



Fall Report 2025

Jon Van Arragon

December 2025

Introduction



The 2025 BBO crew on the last day of the field season!

The fall field season has come and gone, capping off another successful year at the Beaverhill Bird Observatory's field station. Fall is always a busy time, with two different banding programs (songbird monitoring and owl monitoring) running simultaneously and events that bring hundreds of visitors out to the BBO. The field season ended on November 6th, just ahead of the year's first big snowfall. This fall we banded 2958 songbirds, 177 owls, and hosted over 1000 visitors. Geoff, Jana, and Jon also had the privilege of attending the Canadian Migration Monitoring Network meeting in Port Rowan, Ontario after the field season concluded.

Songbird Migration Monitoring



Some of the highlight captures this fall from left to right, top to bottom: Myrtle Warbler, Connecticut Warbler, Nashville Warbler, Blue Jay

Fall songbird migration monitoring operated from July 20th to October 20th. Up to 17 mist nets each day were used every day as well as a daily census to monitor migrants moving through the natural area. This year 2958 birds were captured in 6877 net-hours for a total capture rate of 43.0 birds per 100 net-hours. Captures were substantially higher this fall than last fall when only 2267 birds were captured over roughly the same number of net-hours. Fewer species were trapped this year, with only 60 species in autumn 2025 compared to 65 in autumn 2024. This autumn's most 3 commonly captured species (in order) were Myrtle Warblers, Least Flycatchers, and Yellow Warblers.

2025's fall migration was an interesting one – from the beginning of the season until the end of August captures were unusually low. Common species like Yellow Warblers, Clay-colored Sparrows, and Least Flycatchers appeared in lower numbers compared to previous years. Some species were even entirely absent: we didn't catch a single LeConte's Sparrow, Baltimore Oriole, or Philadelphia Vireo during our 3 months of banding. We only caught more than 50 birds on two mornings during this period, which is a fairly typical number to hit during that time of year!

Despite the slow start, capture volume rebounded significantly once September started. This year's spike in capture volume was driven almost entirely by a single species – the humble Myrtle Warbler. Myrtle Warblers are our most common capture in most falls, but captures for this year were above and beyond the usual! 1261 Myrtle Warblers were captured this fall, a whopping 42.6% of our total capture volume! In addition, most of these birds made their way through the BBO in a short time span, during the first 2 weeks of September. During this week we averaged 100 birds a morning, with our busiest day being September 10 where 176 birds were captured in a single morning (and 120 of them showed up in a single net check)!



If you've ever wondered what catching 120 birds in a single net run looks like, here you go! All these birds were processed quickly with help from many people.

Given the low species total at 60, it is unsurprising that we didn't have any exceptionally rare or unusual captures. Some of our highlights were a Connecticut Warbler, a Nashville Warbler, and a handful of Yellow-bellied Flycatchers. We catch these species most years, but they are some of the scarcer migrants that we see in the area, making them exciting to see nonetheless. While not a full species, one other interesting capture this year was a



Mountain White-crowned Sparrow. White-crowned Sparrows are a common fall capture at the BBO, but typically we only catch the Gambel's' subspecies that breeds widely across the boreal forest. The Mountain subspecies does breed in Alberta, but only in the Rocky Mountains. This subspecies is distinguished by its black lores, compared to the pale gray lores of the Gambel's subspecies. While the difference is subtle, it was an interesting rarity to document!

A Mountain White-crowned Sparrow, note the black lores (the lores are the space between the eye and bill)!

Owl Migration Monitoring

Owl migration monitoring began early this year, with non-standard monitoring of roughly 3 hours per night starting on August 11. Standard monitoring began on September 1, with 10 nets and 5 audio lures being operated each night. Nets remained open for 6 hours each night in September and November, and were kept open for 7 hours during October when owl migration tends to peak. 179 Northern Saw-whet Owls and 4 Long-eared Owls were caught over 1706.5 audio lure hours for a capture rate of 10.7 birds / 100 lure hours. Our busiest night for captures was on October 21, when we caught 16 Saw-whet Owls.

This fall was our lowest capture year for Saw-whet Owls on record since 2009 even with the early start in August. Long-eared Owl captures were the lowest they have been since we began targeting the species in 2018 as well. Our station typically catches between 300-500 Saw-whet Owls in a given fall, making this year's total of 179 extremely disappointing. The timing of this year's migration was unusual as well: normally our migration peaks around October 8, but this year our busiest week was from October 19-25. A more detailed breakdown of captures by audio lure is available in Table 2 below.



One of the Saw-whet Owls captured this fall. We demand more of these cuties!



We don't have a concrete explanation for this year's low captures: some of our speculated reasons include a warmer than average September leading to owls not migrating, a higher number of large predatory owls in the area (such as Great Grey Owls) discouraging migrants from sticking around to get caught in our nets, or the possibility of the owls taking a different migratory route that bypasses the BBO this year, or that there is simply fewer Saw-whet Owls this year! Northern Saw-whet Owl populations boom and bust on a roughly 4 year cycle. 2020 was noted to be a down year, so we would typically expect the last 2 years to be peaks. We hope that this year is just an anomaly, and that we'll return to peak capture numbers in the coming years!

Long-eared Owls were also caught in record low numbers this year, despite many being seen in the area this summer.

Events

Fall isn't just an important time for scientific monitoring at the BBO, it is also our busiest season for welcoming visitors out to the BBO! Over 1000 visitors made their way to the BBO this fall, some of whom were just walking through and discovering BBO for the first time, while many others were attending our banding events and hoping to see songbirds and owls up close and personal. We hosted 35 events this fall, and our owl nights in particular sold out very quickly! We also hosted 3 groups of university students from the U of A, Red Deer Polytechnic, and NorQuest College for banding at the BBO! Our busiest event of the year was Supper and Saw-whets on the nights of September 26 and 27. Each night we hosted 50 visitors at the lab, and provided them with a home cooked meal of vegetarian dishes!



Emelie giving BBO Chair Geoff Holroyd a fashionable Barn Swallow face painting during Supper and Saw-whets

While the wild birds were not always cooperative when it came to getting in the nets, we did have our ambassador birds Keith the Red-tailed Hawk and Tansi the Great Horned Owl to keep people entertained on slower days! We also provided a whole range of activities to help pass the time between net checks, including owl quizzes, kids crafts, and a scavenger hunt! Thank you so much to everyone who came out to our events this year, it's always a treat to meet others who are keen on birds and help them create unforgettable memories!

Canadian Migration Monitoring Network Meeting



Geoff, Jana, and Jon birding at Big Creek in Port Rowan during the Canadian Migration Monitoring Network meeting.

This year was the first in-person meeting of the Canadian Migration Monitoring Network since 2019! Geoff, Jana, and Jon attended this meeting to represent BBO and to network with representatives from other stations across Canada. This included a reunion with former BBO employee Shane Abernethy! Shane worked at BBO from 2020-2022 and created the popular “BirdBytes” video series featured on our YouTube channel. It was great to catch up with him and hear about his work as head bander at Tommy Thompson Park in Toronto!

During the meeting, Jana gave an update about BBO’s station activities for the last 2 years, and Geoff gave talks about the value of morphometric data collected during bird banding and funding strategies for banding stations. Other topics included an update from the Canadian Bird Banding office reassuring banders that bird banding programs will not be

affected by disruptions south of the border, information on expansions to the Motus program being led by Birds Canada, a talk from Ann Nightingale (Rocky Point Bird Observatory) about strategies for tracking and preventing bird injuries, and a talk from Nicole Richardson (Birds Canada) highlighting the scientific value of photographs taken of birds in the hand. The meeting was a great source of information and we're looking forward to putting some new ideas into practice during the next field season! A more detailed report about this meeting is available in the 2025 Willet.



Group photo from the Canadian Migration Monitoring Network meeting!

Acknowledgements

It takes a village to accomplish everything we did during this fall season! The BBO would like to thank this year's staff for all their hard work during the field season: Jana Teefy, Jon Van Arragon, Emelie Dykstra, Xavier Quantz, and Willow Zilliox. The staff would also like to extend a hearty thanks to Jewels (Jana's dog) for helping us greet visitors and keeping our hands warm on chilly days.

We would also like to thank our board of directors for their behind the scenes support and dedication to the BBO: Geoff Holroyd, Helen Trefry, Rose Scott, Emily MacLellan, Christie Campbell, Glen Hvenegaard, Darren McGregor, Alyssa Bohart, Richard Hedley, Sian Ford, Carmen Patry, and Julianne Hayes.

We would also like to thank all our volunteers who dedicated their time to the BBO this summer. Whether you came out for a morning or a month, our work wouldn't be possible without help from people like you!

Table 1. Fall Migration Monitoring Banding Totals

| <i>Species</i> | Banded | Repeat ¹ | Return ² | Unbanded ³ | Grand Total |
|--------------------------------|--------|---------------------|---------------------|-----------------------|-------------|
| Alder Flycatcher | 6 | | | | 6 |
| American Goldfinch | 4 | | | | 4 |
| American Redstart | 35 | | | | 35 |
| American Robin | 1 | 1 | | | 2 |
| American Tree Sparrow | 16 | 3 | | | 19 |
| Bay-breasted Warbler | 2 | | | | 2 |
| Black-and-white Warbler | 7 | | | | 7 |
| Black-capped Chickadee | 52 | 83 | 3 | 1 | 139 |
| Blackpoll Warbler | 23 | | | | 23 |
| Blue Jay | 2 | | | | 2 |
| Blue-headed Vireo | 5 | | | | 5 |
| Brown Creeper | 2 | | | | 2 |
| Canada Warbler | 1 | | | | 1 |
| Cedar Waxwing | 5 | | | | 5 |
| Clay-colored Sparrow | 66 | 1 | | 4 | 71 |
| Common Yellowthroat | 14 | | | | 14 |
| Connecticut Warbler | 1 | | | | 1 |
| Downy Woodpecker | 3 | 6 | 2 | | 11 |
| Eastern Phoebe | 3 | | | | 3 |
| Gambel's White-crowned Sparrow | 9 | | | 1 | 10 |
| Gray Catbird | 3 | 2 | 1 | | 6 |
| Gray-cheeked Thrush | 1 | | | | 1 |
| Hairy Woodpecker | 2 | 1 | 2 | | 5 |
| Hermit Thrush | 7 | 5 | | | 12 |
| Least Flycatcher | 285 | 78 | 2 | 7 | 372 |
| Lincoln's Sparrow | 16 | | | 1 | 17 |
| Long-eared Owl | | 1 | | | 1 |
| Magnolia Warbler | 26 | | | 2 | 28 |
| Marsh Wren | 3 | | | | 3 |
| Mountain White-crowned Sparrow | 1 | | | | 1 |
| Mourning Warbler | 4 | | | | 4 |
| Myrtle Warbler | 1196 | 53 | 1 | 11 | 1261 |
| Nashville Warbler | 1 | | | | 1 |
| Northern House Wren | 59 | 22 | | 3 | 84 |
| Northern Waterthrush | 6 | | | | 6 |
| Orange-crowned Warbler | 147 | 12 | | 1 | 160 |
| Ovenbird | 37 | 1 | | | 38 |
| Red-breasted Nuthatch | 1 | | | | 1 |
| Red-eyed Vireo | 5 | | | | 5 |
| Rose-breasted Grosbeak | 1 | | | | 1 |
| Ruby-crowned Kinglet | 28 | 2 | | | 30 |

| | | | | | |
|---------------------------|-------------|------------|-----------|-----------|-------------|
| Ruby-throated Hummingbird | | | 1 | 8 | 9 |
| Ruffed Grouse | | | | 2 | 2 |
| Savannah Sparrow | 6 | | | | 6 |
| Sharp-shinned Hawk | 1 | | | | 1 |
| Slate-colored Junco | 23 | 2 | | | 25 |
| Song Sparrow | 10 | | | | 10 |
| Swainson's Thrush | 34 | | | | 34 |
| Swamp Sparrow | 2 | | | | 2 |
| Tennessee Warbler | 45 | | | | 45 |
| Traill's Flycatcher | 56 | 3 | | 1 | 60 |
| Vesper Sparrow | 1 | | | | 1 |
| Warbling Vireo | 21 | 5 | 2 | | 28 |
| Western Palm Warbler | 26 | | | | 26 |
| White-breasted Nuthatch | 3 | 2 | | | 5 |
| White-throated Sparrow | 24 | 3 | | 4 | 31 |
| Wilson's Warbler | 14 | | | | 14 |
| Yellow Warbler | 201 | 33 | 4 | 1 | 239 |
| Yellow-bellied Flycatcher | 4 | | | | 4 |
| Yellow-bellied Sapsucker | 5 | 9 | | 1 | 15 |
| Yellow-shafted Flicker | 2 | | | | 2 |
| Grand Total | 2564 | 328 | 18 | 48 | 2958 |

6877 net hours

43.0 captures / 100 net hours

1 Banded recently (within 90 days) at the BBO

2 Banded at the BBO >90 days prior to recapture (e.g. in a previous year).

3 Caught in a mist-net but not banded (e.g. escaped net).

Table 2. Owl Monitoring Banding Totals

| <i>Species Name (Autofills)</i> | Banded | Repeat ¹ | Return ² | Foreign ³ | Grand Total |
|---------------------------------|------------|---------------------|---------------------|----------------------|-------------|
| Long-eared Owl | 4 | | | | 4 |
| Northern Saw-whet Owl | 165 | 5 | 1 | 6 | 177 |
| Grand Total | 169 | 5 | 1 | 6 | 181 |

NSWO Male Lure 1

342 lure hours

91 captures

26.6 captures / 100 lure hours

1 Banded recently (within 90 days) at the BBO

2 Banded at the BBO >90 days prior to recapture (e.g. in a previous year).

3 Banded at a location other than the BBO

NSWO Male Lure 2

353.5 lure hours

58 captures

16.4 captures / 100 lure hours

NSWO Female Lure

329.5 lure hours

10 captures

3.0 captures / 100 lure hours

Long-eared Owl Lure

367 lure hours

3 captures

0.8 captures / 100 lure hours

Boreal Owl Lure

314.5 lure hours

19 captures

6.0 captures / 100 lure hours

Thanks to our Sponsors



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