
Black-capped Chickadee	12	7	0	19
Brown-headed Cowbird	4	1	0	5
Clay-coloured Sparrow	2	2	0	4
Cedar Waxwing	3	0	0	3
Common Yellowthroat	3	0	0	3
Downy Woodpecker	1	2	0	3
Gray Catbird	4	3	0	7
Least Flycatcher	66	20	1	87
Mourning Warbler	1	0	0	1
Northern House Wren	8	2	1	11
Ovenbird	1	0	0	1
Rose-breasted Grosbeak	1	0	0	1
Red-winged Blackbird	6	6	1	13
Song Sparrow	4	2	0	6
Swamp Sparrow	4	1	0	5
Tennessee Warbler	1	0	0	1

Traill's Flycatcher	5	0	0	5
Warbling Vireo	9	3	0	12
Yellow-bellied Sapsucker	4	2	0	6
Yellow Warbler	62	32	1	95
Total	213	88	4	305

Net hours: 328.5

92.8 captures per 100 net-hours

¹ Captured previously at the BBO.

² Caught in a mist net but not banded (ex. escaped).

Table 2. LILA Banding Totals

Species	Banded	Recapture ¹	Other ²	Total
American Goldfinch	8	2	0	10
American Robin	2	1	1	4
Baltimore Oriole	3	1	0	4
Black-capped Chickadee	9	3	0	12
Brown-headed Cowbird	2	4	0	6
Clay-coloured Sparrow	2	1	0	3
Cedar Waxwing	10	0	0	10
Common Grackle	2	0	0	2
Common Yellowthroat	3	1	0	4
Downy Woodpecker	1	1	0	2
Gray Catbird	3	2	0	5
Least Flycatcher	50	17	2	69
Long-eared Owl	1	0	0	1
Lincoln's Sparrow	1	0	0	1
Mourning Warbler	1	0	0	1
Northern House Wren	3	3	0	6
Rose-breasted Grosbeak	1	0	0	1
Red-eyed Vireo	1	0	0	1
Red-winged Blackbird	10	1	0	11
Song Sparrow	11	2	0	13
Swamp Sparrow	2	1	0	3
Tennessee Warbler	3	0	0	3
Traill's Flycatcher	11	1	1	13
Warbling Vireo	9	4	0	13

White-throated Sparrow	1	1	0	2
Yellow-bellied Sapsucker	2	4	0	6
Yellow Warbler	50	14	1	65
Total	202	64	5	271

Net hours: 305.5

88.7 captures per 100 net-hours

¹ Captured previously at the BBO.

² Caught in a mist net but not banded (ex. escaped).

Table 3. BLAB Banding Totals

Species	Banded	Recapture ¹	Other ²	Total
American Robin	5	5	1	11
Baltimore Oriole	1	1	0	2
Black-capped Chickadee	1	1	0	2
Brown-headed Cowbird	0	1	0	1
Gray-cheeked Thrush	1	0	0	1
Least Flycatcher	23	18	1	42
Northern House Wren	1	0	0	1
Rose-breasted Grosbeak	0	2	0	2
Red-eyed Vireo	0	1	0	1
Ruby-throated Hummingbird	0	0	1	1
Red-winged Blackbird	1	1	0	2
Swainson's Thrush	1	0	0	1
Warbling Vireo	3	3	0	6
White-throated Sparrow	0	1	0	1
Yellow Warbler	3	3	0	6
Total	40	37	3	80

Net hours: 292.5

27.4 captures per 100 net-hours

¹ Captured previously at the BBO.

² Caught in a mist net but not banded (ex. escaped).



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 plus donations made in memory of Mary Hughes Weir, John Honsaker, and from the Wainwright Wildlife Society.

Visit www.beaverhillbirds.com for more information.



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