

Beaverhill Bird Observatory Annual Report 2022

By Sara Pearce Meijerink Shane Abernethy Jon Van Arragon and Jana Teefy

February 2023

Thank You to Our Sponsors

BBO is only able to continue to do 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, Beaver County, Bass Pro Shops and Cabella's Outdoor Fund, Birds Canada Birdathon, Canada Summer Jobs, Claystone Waste Ltd., Compliant Environmental Services, Edmonton Community Foundation, Edmonton Nature Club, Engineering Link Incorporated, Nature Canada's Charles Labatiuk Nature Endowment Fund, Nickle Family Foundation, Spenser Environmental, TD Friends of the Environment Fund, and Wild Bird General Store.

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

Notes from BBO Chair, Geoff Holroyd

Another amazing year added to BBO's continuing accomplishments. The details of BBO's activities in the 2022 year can be found in the pages below with more details on our website <u>www.beaverhillbirds.com</u>. We grew as an organization with six new board members elected at our spring AGM – thanks for stepping up! And thanks to outgoing board members who contributed so much over the past years. One accomplishment of the board was an update of our strategic plan which is now summarized on our website.

BBO continues with a strong financial position thanks to your donations and hard work. One notable fundraiser was our surprise casino in January. After a group cancelled, AGCL phoned at 3:30 pm to ask if we could host a casino on the following two days since other groups had said no; I immediately said yes. By 8:30 pm Sara and Helen had recruited enough volunteers to fill the shifts for both days. By the following morning you had stepped up with 50% backup volunteers. AGCL sent us a very appreciative note; if we had not stepped up the casino would have closed for two days! Your rapid response shows the strength of our membership; thank you. The casino was a huge windfall. That money freed up other funds that allowed us to replace the Nuthatch Nest bunkhouse this winter. We also had funds to commit to our Endowment Fund in the Edmonton Community Foundation. Together with private donations including one in memory of Mary Hughes Weir, our \$50,000 was matched with \$44,000 from an ECF funder, growing our Endowment Fund to over \$440,000 in just four years.

With all new buildings we can now turn our attention to continued education and new research projects such as the Least Flycatcher study that was conducted in 2022. Thank you for your ongoing support of BBO activities. We have accomplished much and will continue to grow. Think Globally, Act Locally!

Notes from BBO Head Biologist, Sara Pearce Meijerink

We've had another wonderful year of operations at the BBO! Everything has gone back to normal with us finally being in the "post pandemic" stage of our world. BBO's public events and annual fundraisers were able to run once more, we invited new interns and volunteers to join the BBO team and all the staff were able to work on site together without fear of getting sick. Migration monitoring and MAPS banding went smoothly this year (even with 7 new nets in operation during migration monitoring) and the owl banding season was fantastic with 236 Northern Saw-whet Owls and 21 Long-eared Owls captured! Site improvements continue to occur with this autumn seeing the demolition of the 30+ year old Nuthatch Nest Bunkhouse and over the winter it will be replaced it with a brand new accommodation for staff, volunteers and visiting researchers to use! So much site improvement and changes have occurred. The last change being that this was my final field season at the BBO. The last 6 years of working here have been some of the best of my life and I will dearly miss the wonderful work and outreach the BBO does. It's time for a new chapter in my life though and I know this organization will continue to grow and flourish for many years to come!



Head Biologist Sara and her faithful dog and BBO's Chief Morale Officer, Taiga

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List of 2022 Executive, Staff and Contact Information

First	Last Name	Position	Year Joined
Name			the Board
Geoff	Holroyd	Chair	1984
Helen	Trefry	Vice-Chair	2014
Rose	Scott	Treasurer	2016
Jac	Curry	Director at Large	2020
Darren	McGregor	Web Designer	2005
Emily	McLellan	Director at Large	2020
Julianne	Hayes	Director at Large	2019
Glen	Hvenegaard	Director at Large	2020
Alyssa	Bohart	Director at Large	2018
Christie	Campbell	Director at Large	2022
Kimberly	Fulton	Director at Large	2022
Warren	Finlay	Director at Large	2022
Brendan	Casey	Director at Large	2022
Richard	Hedley	Director at Large	2022
Pat	Chan	Director at Large	2022
	STAFF		
Sara	Pearce Meijerink	Staff	
Shane	Abernethy	Staff	
Jon	Van Arragon	Staff	
Jana	Teefy	Staff	

Contact Information:

Geoff Holroyd, Chair of the Board of Directors - chair@beaverhillbirds.com

Sara Pearce Meijerink, Head Biologist - biologist@beaverhillbirds.com

Spring Report

Executive Summary

The Beaverhill Bird Observatory's spring migration monitoring was conducted by Head Biologist Sara Pearce Meijerink, along with Assistant Biologists Shane Abernethy, Jon Van Arragon, and Jana Teefy. They were assisted by long-term Belgian volunteer Myrthe Van Brempt and ELITE intern Bashir Bello. Spring migration monitoring program occurred each morning between May 1 and June 9, with a daily census of birds in the natural area and banding occurring on days without inclement weather. Thirteen mist nets were operated as part of standard migration monitoring protocols, and 7 additional new nets were operated simultaneously to fulfill criteria for moving net lanes. The standard net lanes recorded 412 captures for a capture rate of 18.3 birds / 100 net hours, while the new net lanes recorded 526 captures for a capture rate of 94.8 birds / 100 net hours. From May 13 until June 5 staff hosted visitors on site for migration banding events, as well this year marked the long-awaited return of the Big Birding Breakfast event on May 28 and 29. We were also able to thank all who donated to our new lab-education building at a ribbon cutting on June 4 and 5. Eight student interns began working on numerous long-term monitoring programs in the natural area that will continue into the summer months.

Migration Monitoring

The standard 13 mist nets (2, 2X, 8, 9, 9X, 50, 51, 52, 53, 54, 55, 56, 57) were operated from May 1 to June 9 on mornings where temperatures were above 0°C, wind was below 20 km/h, and there was no precipitation. A total of 412 birds were caught in the standard net lanes, of which 320 were newly banded and 88 were repeats and returns (Table 1). A total of 35 species were captured, a welcome improvement over last year's dismal total. While the capture rate increased from the extreme low of spring 2021, the overall capture rate still remained low compared to previous years. The five most commonly caught species were Least Flycatcher, Slate-colored Junco, Baltimore Oriole, Swainson's Thrush, and Clay-colored Sparrow.

migration in our "standard nets" at the Beaverhill Bird Observatory since 2006.								
	2006	2007	2008	2009	2010	2011	2012	2013
Total Captures	242	408	382	500	497	412	459	324
Birds Banded	169	318	288	351	333	241	307	211
Net Hours (NH)	1615	1813	1828	1608	2016	1884	1997	1884
Capture Rate (birds/100 NH)	15.0	22.5	20.9	31.1	24.7	21.9	23.0	17.2
Species Captured	31	44	38	39	38	40	39	39
	2014	2015	2016	2017	2018	2019	2021*	2022
Total Captures	841	810	849	996	607	647	262	412
Birds Banded	561	641	663	802	443	491	194	320
Net Hours (NH)	2615	2859	3432	2031	2594	2503	1929	2257.5
Capture Rate (birds/100 NH)	32.2	28.3	24.7	49.0	23.4	25.8	13.6	18.3
Species Captured	36	43	45	54	51	44	27	35

Table 1. Number of captures, net hours, species banded, and capture rates during springmigration in our "standard nets" at the Beaverhill Bird Observatory since 2006.

*Due to the COVID-19 pandemic, banding did not occur during the 2020 season

Alongside the 13 standard mist nets, staff operated 7 new net lanes (59, 60, 61, 62, 63, 64, 65) that will hopefully replace some of our less productive nets in the future. These nets were located only 25-50 m north of the existing net lanes in willow habitat that was more suitable for catching large volumes of migrating songbirds. A total of 526 birds were caught in the new nets, of which 411 were newly banded. 35 species were captured in the new net lanes as well for a combined 43 species between all 20 nets. As anticipated the capture rate was much higher in these nets at 94.8 birds / 100 net hours – over 5 times greater than the capture rate in the standard nets. The five most commonly caught species were Clay-colored Sparrow, Yellow Warbler, Baltimore Oriole, Least Flycatcher, and Common Yellowthroat.

Our busiest week in terms of captures was from May 21st to May 28th, during which we caught 400 birds between both the old and new nets. Our busiest day was on May 22nd where we caught 59 birds in one morning! We were fortunate enough to be hosting visitors that day, which meant our guests were in for quite a treat!

In addition to banding, staff conducted a 40-minute daily

Clay-colored Sparrows were overall our most abundant capture this spring. While not the most brightly coloured birds, they're still super cute!

census each day to document the species in the natural area. With Beaverhill Lake continuing to return, it was no surprise to once again see massive flocks of Franklin's Gulls clouding over the lakebed to forage on insects. The overhead streams of Greater White-fronted Geese and Snow Geese were as impressive as ever in the early spring, and they eventually gave way to flocks of boreal migrants such as Tennessee Warblers and Northern Waterthrushes. Other notable sightings included a Brown Thrasher near one of our net lanes, a Turkey Vulture that decided to land in our lab clearing, and 11 pairs of Purple Martins at our Purple Martin boxes!

Big Birding Breakfast

After two years of cancellations due to COVID-19, the Big Birding Breakfast celebration finally made its triumphant return this spring! The event was a huge success and the staff would like to extend a massive thank you to the volunteers and board members who assisted during the events. An extra-special thank you goes to Janos Kovaks for spending both mornings cooking some absolutely delicious crepes!

We hosted 50 visitors each morning on May 28th and May 29th, and visitors were treated to a full morning of banding to go



Visitors tossing feathers for our Tree Swallows to use when building their nests.

with their breakfast. We also ran several other activities throughout the morning: an owl

headband craft for kids, a guided nature hike to the weir, and we even threw feathers out in the grassland for our local Tree Swallows to use for nesting material!

Other Activities

Besides our usual migration monitoring programs, staff put a great deal of emphasis on trying to find out more about our local breeding birds. Myrthe, our long-term volunteer from Belgium, worked incredibly hard to find as many Least Flycatcher nests as possible so that we can learn more about the breeding biology of one of our most common summer residents.

The BBO is home to many nest boxes designed for Northern Saw-whet Owls, and we were thrilled to find one of them was occupied this year! We carefully monitored the nest box and were able to band six adorable owl chicks on May 26th.

While our Tree Swallows are still mostly incubating eggs in early June, staff also had the chance to band Mountain Bluebird chicks in one of the nest boxes along the road! In addition to the chicks, a great deal of patience gave staff the opportunity to band the male parent as well! The female bird at this particular nest box was already banded, so we were happy to give her partner some matching bling so he didn't feel left out.



A female Least Flycatcher sits on her nest.

This is a shortened version of the spring report. The full version can be found <u>HERE</u>.

Summer Report

Introduction

The 2022 summer season at the Beaverhill Bird Observatory (BBO) saw the completion of a number of avian monitoring projects and site maintenance tasks. Operations were carried out by head biologist Sara Pearce Meijerink, assistant biologists Shane Abernethy, Jana Teefy, Jon Van Arragon, and volunteer Myrthe Van Brempt. The primary operational task of MAPS (Monitoring of Avian Productivity and Survivorship) banding occurred between the dates of June 10th and August 8th, but additional projects included Tree Swallow chick banding, Purple Martin colony monitoring, the Breeding Bird Forest Census, numerous student intern projects, and a Least Flycatcher nest productivity study.

In addition to these projects, staff worked on various maintenance and stewardship activities, including a significant re-graveling of the access road, installation of a BBO sign at the turn by the front gate and site facility maintenance tasks. BBO Staff also hosted the sixth Geoff Holroyd's Young Ornithologist Workshop, with eleven youth from Alberta, Saskatchewan and Oregon attending to learn about bird ID, handling, banding and more! Workshop participants spent a full week helping with bird banding operations, learning about field biology, wetland ecology, butterflies, falconry, wildlife rehab and more.

Monitoring Avian Productivity and Survivorship



A fledgling Yellow-Bellied Sapsucker, in juvenile plumage.

The MAPS program is a protocol standardized across North America, used to assess the breeding status and condition of land birds during the summer, and geared to provide a detailed overview of nest productivity, fledgling, adult survivorship, post-fledging activity and overall population. The protocol involves catching birds with ten 12m songbird mist nets once every ten day period at each station. Nets were opened at sunrise and monitored for 6 hours. Nets were closed in the event of inclement weather, namely precipitation, wind in excess of 20 km/h or temperatures above 27°C. The BBO has operated three MAPS stations since 1989, making it one of Canada's oldest MAPS operators. The BLAB station has been operating since 1989, and the more recently established SOPO and LILA stations have operated since 2016. This year we accumulated 635 net-hours and captured 477 birds across all three stations, for an area-wide capture rate of 75.1 captures/100 net-hours.

BBO Lab

The BLAB MAPS station is located in the area around the banding lab and clearing (N53.38055° W112.52737°), in a habitat mostly characterized by mixed-age poplar forest. It is the longestrunning MAPS station at BBO, but has also been significantly impacted by forest succession in the 33 years since its inception. The habitat is now dominated by Trembling Aspen and Balsam Poplar, with a canopy level far above the level of our nets, resulting in a major decline in capture rate over the years. Nonetheless, it remains one of Canada's oldest MAPS stations, and provides valuable data by virtue of how forest succession and growth impacts bird numbers and diversity.

BLAB was run on June 11th, 20th, 30th, July 10th, 21st, and 31st. 333 net-hours were accumulated, yielding 73 total captures and a capture rate of 21.9 captures/100 net-hours. The most common capture was Red-winged Blackbirds (30), followed by Least Flycatchers (22) and American Robins (7). Other captures of interest were Baltimore Orioles (3), Yellow Warblers (2) and a single White-throated Sparrow.

Sora Pond

The Sora Pond, or SOPO MAPS station covers a region of forest edge immediately southwest of Sora Pond at the intersection of the Flicker Freeway and Harrier Highway trails (N53.37936° W112.51921°). The station was established in 2016 and consistently has the highest capture volume of the three stations. Its survey area is on a boundary between mid-succession aspen forest and wetland, with a transition area of willow shrubland between them. Water levels were highly variable this year, and several of the nets could not be run for two periods due to high water making them inaccessible and unsafe for birds.

SOPO was run on June 12th, 21st, July 1st, 11th, 22nd and August 1st. The six monitoring periods accumulated 275 net-hours, and captured 223 birds, for a total capture rate of 81.1 captures/100 nethours, making it the most productive station for both capture rate and absolute volume. Red-Winged Blackbirds (48) were the most common capture,



This Veery, an uncommon species of thrush in this area, was one of the highlight captures at SOPO.

closely followed by Least Flycatchers (45) and Yellow Warblers (34). Other noteworthy captures were a Nelson's Sparrow (1), an Eastern Kingbird (1), a Blue-Headed Vireo (1) and a Veery (1), an uncommon bird in this region.

Lister Lake

The LILA MAPS station is located along the shores of Lister Lake near the lookout off Harrier Highway trail, (N53.37216° W112.52930°) close to the Visitor Parking Lot. It includes mid-succession poplar forest and willow grassland as well as a section of lakeshore, characterized by dense willow shrubs. Historical beaver activity in the nearby area is heavy and resulted in the clearance of a swath of forest, as well as the formation of a large beaver trench in the number 2 net lane, requiring that particular net lane's retirement in 2021.

Dates of LILA's operation were June 13th, 22nd, July 3rd, 15th, 23rd and August 3rd. 278 net-hours were accumulated for a total of 181 captures and a capture rate of 65.1 captures/100 net-hours. Least Flycatchers (40) were the most commonly caught, followed by Red-Winged Blackbirds (36), Yellow Warblers (15) and Song Sparrows (13). Of note were a number of Yellow-Bellied

Sapsuckers (11), a pair of Philadelphia Vireos (2), a Common Grackle (1), several Cedar Waxwings (5) a single Myrtle Warbler (1).

Nest Site Banding

During the summer, BBO maintains nearly 200 Tree Swallow nest boxes in three grids throughout and outside the Beaverhill Natural Area, as well as two Purple Martin colony boxes and 100 House Wren nest boxes. After years of hope and maintenance, our Purple Martin colony boxes were finally occupied in force! In previous years only two pairs attempted nesting without success, but this year saw 11 active nests in the two colony boxes, most of which successfully fledged young!

Staff and summer interns monitored these nest sites, and banded Purple Martin and Tree Swallow chicks when they were at the appropriate age, as well as the two broods of Mountain Bluebirds that occupied one of the nest boxes on the road grid. After a painful period of waiting, staff were able the capture and band the male of the pair, and a stroke of luck allowed the capture of the female as well, who had been banded at that same box the previous year. Staff were able to band over 400 chicks, mostly Tree Swallows, and were able to recapture two adults that had been banded as chicks the previous year.

Nest Searching and Monitoring

Another regular summer activity is nest searches and recording incidentally found bird nests within the natural area. With the aid of Myrthe, our international volunteer, we were able to scale up our searching and commence a monitoring project specifically focused on Least Flycatchers, a very common local breeder. During a number of days of searching, Myrthe was able to find 36 flycatcher nests, which were then checked for progress every three days with a pole-mounted camera. More than half of these nests were successful, fledging an average four young per nest.

Young Ornithologists Workshop

The sixth Geoff Holroyd's Young Ornithologists Workshop, despite some less-than-ideal weather, was another great success. Eleven youth from across Alberta, Saskatchewan and Oregon, were hosted on site and spent a week being immersed in the life of a field biologist. This year's group was composed of a pleasant mix of skill levels, from passionate birders and naturalists to interested beginners looking for a head start, and it was a great pleasure watching their skills and confidence increase as the week went on. The attendees tented in the clearing in front of the lab building, were woken up each morning by the sonorous blare of Shane's trumpet if they didn't get up themselves in time, and assisted with the banding process, learning to apply bands, age and sex birds in the hand, extract from mist nets and record data. The ravenous youth were fueled in all this by a generous



Several of the 2022 Young Ornithologists pose with one of their first banded birds.

donation from the Edmonton Nature Club, which covered most of our culinary needs for the week.

In the afternoon, they participated in other activities, including a riveting talk by Dave Lowrie on butterflies and moths, a trip to the UpsanDowns falconry farm to learn about captive breeding from Phil and Helen Trefry, a duckling release with WildNorth and Kim Bloom and a benthic invertebrate survey at the weir with Matt Turnbull. On their last day, they embarked on a Big Birding Day, a quest to spot and identify as many species as possible while traveling to various birding hotspots and they documented an amazing 115 species! That day ended with supper at Geoff's shoreline acreage on Islet Lake.

Volunteers

This year we once more embarked on some ambitious repairs to the access road, spreading 108 tons, or nine dump truck loads, over some of the roughest sections of the road and much improving them. While a daunting task on paper, the assistance of Bob Schwartz and his trusty Bobcat, as well as the extra hands provided by several volunteers (Hazel Flesher, Karin Snyder, Theodore, and Geoff), made it a single morning's work. Thank you to all that helped out with this job in particular: your contribution will not go unnoticed by visitors to the observatory for years to come.



BBO staff and volunteers spread gravel over a deeply rutted section of the access road.

This is a shortened version of the summer report. The full version can be found <u>HERE</u>.

Fall Report

Introduction

The 2022 fall season was a resounding success. The BBO staff operated 13 standard nets and 7 experimental nets for songbird migration monitoring and 9 nets, and 4 owl audio lures targeting three species of owls. The weather was unseasonably mild and warm this autumn, allowing the staff to reach higher net hours into October than in previous seasons. This also meant minimal banding events had to be cancelled. In addition to daily banding, the staff hosted over 1000 visitors through a variety of public events over the fall season, including over 30 ticketed songbird and owl banding events, Supper & Saw-whets fundraiser, a Canadian Newcomer's Event, and a number of school groups. Late in the season, staff and volunteers demolished the last remaining historical BBO building, Nuthatch Nest. The bunkhouse will be rebuilt over the winter and will be ready for staff to move into come the 2023 field season.

Songbird Migration Monitoring



Black-throated Green Warbler captured and banded this fall

Thanks to the newly established experimental nets in the willows between Beaverhill Lake and the forest, the 2022 fall songbird migration monitoring saw high capture rates and species diversity. Operating from July 20 to October 20, 2022, an impressive 71 species were captured, and nearly 3000 individuals were banded, the highest diversity on record in the BBO's history. With the 7 experimental nets and 13 standard nets, a total of 20 nets were operated throughout the season. As with the spring migration monitoring, the experimental nets continued to outperform the standard nets with a 10-fold difference in capture rates; 118 captures/100 net hours and 18 captures/100 net hours, respectively (Table 2). The experimental nets also captured a higher species diversity. with 58 species compared to 49 species captured in the standard nets. The staff were excited to capture and band rare species such as Townsend's Warbler, Townsend's Solitaire, Black-throated Green Warbler, Sedge Wren, Marsh Wren, MacGillivray's Warbler, Vesper Sparrow, and an Evening

Grosbeak. Of the banded birds, 854 were Myrtle Warblers, by far the most abundant species, 346 were Least Flycatchers, and 504 were Yellow Warblers.

	2006	2007	2008	2009	2010	2011	2012	2013
Total Captures	1969	1079	892	875	880	701	978	631
Birds Banded	1525	952	723	718	708	589	776	628
Net Hours (NH)	3476	3534	3400	3671	3190	3678	3683	3144
Capture Rate (birds/100 NH)	56.6	30.5	26.2	23.8	27.6	19.1	26.6	20.1
Species Captured	63	52	58	51	60	53	57	45

Table 2. Number of captures, net hours, species banded, and capture rates during fall migration in our "standard nets" at the Beaverhill Bird Observatory since 2006.

	2014	2015	2016	2017	2018	2019	2021*	2022
Total Captures	738	1641	1721	1918	2029	1261	1944	869
Birds Banded	618	1393	1390	1620	1692	1040	1646	691
Net Hours (NH)	2565	4478	4174	4202	4128	4555	5165	4818
Capture Rate (birds/100 NH)	28.8	36.6	41.2	45.6	49.2	27.7	37.6	18.0
Species Captured	46	58	53	52	62	58	49	49

*Due to the COVID-19 pandemic, banding did not occur during the 2020 season. 2021 numbers include experimental net captures.

Owl Migration Monitoring

With the return of autumn came the owls. Four targeted owl programs were operated this season using 9 mist nets and 4 breeding calls - a male Northern Saw-whet Owl (4 nets operating from Sept 1-Oct 31), a female Northern Saw-whet Owl (2 nets operating from Sept 1-Oct 19), a male Long-eared Owl (1 net operating from Sept 1-Oct 31), and a male Boreal Owl (2 nets operating from Oct 2-Oct 31) for audio lures. Contrasting with the songbird migration captures, the Northern Saw-whet Owl migration was surprisingly slow, with only 236 individuals captured. Excitingly, 4 of the Northern Saw-whet Owls captured were foreign recaptures, two originally banded at Islet Lake by Geoff Holroyd.



The many faces of Northern Saw-whet Owls

Despite low captures of Northern Saw-whet Owls, it was a productive Long-eared Owl season with 21

individuals captured. Interestingly, there were no recaptures, with all the Long-eared Owls receiving new bands. Unfortunately, no Boreal Owls, Great-horned Owls or Barred Owls were captured or banded this season; however, another Barred Owl was observed near the nets this year. Additional captures in the owl nets include a Silver-haired Bat, Little Brown Bats, and Northern Flying Squirrels.

Events

This fall, the public joined us for the second year of ticketed songbird migration monitoring events. The events ran from August 13 to September 18, 2022, with over 100 attendees joining us to learn about songbirds, migration, and banding.

The ever-popular owl banding events continued this fall, with 420 attendees joining us from September 22 to October 30, 2022. They joined the staff as they operated the 4 targeted owl banding programs and captured and banded over 250 owls. This year marked the return of the annual Supper & Saw-whets event, which was a success. The event was hosted over two evenings with 50 visitors attending each night. Visitors were given a selection of vegetarian dishes to enjoy, were entertained with live music, and had the opportunity to meet one of our education ambassador birds, Maple the Peregrine Falcon. They joined the staff on net checks throughout the night and were given an interpretive experience while banding Northern Saw-whet Owls and a Long-eared Owl.

The BBO partnered with Alberta Parks and Edmonton Catholic Services to host a Canadian Newcomer's Event. Hosting 33 attendees that are new to Canada, the event included transportation to the natural area, songbird banding demonstrations, and guided hikes through the natural area to the weir with BBO staff. Our education ambassador birds, Maple and Remy, were again brought to the site to welcome the newcomers.



Long-eared Owl captured and banded during the Supper and Saw-whets event

In the last week of the field season, staff, board members, and volunteers demolished Nuthatch Nest – the bunkhouse that marked the last of the historical BBO buildings. Constructed in the late 1980s, the bunkhouse was overdue for updating. The staff are excited to see the new Nuthatch Nest come spring.



Progression of the demolition of Nuthatch Nest in preparation for the new bunkhouse

This is a shortened version of the fall report. The full version can be found <u>HERE</u>.

Weekly Updates

This year, we were able to resume normal banding operations and completed weekly banding updates on the usual schedule. If you missed them, check them out on our website for a more indepth look at our day to day activities, highlights, and migration progress! We also post regular updates during the field season on Facebook, Instagram, and TikTok. Give us a follow and we'll post pictures of birds!

Weekly Banding updates can be found <u>HERE</u>.



BBO Team from left to right: Shane Abernethy, Myrthe Van Brempt, Jon Van Arragon, Sara Pearce Meijerink, Jana Teefy and Taiga the dog in front

Intern Reports

This year we hosted eight interns to help conduct various long-term monitoring surveys on our locally breeding populations of wildlife. Of the eight interns who joined our operations this year: 2 interns each monitored the Tree Swallow grids, House Wren grids and bat boxes, one ran the Grassland Breeding Bird Census, and another monitored butterflies within the natural area. The intern funding was made possible this year by Carole and Gary Dodd and the Alberta Conservation Association. Thank you to all parties involved!

Intern Project Reports can be found on our website HERE.

BirdSmart Education Program

This year BBO's BirdSmart program was able to offer presentations in the classroom once more! Presentations about birds, climate change, and conservation were available as both in-person and online formats to ensure we could reach the widest audience possible. Sara and Shane teamed up with ambassador birds Remy the American Kestrel and Maple the Peregrine Falcon to deliver 195 presentations between November 24th, 2021 and April 29th, 2022! Overall we reached 5800 students and 1100 adults during presentations to schools, youth groups, and private events. This was a massive improvement over the 2020/2021 education season thanks to demand for inclassroom presentations as well as reduced presentation costs for schools.

If you would like a live bird of prey to attend your school, meeting or private event (we do birthday parties as well!) be sure to contact our education team at <u>education@beaverhillbirds.com</u>



The BBO's ambassador birds for the 2022 education season Maple the Peregrine Falcon (left) and Remy the American Kestrel (right)

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 2022, these 3 issues were produced by BBO Vice-chair of the Board, Helen Trefry, and new board member Richard Hedley, which were sent out to our membership. Helen and Richard did another wonderful job of keeping you informed of all the work we do! If you have enjoyed reading our Newsletter, you have them to thank! Past editions of the Willet from 2022 or earlier, can be found by visiting our website HERE.



Helen Trefry on the left and Richard Hedley on the right. Our two wonderful writers of the Willet Newsletter!



Financial Statements December 31, 2021

Statement of Operations

For the year ended December 31, 2021

	2021	2020
Revenues		
Grants	137,129	110,763
Casino	35,812	40,435
Donations	106,640	104,164
Subsidy Income	13,674	21,722
Endowment Income		5,690
Presentations and talks	5,100	12,630
Events	13,230	11,171
Memberships	1,861	610
Miscellaneous	1,125	2,634
Conference Income	-	-
Casino interest income	537	272
Promotional Item Sales	1,333	3,238
Total Revenues	316,441	313,329
Cost of Goods Sold		
Cost of Promotional Items for Sale	753	2,073
Net Revenue	315,688	311,256
	515,000	511,250
Expenditures		
Salaries	134,263	113,664
Presentation Expenses		2,820
Depreciation	10,062	7,749
Travel	5,678	4,927
Small equipment	9,260	6,637
Young Ornithologists' Workshop	192	-
Office expenses	7,636	7,717
Conference expenses	504	471
Bursaries	2,200	600
Events	1,761	2,150
Laboratory supplies	2,661	816
Occupancy costs	1,426	1,243
Bank charges	1,165	1,139
Repairs and maintenance	757	5,920
Licenses, dues and memberships	40	55
Advertising	550	
Gain/Loss on Dispoal of Assets	6,528	
Total Expenditures	184,683	155,908
Net income (loss)	131,005	155,348
Net assets, January 1	527,065	371,717
Net assets, December 31	658,070	527,065

Statement of Financial Position

As at December 31, 2021

	2021	2020
Assets		
Current assets:		
Cash	143,778	152,736
Restricted cash - casino	17,397	11,549
GICs	-	25,000
Restricted GIC - casino	-	55,000
Accounts receivable	47,913	3,011
Prepaid expenses	2,164	584
Undeposited Funds	-	-
Inventory	42	272
Goods and services tax receivable	1,258	4,533
Total Current Assets	212,552	252,686
Non-Current Assets:		
Property and equipment	281,519	200,877
Beneficial Interest in Assets Held in Endowment	200,067	168,978
Grants Receivable - Long term	65,000	
Total Non-Current Assets	546,586	369,855
Total Assets	759,138	622,541
Liabilities and Net Assets		
Current Liabilities:		
Accounts payable	2,882	_
Prepaid Revenue	-	_
Deferred grant income	5,530	26,479
Current portion of deferred casino income	27,655	35,812
Total Current Liabilities	36,068	62,291
Long Town Lighilities		
Long Term Liabilities: Deferred Casino Income		27,655
Deferred Grant Income	- 65,000	5,530
		· · · · · ·
Total Long Term Liabilities	65,000	33,185
Total Liabilities	101,068	95,476
Net assets:		
Unrestricted net assets	401,376	286,088
Net Assets - Board Restricted	40,000	60,000
Net Assets - Donor Restricted	8,000	12,000
Net Assets Restricted for Endowment	208,694	168,978
Total Net Assets	658,070	527,065
Total Liabilities and Net Assets	750 139	677 5/1
i otal Liabilities altu ivet Assets	759,138	622,541

Statement of Cash Flows

For the year ended December 31, 2021

	2021	2020
OPERATING ACTIVITIES		
Net Income	131,005	155,350
Adjustments to reconcile Net Income to Net Cash provided by operations:		
120 Accounts Receivable	(44,902)	5,548
130 Prepaid Expenses	(1,580)	264
140 Inventory Asset	231	211
300 Accounts Payable	2,882	(4,003)
331 GST Payable	3,275	(3,898)
350 Deferred Casino Income - Current	(8,157)	7,962
352 Deferred Grant Income - Current	(20,949)	(18,161)
351 Deferred Casino Income - Long-Term	(27,655)	27,655
353 Deferred Grant Income - Long Term	59,470	(22,802)
Total Adjustments to reconcile Net Income to Net Cash provided by operations:	(37,385)	(7,224)
Net cash provided by operating activities	93,620	148,126
INVESTING ACTIVITIES		
200 Buildings	7,916	2,751
201 Computers	48	120
204 Solar Panels	(19,794)	400
205 Education/Lab Building Construction Costs	(54,347)	(13,614)
206 Land Improvements	(1,667)	
207 Sign	(1,485)	
230 Tower	330	(148,908)
231 Water Tank Tower	(133)	(6,607)
240 SeaCan	428	(4,282)
241 Outhouse	(11,938)	-
180 Beneficial Interest in Assets Held by Edmonton Community Foundation	(31,089)	(26,869)
190 Grants Receivable - Long Term	(65,000)	-
Net cash provided by investing activities	(176,731)	(197,009)
Net cash increase for period	(83,111)	(48,883)
Cash, January 1	244,285	293,169
Cash, December 31	161,174	244,285
Cash is composed of:		
Unrestricted Cash	95,778	
Restricted cash - casino	17,397	
Board restricted cash	40,000	
Donor Restricted Cash	8,000	
	161,175	



Financial Statements

*** Available in May 2023 after our AGM ***

Acknowledgement of Donors

None of our work would be possible without the generous support of our donors. All those who donated \$50 or more in 2022 are listed here; all others nonetheless receive our sincere thanks.

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