



Yellow-billed Cuckoo
Photo by Gabriel Evans-Cook

Pelee Island Bird Observatory ANNUAL REPORT 2021

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Pelee Island Bird Observatory 2021

Pelee Island Bird Observatory

The Pelee Island Bird Observatory was established in 2003 and incorporated as a non-profit charitable organization in 2006. PIBO's mandate includes a commitment to long-term avian migration monitoring research on Pelee Island; long-term studies of Pelee's breeding bird communities, including national and provincial Species at Risk; serving as an educational centre for the public, school groups and the local community; and promoting the importance of Pelee Island's unique natural heritage.

Board of Directors

Margaret Atwood (Honorary Chair), Matthew Gibson (Co-chair), John Gruetzner (Co-chair), Donna Hayes, Wayne Grady, and Penny Kavanaugh.

Founders

Founder and adviser - Graeme Gibson the Younger

Founding Patrons - Margaret Atwood and Mysterious Starling Inc.

Staff

Executive Director - Suzanne Friemann

Field Supervisor and Bander-in-Charge - Sumiko Onishi

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Cover photo: Yellow-billed Cuckoo by Gabriel Evens-Cook

Graeme Gibson, from the *Bedside Book of Birds* (2005): *"A great many birdwatchers- from those who simply maintain feeders in their gardens to those, more obsessed, who wander the world in search of new and better birds-have stumbled onto a seductive truth: paying attention to birds, being mindful of them, is being mindful of Life itself. We seldom think of it this clearly, but sometimes, unexpectedly, we are overtaken by a sense of wonder and gratitude. Surely it is the encounter with a force much larger than ourselves that moves us."*

EXECUTIVE SUMMARY

In the spring of 2021, PIBO started our fieldwork season tentatively and cautiously after a year of the COVID-19 pandemic. There were many uncertainties about safety and requirements for staffing, transportation, operating the banding station, and responding to visitors under the restrictions for COVID-19. However, everyone, including seasonal staff, volunteers and visitors, took their responsibility seriously and spent the busy and successful 2021 season without any trouble. Although we still had to work under the minimum staffing to keep social distancing, we are pleased that our routine fieldwork has returned. Thanks to all the assistants, volunteers, visitors, and supporters for supporting us in doing this hard work.

For the 2021 spring, PIBO hired an assistant bander, a census conductor, and three volunteers. The assistant bander helped PIBO's Field Supervisor, who managed the spring migration monitoring, including netting operations and the census, Marsh Monitoring Program, Ontario Breeding Bird Atlas, Species at Risk Monitoring, and the Purple Martin Colony Annual Survey. It was a hectic fieldwork season with lots of bird counting, including participating in the 24-hour bird race - Botham Cup - for our online fundraising event in May, although the netting was unexpectedly quiet with the catch rate - 0.26 bird/net-hour. However, we put our vast effort into the survey of breeding birds and the species at risk. As a result, the point counts for Ontario Breeding Bird Atlas mainly had been done for the first year of the five-year survey. Also, we confirmed a successful breeding season for Prothonotary Warblers and observed the possible breeding evidence of Yellow-breasted Chats and a White-eyed Vireo on their territories. It was a variable experience for us that the previous year's observation resulted in this year's discovery of the Prothonotary's nest location.

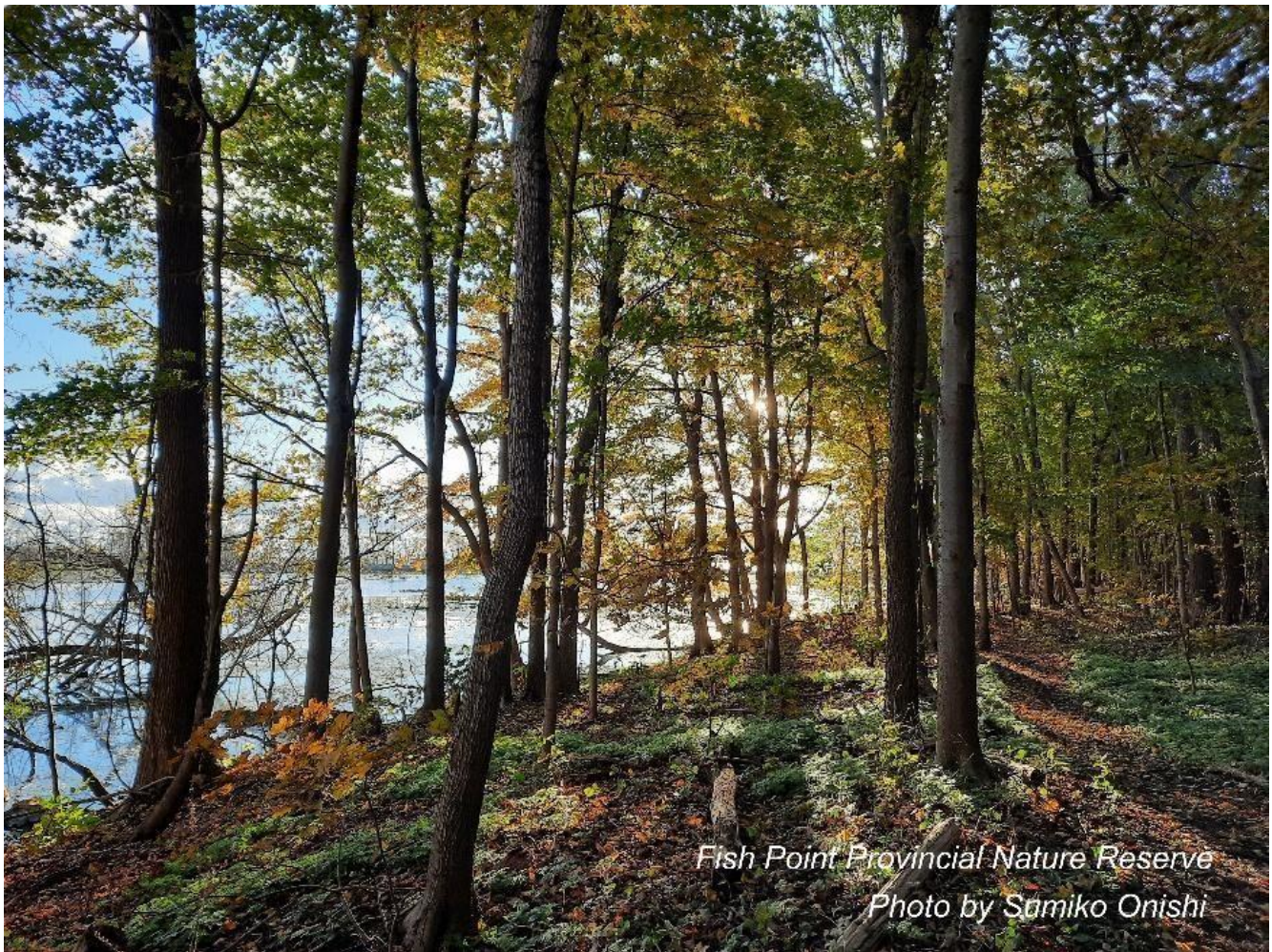
On the other hand, the fall migration was constantly busy - the catch rate was 1.3 bird/net-hour - in contrast to the quiet spring migration. The hired fall assistant and four short-term volunteers often faced stressful moments in handling many captured birds safely during the netting, but everyone did a fantastic job. The Field Supervisor stayed alert to the birds around the banding area and during the census as much as possible to record valuable observations. It was the busiest fall season for the past fifteen years after the 2006 fall, humid, buggy and busy with lots of birds. By the end of the season, 2917 birds of 75 species were banded.

- *Research Studies conducted in 2021:*
- *Migration Monitoring - The daily census - standardized 90 minutes observation - of migrant birds and the daily 6-hour mist-netting to band migrant birds at Fish Point Provincial Nature Reserve.*
- *Marsh Monitoring Program - The point count of marsh birds - three times during the season - at Lake Henry at Lighthouse Point Provincial Nature Reserve.*
- *Ontario Breeding Bird Atlas - The point count of breeding birds on Pelee Island*
- *Species at Risk Monitoring - Observation and recording of Prothonotary Warbler, Yellow-breasted Chat, and other species at risk at their territory on properties under the stewardship of Ontario Parks, the Essex Region Conservation Authority, and Nature Conservancy of Canada.*
- *Purple Martin Colony Annual Survey - Monitoring the colony at the nest box under the stewardship of Nature Canada,*
- *Owling - Non-standard netting and banding of Northern Saw-whet Owl.*
- *Monarch Butterfly migration counts - Standardized count of Monarch Butterfly and the census of migrant birds.*
- *Christmas Bird Count - The citizen science program - 24-hour count of individual and species of birds around the Christmas season*

At the end of the season, a total of 1787.68 hours were conducted by twelve staff and volunteers to accomplish these eight research projects, and 197 species were documented during the season, including standard and non-standard observation. There were some difficulties with communication among staff and volunteers with proofing the data and planning the schedule during the busy fieldwork season since we all tried to stay apart. Still, it was quite an encouraging season compared to the previous year, in which the limited staff did only some research during the pandemic. Indeed, it was a good team, with all staff and volunteers enjoying each other's company.

The first online fundraiser for PIBO was held in May through Facebook Live - *Margaret Atwood Presents* - featured special guests Lorna Crozier, Trevor Herriot and artists including Measha Brueggergosman, Molly Johnson and others. This experimental event benefitted PIBO in numerous ways, thanks to the generosity of everyone who organized and supported it. The restrictions of COVID-19 brought many people from around the world together for the evening.

Pelee Island hosts millions of migratory birds each year as their stopover site. During the 2021 migration season, we observed a group of fifty Common Nighthawks high up in the sky, which looked like a flight queue with the white spot on the long wings. They left the line one by one and disappeared into the forest under the twilight sky to roost. The dynamic ecology of migration similar to this has been observed and recorded by PIBO every spring and fall at Fish Point Provincial Park since 2003. Also, our breeding bird survey on the land restored by Nature Conservancy of Canada, Essex Region Conservation Authority, and Ontario Nature showed the importance of the area as a breeding habitat for many species at risk. The recognition of the importance of the site is currently moving to state the island as Key Biodiversity Area (KBA), transitioning from Important Bird and Biodiversity Area (IBA) by a non-governmental organization, Birdlife, in Canada. While the environment surrounding us in southern Ontario has been rapidly changing, Pelee Island has become an essential site for birds and other wildlife, including some at risk.



*Fish Point Provincial Nature Reserve
Photo by Samiko Onishi*

COVID-19 Protocols

PIBO has developed guidelines for all staff for the duration of the pandemic. Due to the difficulty in maintaining a distance of 2m at our staff cottage, we will only hire one assistant bander for the spring and one for the fall. No short-term volunteers will be employed this year. A negative COVID-19 test will be required prior to starting the banding position. All other PIBO staff will work from their home offices.

INTRODUCTION

This year's report is presented in three sections: 1) Research, 2) Education and Outreach, and 3) Fundraising and Acknowledgments. Section One presents the results of the 2021 research season including details on the spring and fall Migration Monitoring Program, Owl Monitoring (as Non-standard), Breeding Bird Monitoring, including Purple Martin Colony Annual Survey, Species at Risk Monitoring, Ontario Breeding Bird Atlas, Monarch butterfly counts, and reports from bird count we participated. The results of each research program are summarized in tables presented throughout the section, including species recorded on Pelee Island in 2021; Northern Saw-whet owl capture totals; species identified in 2021 as confirmed; Purple Martin nest box monitoring, probable or possible breeders; and Species at Risk sightings, among others. This section includes an edited version of the spring and fall bi-monthly migration updates posted on PIBO's Facebook page and website.

Section Two reports some of PIBO's education and community outreach programs in 2021. Details include many of the ways we worked on making Windsor a bird friendly city.

Section Three highlights our first online gala, grants, the acknowledgements of our donors and the data requests.



SECTION 1 - RESEARCH

Songbird migration monitoring

Migration monitoring is one of the major research projects to detect songbird population trends, which was established by Long Point Bird Observatory - the oldest bird observatory in the western hemisphere. There are twenty-nine monitoring stations across the country - members of the Canadian Migration Monitoring Network (CMMN). One of PIBO's significant contributions is collecting long-term constant, standardized data by counting and capturing birds during the migration season as a station member of the CMMN. Many songbirds use the region along Lake Erie as a stopover site while they spend the breeding season in the Boreal Forest and fly to their wintering grounds in Central and South America. For each spring and fall migration season, PIBO conducts the visual count (census) and the constant mist-netting (banding) at Fish Point Provincial Nature reserve (Ontario Parks - Ontario Ministry of Natural Resources) and collects thousands of records of the migratory songbirds. The island's unique geological location allows us to study a wide variety of songbirds.

PIBO's 19th year of migration monitoring at Fish Point was conducted from April 1st to June 10th and August 5th to November 10th for 169 coverage days. One hundred sixty-six mornings were covered by the census - standardized 90 minutes visual observation at Fish Point - and the mist-netting was operated for 114 mornings. One hundred and eighty species were recorded during the standard count period, and we captured 3009 birds, including 2917 banded. The remarkable feature of this season was the differences between the number of migrants we recorded during spring and fall, which we will describe in the summary section.

Spring migration summary

The first half of April

(Report from the census at Fish Point - written by Rob Tymstra)

The 2021 PIBO season kicked off for a new year on April 1st with the daily census at Fish Point, while banding operations resumed on April 12th. The month began with a chilly -2c morning. Several Tree Swallows flew around, desperate to find some insect food. South winds soon warmed things up, and we added new birds to the list daily.

Fox Pond had a nice selection of water birds with a Pied-billed Grebe calling daily for the first week. Several pairs of Blue-winged Teals, Mallards, Wood Ducks, and Canada Geese were added to the list. One would usually see a Bald Eagle soaring overhead, with up to five birds seen daily.

Sparrows were generally scarce, with a few Dark-eyed Juncos, Savannah, Chipping, and Field Sparrows in the grasses near the tip, but White-throated Sparrows, which were expected, were almost non-existent. It was still a bit early for warblers, but a few Yellow-rumped and a Palm Warbler were spotted.

Walking the trails was very pleasant as there were wildflowers everywhere. The warm March temperatures accelerated the spring emergence of several plants. Dutchman's-Breeches were already blooming at the beginning of April with trilliums, toothworts and other spring plants springing up in the second week. Walking back along the west beach to the parking lot is possible most days now that the water levels in Lake Erie have dropped by a meter or so. Numbers of Bonaparte's Gulls and Red-breasted Mergansers increased daily towards the end of the period, there were often single Horned Grebes, and Common Loons spotted offshore. Highlights on the census walks included a Common Snipe flushed from the west beach vegetation on the 8th, a Northern Mockingbird, a Dunlin near the tip on April 9th, and a Black-crowned Night Heron on the 13th.



(Report from the banding station - written by Alessandra Wilcox)

The first week of banding, since April 12th, had been a slow one; the temperature had rarely been above 10°C, and the threat of rain often hung over our heads. American Robins had been getting several repeated recaptures, so they must have settled into their new summer home. We also caught the occasional Common Grackles or Red-winged Blackbirds. Hermit Thrushes started to become more abundant by the end of the week.

We heard the tinkling of Brown Creepers and then saw them slinking up the trees while Black-capped Chickadees, White-breasted Nuthatches, and Carolina Wrens patrol the area. Over the past week, we have noticed a shift from a great abundance of Golden-crowned Kinglets to Ruby-crowned Kinglets as they make their way to their breeding grounds further north. A Winter Wren had also been hanging around the station, and occasionally, we could see it quietly slip from thicket to thicket, so swiftly it could be mistaken for a mouse.

Most noteworthy, however, was the pair of Great Horned Owls that can sometimes be heard calling well into the late morning hours. Among these early nesters, a couple of Bald Eagles and their two older juveniles kept a watchful eye over our netting area. Last week I watched as an adult eagle body-slammed a Red-tailed Hawk out of the canopy, almost crashing into the station, and made off with its freshly caught bounty.

The breeding season was certainly hard to miss with the drums of woodpeckers, the constant drone of blackbirds, and the liquid chittering of tree swallows while they dart to-and-fro scouting for nest cavities. A pair of Purple Martins began to bring nesting material back to their carefully selected apartment at the PIBO cottage. Although this week calls for snow, we can only hope they survive. It will only get better from now on as we await the return of the outlasting migrants.



The latter half of April

(Report from the census at Fish Point - Rob Tymstra)

Ephemeral spring flowers were a couple of weeks early: the forest floor was carpeted entirely with fully blooming native flowers. Although an early spring for flowers did not speed up the bird migration, and while new birds were arriving daily, numbers were generally low. In particular, sparrow species were almost nonexistent, which should have been abundant.

On April 16, the first Purple Martins and Barn Swallows arrived to join the dozens of Tree Swallows forming territories around Fox Pond. A lone female Hooded Merganser showed up on the pond for several subsequent days, but no mate was ever seen. The first Great Egrets made their debut for daily sightings on the pond. Three Lesser Yellowlegs flew over the pond on the 20th, and the Blue-winged Teal population had increased to 10 birds.

A pair of Brown Thrashers were observed skulking in the brush near the tip on April 22, and a Merlin flew over a couple of days later. A pair of Greater Scaup was observed on the lake on April 26.

The weather event of the period was undoubtedly the late snowstorm that hit on April 21. Several centimeters of sticky white snow fell, covering the woodland flowers and trees in a thick blanket of white. It was a magical scene with tree buds encrusted in cherry blossoms made of snow.

One could usually see a Bald Eagle or two sitting on the sandbar just south of the Fish Point tip, but on the 24th, 13 young eagles were hanging out together. Another three adults were flying around nearby for 16 eagles! Eagles were often one of the most common birds counted on the census!

There was a light 'reverse' migration (citation-----) on the 27th, with a few grackles, redwings, cowbirds, and a dozen or so Yellow-rumped Warblers observed flying south off the tip.

April 28 was the first warm day. Several new species made their first appearances, including Blue-gray Gnatcatcher, House Wren, Ovenbird, Solitary Sandpiper, Yellow Warbler, Baltimore Oriole, and many Blue Jays. A Common Yellowthroat showed up the following day, and on the 30th, there was a Warbling Vireo and a Black-and-White Warbler near the tip. A pair of Northern Shovelers on Fox Pond capped off the last census day of April.



The first half of May

The first two weeks of May in southern Ontario are generally considered the peak for bird migration, but numbers this year were well below average. The expected big mixed flocks of tanagers, grosbeaks, and warblers were not appearing, but there were also no appreciable reverse migrations off the Fish Point tip. Nevertheless, every day there were new arrivals to keep things exciting.

The month started with a bright pair of Scarlet Tanagers and a male Summer Tanager. Up to a dozen Blue-winged Teals could be observed for the first few days of the month in Fox Pond. Many were pairing off and might stay to nest, but they eventually drifted off elsewhere. The Baltimore Orioles arrived on time at the beginning of May, and their fluty calls could be heard everywhere. May 3 saw temperatures warming and the first spring migrant warblers arriving, such as Cape May and Black-throated Green and the season's first Eastern

Kingbirds. Northern Parulas and Black-throated Blue Warblers were more common than usual and for several days their distinctive songs could be heard everywhere. On May 4, there was a good selection of sparrows, which were otherwise quite rare this spring. Redheaded Woodpeckers were more common than usual, with four being seen daily.

On May 5, the season's first Prothonotary Warbler and Least Flycatcher were spotted. Another Summer Tanager appeared on May 7, and a Grey-cheeked Thrush was seen the following day. The tip hosted a few exciting species. On May 9, the first American White Pelicans appeared, as did a rare Lesser Black-backed Gull. Four Dunlins showed up there on the 11th. The season first Cedar Waxwings arrived on May 12 and became daily fixtures in the woodlands near the tip thereafter.

May 14 was an exciting day for heron spotting: some Great Egrets and Great Blue Herons were present as usual at Fox Pond, but an uncommon Black-crowned Night Heron joined them briefly, and an American Bittern cruising down the west beach was seen. Great Crested Flycatchers arrived this day, and their distinctive calls livened up the woods thereafter. The period ended with a Common Tern and a singing Mourning Warbler near the tip.



Banding Summary Late April, early May

(Report from the banding station - written Alessandra Wilcox)

After a period of snow and dreary weather, the birds have bounced back in full force! On April 23, the sky around the banding station was filled with the twittering of Tree Swallows. After the unfavourable weather, Yellow-rumped Warblers and Ruby-crowned Kinglets are taking the area by storm as they scour the undergrowth for gnats and other tasty morsels. Given the opportune weather, they seem to be the most frequent visitors to the netting area, although many new migrants have just started to pass through. We saw our season's first Pine Warbler on April 23, a sign that the onslaught of warblers is just around the corner.

Southern winds and cloudy skies on April 26 brought new migrants to the area; the season first Black-throated Green Warblers, Orchard Orioles, Rose-breasted Grosbeaks, Purple Finches, and Gray Catbirds passed through the netting area. The height of migration has finally begun! We caught a stunning male Scarlet Tanager on April 28, which we had seen foraging around the station earlier that morning. This beauty was certainly not hard to miss amongst the sea of budding twigs and brambles.

The start of May was kicked off with our season's first Blue-winged Warbler capture! He was a rather interesting individual, as it sported secondary coverts tinged with gold. We also banded the first Northern Waterthrush and Tree Swallow of the season. Yellow-bellied Sapsuckers and Yellow-rumped Warblers are frequently observed around the station, but we only caught one of them. Perhaps the lack of lush foliage in the undergrowth discourages them from straying too far from the canopy.

Ovenbirds and White-throated Sparrows had started to trickle in as migration proceeded. Warbler species such as Black-throated Blue, Black-and-white, Tennessee, Blackburnian and Northern Parulas were beginning to pass through in small numbers. Veerys and Wood Thrushes had also returned, following the Hermit Thrushes' footsteps. The temperature is still relatively chilly, hovering around or below 10°C, but the birds must push through regardless, and we are still here to process any that fall within our grasp. The anticipated spring migration has finally arrived, although in seemingly less force than in previous years.



The late half of May

(Report from the census at Fish Point - written by Rob Tymstra)

Warblers continued to arrive daily but in smaller than expected numbers.

The Fish Point tip hosted various visitors throughout the period, beginning with the first Forster's Terns on the 16th and a variety of more common shorebirds such as Least and Semipalmated Sandpipers, Dunlin, Sanderlings, Ruddy Turnstones, and Semipalmated Plovers. A lone Red Knot on the 23rd was unusual, and a Black-bellied Plover appeared on the 28th. The most exciting shorebird sighting was the huge flock of 240 Whimbrels that flew over the tip on May 26. The number of American White Pelicans slowly increased, with a high of 23 birds seen near the tip on May 24 and two Green Herons flew past the following day.

May 17 was 'beach day' for several families of Canada Geese as parents took their goslings out onto Lake Erie for the first time away from their birthplace on Fox Pond. A Wood Duck successfully raised a ten-duckling family. The season's first Black-billed Cuckoos and a Willow Flycatcher were heard singing on May 20. Tennessee and Blackpoll Warblers were

now the dominant migrant singers in the forest for a week before continuing north. On May 22, a Prothonotary Warbler arrived at Fox Pond and sang there daily throughout.

The most dramatic event of the period was a powerful gale-forced storm that blew out of the east on May 28. Giant waves, driving rain, and high water levels combined created a great deal of damage to the east side of Fish Point. Fox Pond itself was inundated with water as the waves blew out sections of the sandy wall. The old trail to the point, part of the census route, mainly had disappeared under a thick layer of sand deposited by huge waves. With the sandy ground supersaturated with water, many trees could no longer stand and had fallen over. There were also hazardous areas of quicksand to contend with as well.

The next day, the sandy spit at Fish Point was obliterated, and the usual sandbar offshore had disappeared. Fox Pond's water level was higher than Lake Erie. Despite the intensity of the storm, it did little to dampen the spirits of the now resident Prothonotary Warbler singing its heart out every morning near the observation platform. This usually shy and retiring warbler would often sing from the highest branches of the tallest dead trees to spread his call everywhere, possibly in search of a mate.

As the month ended, the sounds of the forest had shifted away from those of migrants to those of the usual summer breeders such as Red-eyed and Warbling Vireos, Indigo Buntings, Baltimore Orioles, Yellow Warblers, and Yellow-billed Cuckoos.



Indigo Bunting
Photo by Gabriel Evans-Cook

(Report from the banding station - written by Alessandra Wilcox)

The weather held up great for most of May, and we saw a significant increase in species diversity by the banding station. Hooded, Black-and-white, Nashville, Blue-winged Warblers, American Redstarts, and Magnolia Warblers.

The season's first Golden-winged Warbler was seen on May 10, and it hung around the station for a couple of days, giving us decent views! A male Golden-winged Warbler was heard singing almost a week later, just as the Canada Warblers started rolling in. For a brief moment this month, the forest was filled with the flashing colours of warblers and finches, the air echoed with song, and there was never a dull moment! The undergrowth was constantly shifting as Veerys, Wood Thrushes, Gray Catbirds, and Ovenbirds foraged among the waterlogged vegetation.

On May 13, Nashville Warblers dominated the netting area, and we were also starting to see decent amounts of Black-throated Green Warblers, Northern Parula, and Yellow Warblers moving through. We were also beginning to see the season's first Least Flycatcher migrants.

We banded a Yellow-breasted Chat on the 15th! It was a welcome surprise since they are secretive birds that can be difficult to see amongst their preferred dense brush and scrubland. We heard another chat calling around the netting area as we released the banded individual!

There was a noticeable boom of Ovenbirds between the 13th and 15th, with 29 banded by the end of the season. On May 16, we saw peak species diversity at the netting area, with 68 species seen in total! Cuckoos had also become common, and their clatters and gulps could be heard in almost every forest stand. Species diversity began to dwindle after the 19th noticeably, and we started seeing a transition of warbler species from early arriving to late-arriving warblers. The late-arriving Canada Warblers hit all at once on the 20th and stayed until the end of the banding season. Magnolia Warblers also started becoming more common as the hoards of Yellow-rumped Warblers moved on. Yellow Warblers had begun charting their breeding territories by performing dramatic aerial fights by the nets.

An Acadian Flycatcher was first heard on the 21; we hoped it would go in the nets or come into good view, but it never did. By the end of the banding season, the forests began to settle once again. Eastern Wood Pewees would throw their calls into the thick morning air, and the occasional trill of a blackbird always broke the silence. Yellow Warblers and Red-eyed Vireos also kept us company from the canopy while we waited for the last of the migrants to trickle through. As the month progressed, we noticed some uncharacteristically late migrants around the netting area; our final bird banded on the 31st was a female Blackburnian Warbler.

In the last couple of days, we had a small influx of Blackburnians, which was interesting to see so late in the season.



Fall Migration Summary (written by Sumiko Onishi)

August 1-14

PIBO's fall migration monitoring started on August 5. Forty-five species were recorded on the fall season first census - the banding began on the 15th. We heard Purple Martins everywhere along the trail, and a big roosting flock were seen at the pond and the tip. A couple of Red-headed Woodpeckers (local nesters) were still hanging around their territory. Families of summer breeding species were seen in the forest, and the tip was crowded with sixty American White Pelicans.

The swallows were migrating these days. On August 6, several Bank Swallows, Purple Martins flying high up in the sky and Barn Swallows flying low over the water were seen. Forty species were recorded during the census on August 7, and a pair of Red-headed Woodpeckers, Prothonotary Warblers, and a female/young American Redstart were seen for the post-breeding dispersal.

The wind had been to the south, and the morning temperature had been warmer for the last few days, although the cooler air after the sunset revived many insects' calls for the evening. The breeding birds started moving away, and the forest became quiet. Shorebirds began arriving, and many Spotted Sandpipers were seen. On August 8 and the 9, a group of Sanderlings and a Least/Semipalmated Sandpiper was along the shore, and many swallows, including a season first Chimney Swift, was taking off to the south from the tip.

The weather became unpleasant with high humidity and 25C after the thunderstorm on August 10. The condition made mosquitoes lively again, and birds were attracted to the puddles everywhere after the dry weather last week. Forty species were counted during the census, including a season first Northern Waterthrush singing at the pond. The flock of American White Pelicans at the tip had been getting more significant day by day, which came to be about a hundred of them.

The intense thunderstorm overnight kept the humidity around 100% for the morning of August 11. The census was quiet, but a Solitary Sandpiper was seen at the roadside puddle on my way to the census (non-standard observation).

On August 12, we cancelled the census due to the road being closed - power lines and trees were down at several locations around Fish Point after multiple severe weather systems passed. More trees came down across the census route and forced me to walk around to find a better path on August 13. Thirty-nine species was recorded, including a season first Least Sandpiper.

On August 14, the weather had changed with the night northeast winds, which brought some flycatchers and many stable flies. Many Least Flycatchers were observed on the east shore, and some Yellow-bellied, Trails and Great Crested Flycatchers. In addition, warblers were flying over high up in the canopy - we observed quite a few Blackburnian and Black-and-white Warblers.



August 15 to 31st

The banding operations started on August 15. The forest was primarily quiet for the first morning at the banding station, except some post-breeding species like Red-eyed Vireos and House Wrens were singing. Although, we did hear some warblers coming and going above our heads. We opened five of the ten nets for three hours while trimming vegetation along the net lines. A Northern Waterthrush was banded as the first bird of the season, and then some warblers - Blackburnian (10), Black-and-white (7), and others - were banded in the late morning. Twenty-two warblers were banded in the morning.

On August 16, the rain clouds continuously covered the sky during the day. About two hundred Purple Martins were observed at the pond on the census. Some nets were opened between the rain, but it became quieter later in the morning. On the census of the 17, a flock of warblers - Blackburnian and Black-and-white Warblers - were seen. On August 18, the nets were opened after the census, and 26 birds - 22 warblers and two flycatchers - were banded. On August 19, twenty-six birds were banded, including 23 warblers.

On August 20, we started the census half an hour early to obtain more net hours due to the shortage of experienced staff to operate netting for this fall. Many birds started flying into the nets soon after we opened. Thirty-five birds, including 34 warblers, were banded (19.5 net-hours), and 56 species were recorded on the census. A season first, Canada, Tennessee Warblers, and numerous House Wrens were seen along the trail and in the netting area.

On August 21, a flock of warblers - quite a collection of different species - were seen around the vegetation along the west beach. North winds overnight brought many warblers on August 23. Numerous Black-and-white, season first Blue-winged, Black-throated Blue, and Black-throated Green Warblers were observed near the tip. Netting was busy banding 34 warblers (24.4 net-hours) - 14 Magnolia, 6 Chestnut-sided, 5 Bay-breasted and others.

The forest was full of hundreds of warblers on the census of August 24. Along with the large number of Bay-breasted since last week, Blackburnians, Black-and-white, and Chestnut-sided were numerous, and a Mourning Warbler was observed as new for the season. We banded 15 birds (25.3 net-hours) for the morning, including season first, Swainson's Thrush and Veery, and a total of 58 species was recorded during the standard count period.

On August 25, an intense thunderstorm passed through in the early morning before the census, and the light rain was intermittent during the day. Many warblers flew around in the drizzle, and a Wilson's Warbler was recorded as new for the season. August 26 was another rainy morning and quieter in both census and the netting area.

The wind shifted briefly to the northeast during the early morning of August 27. Numerous warblers, some thrushes and flycatchers were observed during the census. Quite a few Black-throated Blue, Black-throated Green, Cape May and Nashville Warblers were recorded. Seventy-three birds were banded (20.44 net-hours) - 14 Red-eyed Vireos, 7 thrushes, and 52 warblers of 12 species, including 12 Black-throated Blue.

On August 28, we recorded numerous Red-eyed Vireos for both the census and the banding - 18 of them were banded, which tallied up to 32 for the last two days. Banding had not slowed down with catching warblers - 34 warblers banded. Fifty-eight birds (23.4 net-hours) were banded, and 15 warblers were observed for the standard count period.

The heatwave with high humidity lasted for almost a week and brought us harsh working conditions, but birds looked active on the morning of August 29. Several Great Blue Herons, Great Egrets, some Green Herons and Belted Kingfishers were feeding at the pond and warblers and flycatchers were busy catching flying insects. A few Blackpoll Warblers were recorded as new for the season and lots of Bay-breasted. We banded 28 birds of 12 species (24.4 net-hours).

On August 30, numerous Magnolia Warblers and American Redstarts were seen in a flock of warblers, and quite a few Cedar Waxwings were flying over and feeding in the canopy. Twenty-four birds of 15 species were banded, including three species of vireos - Red-eyed, Warbling, and Philadelphia. The weather shifted more autumn-like on August 31, and some migrants arrived overnight. Eighty 81 birds (27 net-hours) of 18 species were banded, including 18 Magnolias and 11 Cape Mays.

The weather for this period repeated a similar pattern during the heatwave - thunder with rain during the night dropped the temperature at dawn and became very still with high humidity for the morning.

We have already banded about 400 birds despite the short net hours since August 15.



September 1-15

The strong north wind brought many migrants to the area on September 1. We heard many thrushes from the bush and the dark sky before sunrise. These Veerys and Swainson's Thrushes began moving around at dawn, and we banded 35 of them. One hundred and ten (35.6 net-hours) of 20 species, including 54 warblers and 16 vireos, were banded. On September 2, we banded 103 birds (26.25 net-hours) of 17 species, including 58 warblers (many Magnolia and American Redstart), 27 thrushes, 11 vireos and 6 flycatchers. Sixteen warbler species were observed, including a bright adult male Golden-winged Warbler and an Orange-crowned Warbler.

The next several days were continuously busy. On September 3, it was a busy day identifying different warblers' species and counting many Bay-breasted - 50 species was recorded, including quite a few Eastern Wood Pewees and banded 49 birds for the 25.1 net-hours. Quite a few Monarch Butterflies were seen on the day as well. On September 4, many swallows were moving toward the south - 15 Chimney Swifts were recorded, along with lots of Purple Martins and Barn Swallows. Forty-eight birds of 17 species were banded.

The wind shifted to the northwest on September 5th. A hundred American Robins were along the road on my drive to Fish Point (non-standard observation), and Blue Jays started teaming up, and their lively calls echoed in the area. Veerys and Swainson's Thrushes were still numerous, and many Blackpoll Warblers showed up on September 6. The number of warblers observed became smaller day-by-day. Fifty-four birds of 16 species were banded for the 26.25 net-hours, including 20 thrushes and 27 warblers.

The temperature dropped quite a bit in the morning of September 7 and warmed up to 30 C with strong south wind for the afternoon. It turned to dry weather without any precipitation for many weeks. Noisy calls of Red-headed Woodpeckers echoed at the pond, and warblers and flycatchers were chasing after numerous tiny moths, and crane flies in the sun. The early net-round was busy capturing a season first Gray-cheeked Thrush and a Connecticut Warbler. Forty-eight birds (24.4 net-hours) were banded, and 54 species were recorded during the count period.

On September 8, 53 species was recorded during the standard count period, and 27 birds were banded for the 33.8 net-hours. From the 9 to 10, thrushes were seen everywhere along the trail, and numerous flight calls were heard before daybreak. Fifty birds were banded for the 42 net-hours on the 9th - 29 Swainson's, 4 Gray-cheeked and 3 Veery and others. Sixty-nine birds were banded for the 38.4 net-hours - 27 Swainson's, 6 Gray-cheeked, and

5 Veery and others. Five Common Nighthawks flying over in the late afternoon were seen (non-standard observation).

September 11 was a gentle south breeze and a quiet morning for the census and the netting, except more than fifty Purple Martins were high up in the sky at the tip. The south wind became stronger on September 12. We captured some thrushes in the early morning and hardly heard any birds late afternoon. However, a rare Western Kingbird sitting on a hydro line was spotted on the way back home (non-standard observation).

On September 13, 56 species was recorded, including some Western Palm Warblers along the east shore on the census. In addition, forty-one warblers, 25 thrushes, and others were banded for the 45 net-hours. On the 14, three Merlins hunting at the pond were seen on the census, and 46 birds banded for the 20.6 net-hours. Sixty-two species, including 14 warbler species, were recorded during the count period.

Small birds became more secretive than usual since raptors began to show toward the late half of the month. A season first Peregrine Falcon, lots of Yellow-rumped and Western Palm Warblers were recorded for the census on September 15. Many birds calling and singing were heard soon after the sunrise, and eighty-three birds (45 net-hours), including 31 warblers and 45 thrushes, were banded.



September 16-30

A steady north wind overnight brought some sparrows and accipiters on September 16. Many Blackpoll Warblers were seen, and a Lincoln's Sparrow was banded as a season first. Fifty-nine birds, including 37 thrushes, were banded for the 45 net-hours. Swainson's and Gray-cheeked Thrushes had been numerous for a week. The winds shifted to the south on the 17. Many thrushes were captured for the early net round. An Osprey was sitting on a branch, and six Sharp-shinned Hawks were flying above the forest during the census. Numerous warblers - probably a hundred of Blackpolls - were seen. Later on in the day, a group of Common Nighthawks - counted about fifty - was seen. They were moving high up in the sky, which was remarkable.

The wind shifted from the south to the north on September 18 and kept blowing gently overnight from the northeast. There were warblers in the shrubs along the west shore, including many Yellow-rumped and Western Palm Warblers. Fifty-one species, including sixteen warbler species, were recorded for the count period, and the season second, Connecticut Warbler was banded.

The weather looked favourable for migration, with mostly north-east wind during the night and early morning on September 19. However, it warmed up soon with an all-day strong south-east wind. Sixty species was recorded during the standard count period, and 41 birds were banded, including a dozen Nashville and Tennessee Warblers that occasionally moved through the area.

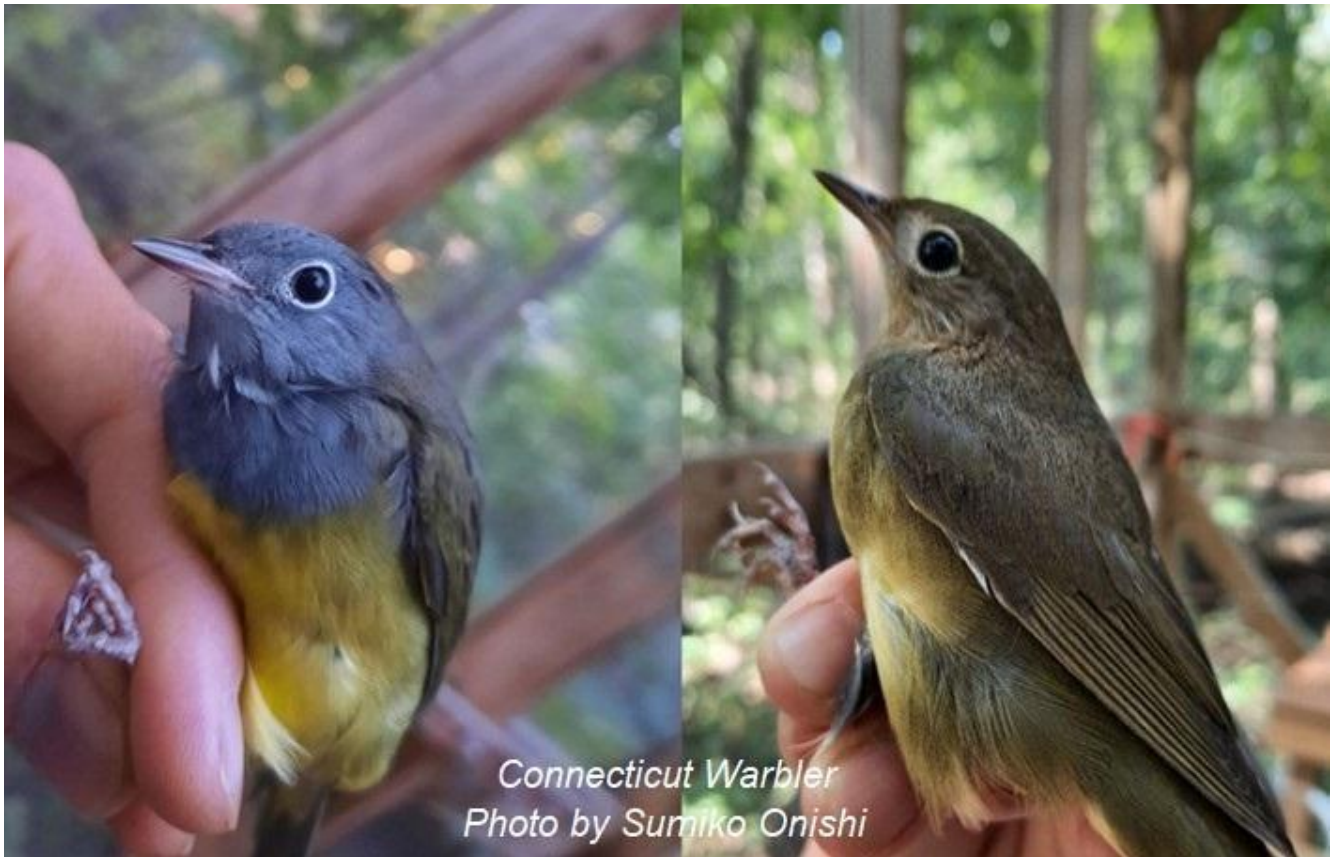
On September 20, a few American Kestrels were at the field along the road to Fish Point. My birdathon was still ongoing in the early morning, but it was tranquil for the census except for recording two Ruddy Turnstones as new for the season at the tip.

On the morning of September 21, a strong wind started building up. After observing several Sharp-shinned Hawks chasing a Merlin away at the pond on the census, we banded a season first Sharpie. Strong north wind with rain battered the island from the evening of the 21, and only the census was conducted on the 22, with eleven species observed at the pond.

On September 23, a strong southwest wind was howling, and the census and netting were postponed until the wind died down. From September 24 to 27, the wind stayed strong, and we had quiet mornings for both the census and the netting. A few Sharp-shinned Hawks, Golden-crowned and Ruby-crowned Kinglets were seen in the netting area while we banded only ten birds on the 24th. On September 25, it was a gloomy day with the wind blowing against the west shore. There were not many birds observed on these days due to the weather condition, except some thrushes and sparrows were heard. The season third Connecticut Warbler was banded along with other 12 species for the 43.5 net-hours on the 26th

The heavy rainstorm and strong southwest winds must have delayed many migrants for a week. When the wind finally shifted to the northeast over the night of the 28th, many thrushes' flight calls passed overhead, and sparrows flew across the road on our way to Fish Point. The netting area was full of birdcalls as well. Numerous kinglets, Brown Creepers, Winter Wrens, White-throated Sparrows, and thrushes were heard in the dark forest. A hundred seventeen birds of 19 species - 34 kinglets, 23 thrushes, 19 White-throated Sparrows, 22 warblers, 2 Yellow-bellied Flycatchers and 2 Scarlet Tanagers - banded for the 23.1 net-hours. Fifty-nine species was recorded, including a season first Northern Harrier, Yellow-bellied Sapsucker and Hermit Thrush during the standard count period.

The wind kept blowing from the north, and numerous White-throated Sparrows, Winter Wrens and Golden-crowned Kinglets were observed in the netting area on the 29th, although it looked less numerous than the day before. Seventy-seven birds, including 17 Yellow-rumped Warblers, were banded for the 45 net-hours. The following day (30th) became much quieter, and 49 birds were banded, including a season first Dark-eyed Junco and a young Indigo Bunting.



October 1-15

A south wind blew for the first week of October, and migration had been observed primarily from the birds flying over the census route. The daily total of October 1st and 2nd recorded a good number of Blue Jays and Golden-crowned Kinglets, but blackbirds were not seen at this time, and the banding had been slow.

On October 3rd, it was pouring rain at the beginning of the census, and not many birds were observed. The rain had been on and off for the early morning of the 4th. Hundreds of Golden-crowned Kinglets in the canopy and hundreds of Blue Jays flying over. A small group of Red-breasted Mergansers was recorded as new for the season.

The wind shifted briefly to light north-east with drizzle at the beginning of census on October 5th. The pond and the forest were quiet, but thousands of gulls covered the tip, and a group of 58 Sanderlings were busy walking around on the sand. The rain became heavy at the end of the census, and the netting was cancelled for the morning.

October 6th was an overcast sky with a strong east wind. On the way to Fish Point, our car drove into a cloud of midges. Many birds were seen feeding on those midges in the tree branches. We banded some sparrows for the first net round, and occasionally groups of kinglets - 27 kinglets were captured at once in a net. On October 7th, several Ruddy Turnstones were observed with Sanderlings feeding around the seaweed along the shore.

On the census of October 8th, thirty Sharp-shinned Hawks were recorded, and hundreds of Blue Jays were continuously observed. The wind shifted to a steady south wind for the next several days, and the netting became steadily quieter. During these three days (8th to 12th), we banded 39 birds, including 18 Blue Jays, and the 13th was the quietest morning, with only two Blue Jays banded at the last net round.

On October 9th, a swarm of midges were moving above the forest before the dawn. There was a mixed flock of Red-winged Blackbirds, Common Grackles and Rusty Blackbirds at the pond under the blue sky. Sixty Sanderlings were observed along the west beach and a couple of Dunlins along with them. The south wind became stronger on October 10th. The temperature warmed with on and off showers during the night, bringing back the mosquitoes and the forest green as if it was summer.

A flock of hundreds of Blue Jays continuously showed up from the forest on the census of October 11. Two Peregrine Falcons were observed as well along the west shore. On the 12th, two Cooper's Hawks tried to chase Sharp-shinned Hawks away at the pond. The next day (13th) was another good day for counting migratory raptors - 41 Sharp-shinned Hawks recorded along with a Northern Harrier, Peregrine Falcon, Merlin, and American Kestrel during the census. In addition, we observed 54 American White Pelicans at the tip.

On October 14th, some Tree Swallows were recorded along with hundreds of jays and blackbirds. The next day (the 15th) became rainy all day, and only the census was conducted. There were not many birds observed during the census. However, numerous Dark-eyed Juncos and blackbirds were seen along the roadside.



October 16th to 31st

The west winds became stronger on October 16th and shifted to a northwest wind the next day. Hundreds of White-throated Sparrows and Dark-eyed Juncos, including some other sparrow species, were observed at the east shore. Twenty-one birds were banded for the 26.25 net-hours, but there were not many birds, probably due to the flooded understory. On October 17th, a season first, Horned Grebe and many Eastern Phoebes were recorded on the census. We only banded a few kinglets and sparrows in the morning. However, in the afternoon, a dozen Song Sparrows feeding on the grass were seen (non-standard observation).

The strong wind blowing against the west shore finally calmed, and the blue sky appeared on the morning of the 18th. As soon as the sun rose, birds started singing, calling, and flapping around. The nets were opened for the entire standard net-hours and banded 125 birds, including 70 Yellow-rumped Warblers, 22 kinglets, 18 White-throated Sparrows, and 2 season

first Fox Sparrows. Many Monarch butterflies and dragonflies were recorded during the census as well.

On October 19th, the strong wind changed direction from north to south, and the temperature warmed up late morning. A thousand Ring-billed Gulls had been staying at the tip for the last couple of days. Thirty-nine species was recorded during the count period, and 40 birds - primarily Yellow-rumped Warblers and kinglets - were banded. The wind kept blowing from the south for the next day. On the census, there were a hundred Canada Geese at the pond and the tip, but only a few American White Pelicans.

The wind shifted to strong northwest during the night, and the temperature dropped to 5C by early morning on October 22nd. The netting area became even more flooded after the heavy rain. Numerous kinglets hopping low near the ground and thousands of Red-winged Blackbirds and Common Grackles flying over were observed on the census. The season's first Savannah Sparrow and two Trumpeter Swans were also recorded. We constantly captured kinglets from the start during the netting and banded 73 Golden-crowned and 14 Ruby-crowned Kinglets along with 9 other birds.

Fall migration season appeared to be the last movement on October 23rd. On our way to Fish Point, a flock of sparrows was everywhere along the road, and quite a few Eastern Meadowlarks were in the farm field. Numerous kinglets and Dark-eyed Juncos hopping low on the ground and a hundred American Robins during the census. Ninety-eight birds- 69 Golden-crowned and 11 Ruby-crowned Kinglets, and some other species were banded for the 17.5 net-hours.

On October 24th, the morning temperature dropped to 3C, the wind died down, and more birds arrived. Thousands of blackbirds and many groups of different species - including a few Tree Swallows and Purple Martins - were flying, overlapping each other and making their way to the south against the lead-grey clouds behind them. In the chilly autumn air, the banding was busy as well. Eighty-nine birds of seven species were banded, and more than a hundred American Crows flew over the netting area.

October 25th was rainy, and only the census was conducted - 21 species was recorded - and on October 26th, with intense north wind - 30 species was recorded. Still, only three birds were banded after the census. The north wind calmed down on October 17th, and more than 200 American Crows taking off from the tip to the south were observed on the census.

On October 28th, numerous Dark-eyed Juncos were around, a group of 12 Eastern Meadowlarks flying over the west beach and thousands of blackbirds were observed on the census. It started raining in the evening and remained on and off the next day (29th). Some

kinglets, sparrows and blackbirds were observed with the breaks of rain. On the 30th, it was north-east wind and continuously rainy with mild temperatures.



November 1st to 10th

On November 1st, only 26 species were recorded on the census, including a couple of Tree Swallows. On November 2nd, a season first Common Loon and three Sharp-shinned Hawks were observed on the census. The temperature dropped to 4C in the morning on the 3rd, although it warmed up during the day. Many American Crows and Common Grackles were still coming through the area, and a group of Hooded Mergansers were observed at the east shore.

On November 4th, a Northern Rough-legged Hawk flew by along the east shore, and blackbirds continuously showed up in the sky. Also, many Eastern Bluebirds had shown up in the last few days. Some of the nets were opened for a few hours, and 18 birds (10.5 net-hours) of 6 species were banded.

In the chilly autumn air (2C), the migratory passage became like a rush hour for thousands of blackbirds on November 5th. Many American Pipits flew over for the last couple of days. On the water's calm surface, more than a hundred Horned Grebes were observed. About sixty Rusty Blackbirds were hanging around the netting area, and captured three of them - 14 birds banded for 26.3 net-hours.

From November 6th to 8th, the wind had been chiefly south. Twenty-nine species were recorded during the census on the 6th, including some robins, pipits, and a few Cedar Waxwings. A few kinglets were seen while some of the nets were open for a few hours but did not capture any birds. On the 7th, twenty-four species were recorded during the census. It warmed up from 5C in the morning to 17C by the evening with a gentle southwest breeze; a couple of dragonflies and butterflies were seen in the field. On the 8th, fifteen Sanderlings were observed along the west beach during the census. It became a warm afternoon with an all-day south wind. The temperature went up to 18C!

On November 9th, the south wind shifted to the northeast in the early morning. There were several thousand blackbirds and starlings at the pond. A remarkable number of American Crows kept coming out from the forest and forming a long flight to the south on the lake. Hundreds of Horned Grebes, Red-breasted Mergansers and Lesser Scaups were also observed on the water. Some American Tree Sparrows were observed along the west beach, which tells me the season had ended.

November 10th was the last day of our fieldwork season for 2021. The wind had been switching from northeast to southwest, and fog filled the field. There were undoubtedly more birds around than the day before. Many waterfowls were observed on the water, and robins, bluebirds, pipits, juncos, blackbirds, and goldfinches were moving through the canopy and in the sky.

On the last day, I became moist with sweat during the census and took the nets down instead of suffering chilly toes and fingers. Most trees resemble summer with the growing green leaves ten days ago, started dropping the leaves in the last couple of days despite the warmer temperature. A thick russet blanket of leaves finally covered the ground to prepare for winter.



2021 Summary (Spring and Fall) Written by Sumiko Onishi

PIBO's 2021 migration monitoring had a noticeably quiet spring and busy fall. The following table# 1 showed the comparison of the catch-rate (the number of banded plus captured birds / net-hour) with the number we banded and the net-hour for each spring and fall from 2006 to 2021. The spring catch rate of 0.26 bird/net-hour was the lowest catch rate for the past fifteen years. In contrast, the fall catch rate of 1.29 bird/net-hour was the third-highest catch-rate for the fall in the past fifteen years. Since the relatively low net-hour for the fall is due to frequent nets closing during the census, the 1.29 catch-rate could be higher.

TABLE 1 - Comparison of Catch-rate during Migration Monitoring at Fish Point

	Catch-rate		# Banded(Captured)		Net-hour		Total Catch-rate	Total Net-hour	Days nets were open
	Spring	Fall	Spring	Fall	Spring	Fall			
2021	0.26	1.29	394(35)	2523(57)	1667	2003	0.82	3670	114
2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2019	0.73	0.57	803(57)	1558(44)	1176	2829	0.61	4005	115
2018	0.62	0.73	798(60)	1913(49)	1275	2686	0.71	3961	110
2017	0.45	0.91	560(34)	2635(37)	1327	2921	0.77	4248	118
2016	0.51	0.66	735(42)	1671(31)	1533	2598	0.60	4131	113
2015	0.47	0.75	391(33)	2022(37)	907	2745	0.68	3652	111
2014	0.52	0.55	736(34)	1633(45)	1469	3028	0.54	4497	133
2013	0.40	0.69	495(36)	1935(19)	1321	2838	0.60	4159	120
2012	0.58	1.01	838(25)	2702(149)	1484	2816	0.86	4300	125
2011	0.69	0.72	730(37)	1582(59)	1106	2269	0.71	3375	115
2010	0.50	0.97	672(43)	2683(84)	1442	2841	0.81	4283	132
2009	0.44	0.84	739(N/A)	2424(N/A)	1645	2888	0.71	4533	134
2008	0.44	0.88	794(50)	2711(50)	1927	3149	0.71	5075	147
2007	0.47	0.59	604(39)	1937(39)	1376	3325	0.56	4701	140
2006	0.72	1.33	985(N/A)	3269(N/A)	1350	2446	1.12	3797	118

Since 2013 (including 2013) our net-hours were calculated as 'Net-hour x 0.75' because our nets are 9m-net which is smaller size than CMMN standard (10m) nets. The net-hours on this table was corrected from the previous record. The highlighted catch-rate with red colour was calculated from the number of banded without the number of captured.

In the spring, especially, the large volume of warblers was missed during both the census and netting period, although we recorded a variety of warblers since May 7th. For example, the first Magnolia Warbler was banded on May 16th, and the first Blackburnian Warbler was captured on the last day of the banding operation (May 31st).

In contrast, we started capturing numerous warblers soon as we began netting on August 15th for the fall migration. Many Bay-breasted, Blackburnians and Black-and-white Warblers were banded from the end of August to the middle of September. The total banded number of Bay-breasted (80) and Blackburnian (49) was prominent in the previous year's record, which we usually capture less than a dozen. The transition in the catch-rate with a lapse of a month was seen in the following chart.

TABLE 2 – Change in the Catch-rate during Fall Migration 2021

Period	Aug15-31	Sep1-15	Sep16-30	Oct1-15	Oct16-31
Catch-rate (bird/net-hour)	1.54	1.67	1.11	0.49	1.63
Species Banded	38% of Magnolia, Bay-breasted, Blackburnian, and 12% of Red-eyed Vireo	47% of Veery, Swainson's and Gray-cheeked Thrush, 18% of Magnolia Warbler & American Redstart	32% of Swainson's and Gray-cheeked Thrush	30% of Golden-crowned Kinglet	Golden-crowned Kinglet

Another note we would like to mention is that we had many Red-eyed Vireos and thrushes with high fat scores, and quite a few adult warblers banded around September 13th to 14th and adult thrushes banded around September 15th to 16th. Later in September, we captured some young Veery and Swainson's Thrushes with small body size and many shaft streaks on the head feathers or/and distinct fault bar on the tail feathers among the thrushes we banded on September 28th.

We banded 2523 birds for the 2003 net-hours, including 1006 warblers and 660 Catharus thrushes (Veery, Swainson's Gray-cheeked, and Hermit) along with many other species by the end of the fall season.

Because many young birds migrate during the fall season, the fall migration period is usually more extended, and the total number we capture is higher than in spring. However, the differences between spring and fall were noticeably significant for this season, which showed in our banding total. Unfortunately, it might not show in the standard observation since the observer was too busy handling birds. Our first question was, where did these birds come from since we had a noticeably quiet spring. We were interested in whether they had a successful breeding season, a change in their flyway, or a change in their breeding range, which must be examined with all other CMMN station results by Birds Canada.

Table 3 – Migration Monitoring Coverage Summary (2007–2021)

Year	Census Duration Spring	Census Duration Fall	Census Days	Netting Duration Spring	Netting Duration Fall	Netting Days*	Birds Banded + Captured	Net Hours	Birds/ Net Hours	# of Species Banded	# of Species Observed
2021	Apr1-Jun10	Aug5-Nov10	168	Apr12-May31	Aug15-Non10	114	3009	3670	0.82	75	180
2020	Apr1-Jun10	Aug1-Nov10	168	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2019	Apr1-Jun8	Aug5-Nov10	166	Apr15-Jun1	Aug16-Oct20	115	2462	4005	0.61	84	185
2018	Apr1-Jun10	Aug1-Nov10	173	Apr20-May31	Aug17-Nov8	110	2820	3961	0.71	79	190
2017	Apr1-Jun11	Aug1-Nov15	179	Apr21-May31	Aug17-Nov10	118	3266	4248	0.77	80	185
2016	Apr1-Jun10	Aug1-Nov15	178	Apr15-Jun2	Aug17-Nov4	113	2479	4131	0.60	77	193
2015	Apr2-May29	Aug1-Nov15	165	Apr20-Jun3	Aug15-Nov8	111	2483	3652	0.68	76	194
2014	Apr1-Jun10	Aug1-Nov15	178	Apr18-Jun5	Aug15-Nov8	133	2448	4497	0.54	75	197
2013	Apr1-Jun6	Aug1-Nov15	170	Apr15-Jun5	Aug15-Nov8	120	2485	4159	0.60	82	200
2012	Apr4-Jun10	Aug1-Nov15	174	Apr13-Jun15	Aug13-Nov8	125	3714	4299	0.86	81	201
2011	Apr4-Jun8	Aug1-Nov15	173	Apr12-May31	Aug11-Nov15	119	2408	3375	0.71	78	203
2010	Apr2-Jun10	Aug1-Nov15	177	Apr2-May28	Aug4-Nov10	132	3482	4283	0.81	85	193
2009	Apr1-Jun10	Aug1-Nov15	178	Apr2-May24	Aug5-Nov11	134	3222	4533	0.71	88	198
2008	Apr3-Jun14	Aug1-Nov15	180	Apr5-Jun10	Aug3-Nov11	147	3505	5075	0.71	82	194
2007	Apr1-Jun15	Aug1-Nov15	183	Apr2-Jun1	Aug1-Nov15	139	2672	4739	0.56	84	205

Notes: Only census was conducted for 2020 due to a staff shortage under the COVID-19 restriction

Netting Days*: the number of days the nets were opened

Table 4.1 – Top 20 Species Banded in 2021

Species	Spring	Fall	Spring+ Fall
Swainson's Thrush	19	349	368
Golden-crowned Kinglet		331	331
Magnolia Warbler	11	186	197
Yellow-rumped Warbler	4	160	164
Veery	15	141	156
Gray-cheeked Thrush	4	123	127
Red-eyed Vireo	2	110	112
American Redstart	4	99	103
Black-throated Blue Warbler	3	95	98
Ruby-crowned Kinglet	11	83	94
Ovenbird	29	57	86
Bay-breasted Warbler	2	80	82
White-throated Sparrow	2	79	81
Black-and-white Warbler	3	66	69
Hermit Thrush	16	47	63
Blackpoll Warbler		57	57
Brown Creeper		52	52
Chestnut-sided Warbler	2	50	52
Blackburnian Warbler	1	49	50
Yellow Warbler	37		37

Table 4.2 – Other Species Banded in 2021

Species	Spring	Fall	Spring+Fall
Blue Jay	1	31	32
Red-winged Blackbird	32		32
Northern Waterthrush	8	20	28
Nashville Warbler	3	24	27
Yellow-bellied Flycatcher	4	23	27
Wood Thrush	18	7	25
Gray Catbird	19	4	23
Common Yellowthroat	15	6	21
Tennessee Warbler	7	14	21
Dark-eyed Junco		19	19
House Wren	11	8	19
American Robin	16	1	17
Cape May Warbler		17	17
Philadelphia Vireo		16	16
Canada Warbler	9	6	15
Black-capped Chickadee	3	10	13
Sharp-shinned Hawk		13	13
Common Grackle	10	2	12
Baltimore Oriole	11		11
Eastern Wood-Pewee	2	9	11
American Goldfinch	3	7	10
Least Flycatcher	4	6	10
Northern Parula	3	7	10
Brown-headed Cowbird	9		9
Downy Woodpecker	6	3	9
Indigo Bunting	5	4	9
Blue-headed Vireo	1	7	8
Eastern Phoebe	1	6	7
Rusty Blackbird	3	3	6
Wilson's Warbler	1	5	6
Yellow-shafted Flicker	1	4	5
Black-throated Green Warbler	1	3	4
Carolina Wren	2	2	4
Lincoln's Sparrow	3	1	4
Connecticut Warbler		3	3
Fox Sparrow		3	3
Mourning Warbler	2	1	3
Scarlet Tanager	1	2	3
Trail's Flycatcher	3		3
Warbling Vireo		3	3
Black-billed Cuckoo	2		2
Red-bellied Woodpecker	2		2
Swamp Sparrow	1	1	2
Tree Swallow	2		2
Winter Wren		2	2
Blue-winged Warbler	1		1
Chipping Sparrow		1	1
Eastern White-crowned Sparrow		1	1
Golden-winged Warbler		1	1
Rose-breasted Grosbeak		1	1
Song Sparrow		1	1
White-breasted Nuthatch	1		1
Yellow-bellied Sapsucker		1	1
Yellow-billed Cuckoo	1		1
Yellow-breasted Chat	1		1

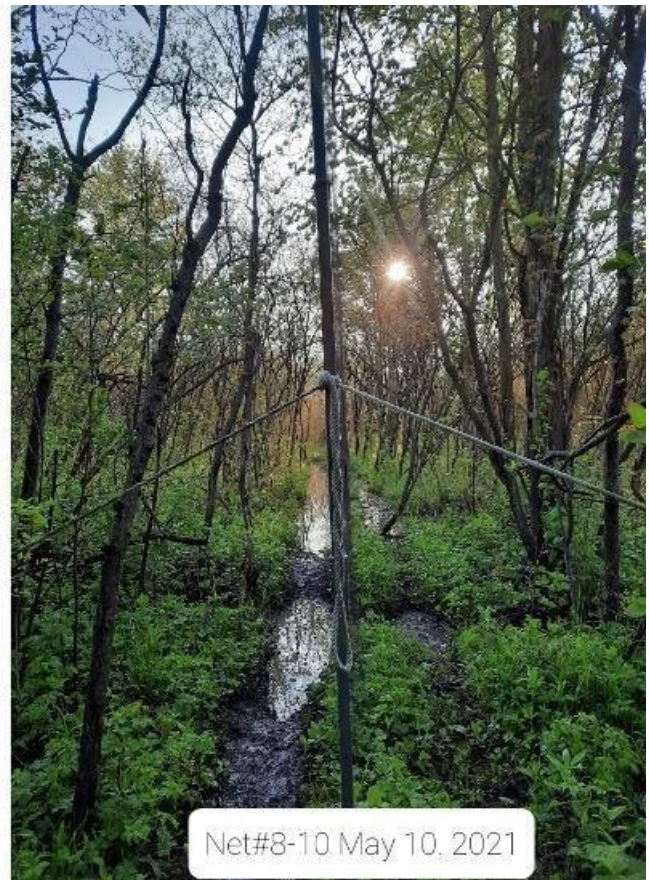
PIBO's netting area at Fish Point Provincial Nature Reserve

Flooding usually occurs in early spring with lots of rain, and the clay ground creates muddy conditions along the net lane and the trail. It slowly dries out towards the summer and fall. However, in 2021 our netting area was flooded almost the entire season except for a couple of weeks during early September.

In August, the verdant vegetation, flooded ground after the frequent downpours, and many fallen trees made extra hard work to set the nets for the fall.

The following photos were taken in early May 2021





Interesting/unusual Species Record for 2021

Sedge Wren: May 7th; singing in the FDNR SE field by the central pond.

Summer Tanager: May 2nd; male with distinct red-yellow feather gradient seen at Fish Point.

Acadian Flycatcher: May 21, 23; June 3; first observed singing around the netting area; observed singing near Fox Pond June 3.

Yellow-crowned Night Heron: June 11; observed fishing in the canal along the Stone Rd Alvar West NCC Property.

White-faced Ibis:

Western Kingbird: September 12th, a dull probably young bird observed at Mahoney Rd.



*Yellow-crowned Night-Heron
Photo by Gabriel Evans-Cook*

Field Effort

We are pleased with all the fieldwork we conducted for 2021. In the second year of the COVID-19 regulations, our routine field research - Migration Monitoring, Marsh Monitoring Program, and Species at Risk Observation, Purple Martin Colony Annual Survey, and Owling - was done successfully, and the result was certainly encouraging for our future effort. Moreover, we contributed our knowledge and passion to breeding bird surveys for the first year of the Ontario Breeding Bird Atlas (a five-year project). Alessandra - Assistant Field Biologist - spent 78 hours paddling, walking, and bicycling for the summer breeding bird survey besides the spring netting operation. Also, Hannah - Assistant Bander - made a constant effort for the netting operation for the long fall season. Other seven volunteers and part-time supporters helped us to fill the shortage of field staff during the peak migration season and enjoyed themselves in their respective way.

TABLE 5 - Field-hour During 2021

Participant	MM	MMP	PUMA	SAR	Atlas	Owling	Other	Total Hours
Sumiko Onishi	611.26	10	6	14	9.5	85.9	6	742.66
Rob Tymstra	105							105
Alessandra Wilcox	222.25	10	10.2	21.42	36.4			300.27
Hannah Mittelstaeds	327.25	0.5						327.75
Gabriel Evans-Cook	88.15	10	4	6	6			114.15
Chloë Chang	15.9							15.9
Suzanne Friemann	102							102
Pat Woodford	27.75							27.75
Erica Dunn	31							31
Martin & Kathy Parker	17.75							17.75
Graeme Gibson			0.7	1.5	1	0.25		3.45

Abbreviation	Field Research	Organization
MM	Migration Monitoring	Canadian Migration Monitoring Network
MMP	Marsh Monitoring Program	Birds Canada
PUMA	Purple Martin Colony Annual Survey	Nature Canada
SAR	Species at Risk Observation	PIBO
Atlas	Ontario Breeding Bird Atlas	Partnership - Birds Canada, Ontario Field Ornithologists, Ontario Nature and two other
Owling	Owling	PIBO's non-standard netting
Other	Other such as clearing nest boxes	PIBO

TABLE 6 - SPECIES AND FORMS RECORDED by PIBO STAFF DURING 2021

1	Common Loon	51	Spotted Sandpiper	101	Yellow-throated Vireo	151	Pine Warbler
2	Horned Grebe	52	Whimbrel	102	Blue-headed Vireo	152	Bay-breasted Warbler
3	Pied-billed Grebe*	53	Ruddy Turnstone	103	Blue Jay*	153	Blackpoll Warbler
4	American White Pelican	54	Red Knot	104	American Crow*	154	Black-and-white Warbler
5	Double-crested Cormorant	55	Sanderling	105	Horned Lark*	155	American Redstart*
6	American Bittern	56	Dunlin	106	Purple Martin*	156	Prothonotary Warbler*
7	Least Bittern*	57	Semipalmated Sandpiper	107	Northern Rough-winged Swallow	157	Ovenbird
8	Great Blue Heron*	58	Least Sandpiper	108	Bank Swallow	158	Northern Waterthrush
9	Great Egret*	59	American Woodcock*	109	Tree Swallow*	159	Connecticut Warbler
10	Turkey Vulture	60	Common Snipe*	110	Cliff Swallow*	160	Mourning Warbler
11	Green Heron*	61	Bonaparte's Gull	111	Barn Swallow*	161	Common Yellowthroat*
12	Black-crowned Night-Heron*	62	Ring-billed Gull	112	Black-capped Chickadee*	162	Wilson's Warbler
13	Yellow-crowned Night-Heron	63	Herring Gull	113	Red-breasted Nuthatch	163	Canada Warbler
14	White-faced Ibis	64	Lesser Black-backed Gull	114	White-breasted Nuthatch*	164	Yellow-breasted Chat*
15	Mute Swan*	65	Great Black-backed Gull	115	Brown Creeper	165	Hooded Warbler
16	Trumpeter Swan	66	Caspian Tern	116	Carolina Wren*	166	Summer Tanager
17	Canada Goose*	67	Common Tern	117	House Wren*	167	Scarlet Tanager*
18	Wood Duck*	68	Forster's Tern	118	Winter Wren	168	Northern Cardinal*
19	Mallard*	69	Mourning Dove*	119	Sedge Wren	169	Rose-breasted Grosbeak*
20	Gadwall	70	Rock Dove	120	Golden-crowned Kinglet	170	Indigo Bunting*
21	Northern Shoveler	71	Yellow-billed Cuckoo*	121	Ruby-crowned Kinglet	171	Dickcissel*
22	Blue-winged Teal	72	Black-billed Cuckoo*	122	Blue-gray Gnatcatcher*	172	Eastern Towhee*
23	Greater Scaup	73	Great Horned Owl*	123	Eastern Bluebird*	173	American Tree Sparrow
24	Lesser Scaup	74	Northern Saw-whet Owl	124	American Robin*	174	Field Sparrow*
25	Bufflehead	75	Eastern Screech Owl*	125	Wood Thrush*	175	Chipping Sparrow*
26	Common Goldeneye	76	Whip-poor-will	126	Veery	176	Savannah Sparrow
27	Hooded Merganser	77	Common Nighthawk	127	Swainson's Thrush	177	Vesper Sparrow
28	Red-breasted Merganser	78	Chimney Swift	128	Gray-cheeked Thrush	178	White-throated Sparrow
29	Ossprey	79	Ruby-throated Hummingbird*	129	Hermit Thrush	179	White-crowned Sparrow
30	Bald Eagle*	80	Belted Kingfisher	130	Gray Catbird*	180	Fox Sparrow
31	Northern Harrier	81	Red-headed Woodpecker*	131	Northern Mockingbird	181	Song Sparrow*
32	Red-shouldered Hawk	82	Red-bellied Woodpecker*	132	Brown Thrasher*	182	Lincoln's Sparrow
33	Sharp-shinned Hawk	83	Downy Woodpecker*	133	European Starling*	183	Swamp Sparrow
34	Cooper's Hawk*	84	Yellow-bellied Sapsucker	134	American Pipit	184	Dark-eyed Junco
35	Broad-winged Hawk	85	Yellow-shafted Flicker*	135	Cedar Waxwing*	185	Eastern Meadowlark*
36	Red-tailed Hawk*	86	Olive-sided Flycatcher	136	Northern Parula	186	Bobolink
37	Rough-legged Hawk	87	Eastern Wood-Pewee*	137	Orange-crowned Warbler	187	Brown-headed Cowbird*
38	American Kestrel	88	Yellow-bellied Flycatcher	138	Tennessee Warbler	188	Red-winged Blackbird*
39	Merlin	89	Acadian Flycatcher	139	Blue-winged Warbler	189	Rusty Blackbird
40	Peregrine Falcon	90	Willow Flycatcher	140	Golden-winged Warbler	190	Common Grackle*
41	Ring-necked Pheasant	91	Alder Flycatcher	141	Nashville Warbler	191	Baltimore Oriole*
42	Wild Turkey*	92	Least Flycatcher	142	Yellow Warbler*	192	Orchard Oriole*
43	Sora	93	Eastern Phoebe*	143	Chestnut-sided Warbler	193	Purple Finch
44	Sandhill Crane	94	Great Crested Flycatcher*	144	Magnolia Warbler	194	House Finch*
45	Black-bellied Plover	95	Eastern Kingbird*	145	Cape May Warbler	195	Pine Siskin
46	Semipalmated Plover	96	Western Kingbird	146	Black-throated Blue Warbler	196	American Goldfinch*
47	Killdeer*	97	Red-eyed Vireo*	147	Blackburnian Warbler	197	House Sparrow*
48	Greater Yellowlegs	98	Warbling Vireo*	148	Yellow-rumped Warbler		Total: 196 species and forms
49	Lesser Yellowlegs	99	Philadelphia Vireo	149	Black-throated Green Warbler		
50	Solitary Sandpiper	100	White-eyed Vireo*	150	Western Palm Warbler		

Notes: The highlighted 17 species is recorded as non-standard observation and the 76 species with the asterisk shows some breeding evidence / possible breeding evidence.

These species were recorded as standard observation during the census and as non-standard observation by PIBO's staff, spring assistant Alessandra Wilcox, and part-time census conductor Rob Tymstra.

Northern Saw-whet Owl monitoring

From 2004 to 2019, before COVID-19, we operated the owling from the middle of October to the beginning of November. The owling was also opened to the public a couple of times during the period to introduce the smallest North American owl, Northern Saw-whet Owl, to people who are islanders and visitors. In 2019, the CBC TV series 'STILL STANDING' introduced our public owling night as part of an episode featuring Pelee Island.

Since 2004, the observatory banded 362 Northern Saw-whet Owls and captured more than twenty owls that were initially banded at other locations, ranging from Northern Ontario to Minnesota. In 2012, we banded 55 Saw-whet Owls (0.18 birds/net-hour) and recaptured six Saw-whet Owls already banded in previous years or at other banding stations. Our busiest night was November 13, 2012, when we banded 25 Saw-whet Owls (0.51 birds/net-hour). Our previous data showed that the total catch rate is similar regardless of the varied total net hours (average 0.107). Shifting the netting period from early October to late October and mid-November increased the catch rate, which was also probably enhanced by moving to a more southern location.

Unfortunately, PIBO's owl monitoring has reduced operation time and effort since 2020. Because the preparation and the operation are time-consuming besides the standardized migration monitoring with census and mist-netting had been busy every morning. This year the owl banding started on November 19 after the census, and banding was wrapped up for the season on the 10th. The nets were put up in PIBO's bander in charge's place of residence, north of the original netting location but nearby the area. It was beneficial for the single staff who took care of the operation. The owling was conducted occasionally with the weather permitted until the night of Christmas Bird Count on the island on December 19. A total of six Northern Saw-whet Owls and one Eastern Screech-Owl were banded, and four Northern Saw-whet Owls were recaptured.

Because of the small sample size, any remarkable trends and foreign encounters were discovered. In late November, two recaptured owls were originally banded on Kelley's Island on November 5. Another foreign encounter was banded initially at Simcoe County, Ontario, on September 28, 2021. It shows a similar encounter pattern from last year, which happened in late November, which leads to the question of how often and how long they are moving around these Lake Erie islands and if there is a flyway for the population which moves through Simcoe County to Pelee Island.

2021 Northern Saw-whet Owl encounter record

TABLE 7 – 2021 NORTHERN SAW-WHET OWL ENCOUNTER RECORD

Species	Banded Year	Banded Date	Banded Location	Recaptured Year	Recaptured Date	Recaptured Location
NSWO	2021	Nov 5th	Kelleys Island	2021	Nov 19th	Pelee Island
NSWO	2021	Nov 5th	Kelleys Island	2021	Nov 19th	Pelee Island
NSWO	2021	Sep 28th	Innisfil, Simcoe County, ON	2021	Nov 23rd	Pelee Island
NSWO	2021	Nov 23rd	Pelee Island	2021	Dec 2nd	Pelee Island

Note: Highlighted type shows foreign encounter. Please see the following map about the recaptured location.

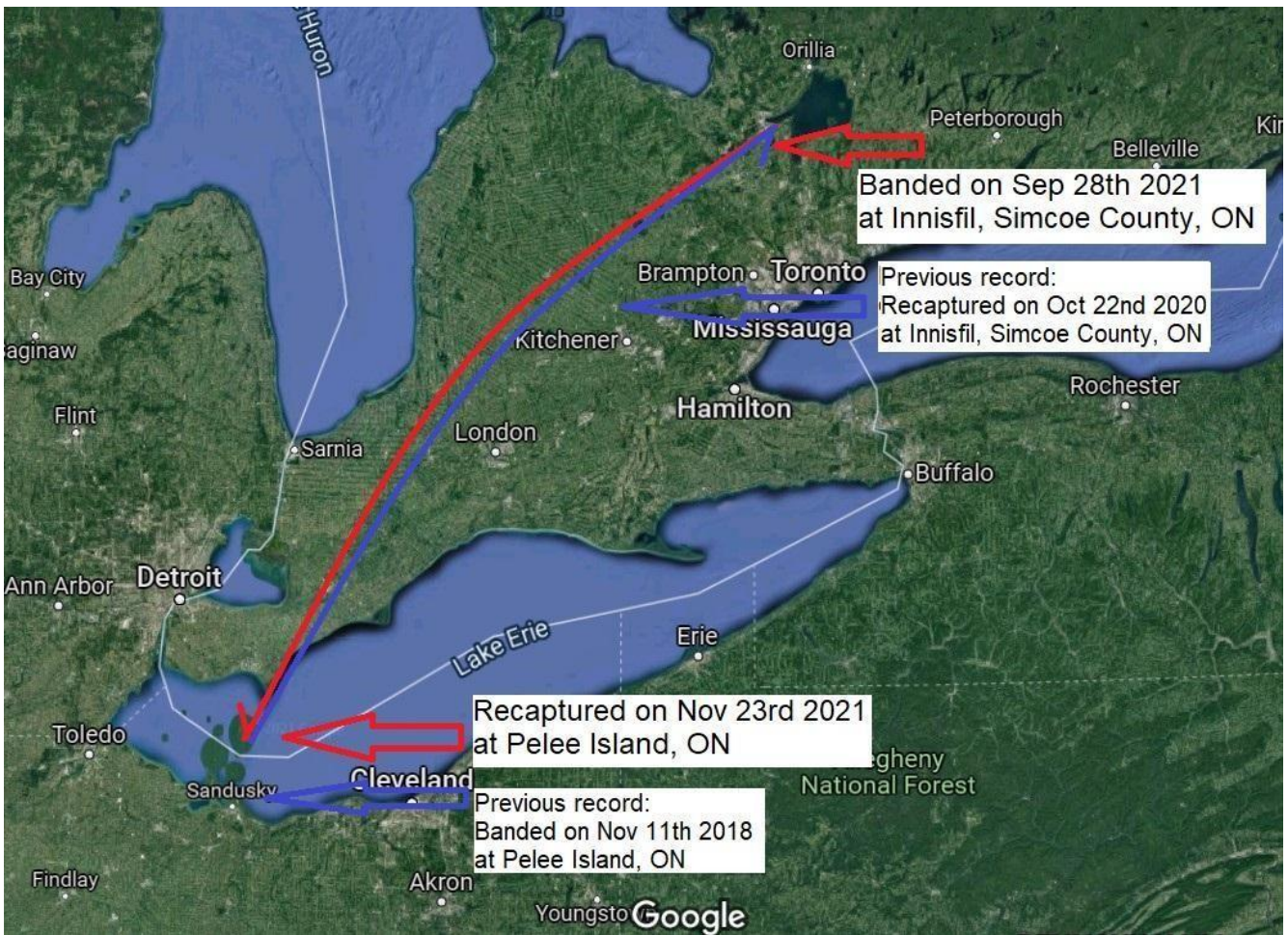




TABLE 8 - OWLS CAPTURED DURING OWLING 2021

Date	Species	Banded	Retrap	Net hours	Birds/net hour	Temperature
19-Nov	NSWO	2	2	9	0.44	2C
23-Nov	NSWO	2	1	15	0.20	1C
2-Dec	NSWO	0	1	15	0.06	7C
4-Dec	NSWO	1		16.9	0.06	4C
17-Dec	EASO	1		13.1	0.08	2C
19-Dec	NSWO	1		16.9	0.06	minus 1C
		Total 7	Total 4	Total 85.9	Average 0.15	

Total 6 Northern Saw-whet Owls and 1 Eastern Screech-Owl were banded, and 4 Northern Saw-whet Owls were recaptured during 85.9 net-hours.

Breeding Bird Observation 2021

PIBO's summer breeding birds' observation is composed of four parts - Purple Martin Colony Annual Survey, observation of the individual Species at Risk breeding on the island, Marsh Monitoring Program, and Ontario Breeding Bird Atlas. We had a successful result despite the limited experienced observers. Many thanks to our spring assistant, who bicycled around Pelee island to find breeding species in the spring and summer. We observed quite a few Dickcissels - at least at the ditch along the field; It was exhilarating to see young Prothonotary Warblers and White-eyed Vireos, although we still hope to see a family of Yellow-breasted Chats someday.

Interesting species observed the breeding evidence on Pelee Island summer of 2021

Prothonotary Warbler

Yellow-breasted Chat

Least Bittern

Red-headed Woodpecker

Cliff Swallow

White-eyed Vireo

Purple Martin nest box monitoring (in progress)

The two Purple Martin nesting houses on the PIBO cottage property were given a quick brush out and raised on April 7th. The first pair of Purple Martins were inspecting the nest boxes on April 11th. After a bout of cold weather and rain, two additional pairs arrived on April 21st, likely taking shelter from the dangerous conditions. The community gradually grew more extensive as the precipitation and weather fluctuated. Several species of birds, including Tree Swallows, House Sparrows, and European Starlings, were observed inspecting the nest boxes, whether they were hunkering down for the cold weather or interested in nesting. Fortunately, there were no adult Purple Martin casualties during the variable cold spells in April and early May. Initial cleaning checks began on April 25th to check nest-building progress and remove European Starling nests; two pairs had begun to make themselves at home as soon as the units were raised. For the rest of April and early May, the nest boxes remained empty until around mid-May when, like clockwork, all the adult Purple Martins commenced nest building at once. When several adults were observed carrying green leaves into the nest boxes on May 23rd, a check revealed that many nests were already complete or in progress; four of those entire nests contained eggs. By June 4th, all the nests were finished

and lined with fresh green leaves, most containing 3-6 eggs. Nest checks continued from May 23rd approximately every five days, weather dependent.

Purple Martin nesting was successful in 2021 with a culmination of 160 eggs, 140 hatched young, and 138 healthy fledglings across 30 pairs. The cause of the discrepancy of 38 young between hatching and fledgling is uncertain; all missing young were noticed in some nests at very early stages of development, at most five days after hatching. Predation or starvation could have been the cause, although no evidence of predation was observed this season and no bodies were found. Two pairs of European Starlings regularly nested in the poly-wood Troyer 'T-14' Martin House. Starling nests were removed ten times from April 25 until they seemingly gave up and left the units empty on July 1; 30 eggs were removed between the two pairs. On June 4, A House Sparrow nest was discovered covering a complete Purple Martin nest in one of the T-14 units; this was only a minor setback for the Purple Martin pair because, as soon as the nest was removed, they immediately began rebuilding and began to lay eggs. No invasive species were observed investigating or entering the gourd apartments, and Purple Martin nests occupied all units.

Table 1- Purple Martin nest box monitoring

Observers
Alessandra Wilcox, Sumiko Onishi, Gabriel-Evans Cook, Graeme Gibson
of nest box checks
14 (April 25; May 4, 12, 23, 30; June 4, 9, 14, 19, 26; July 1, 6, 10, 17)
Hours 10.2

One hundred and ten young Purple Martins were banded this season. Most young (19 broods) fledged before July 17th, with nine broods almost ready to fledge and one late clutch of seven eggs close to hatching. This year there were no second-year males present; all 30 males breeding in this year's colony were after second year. Eight of the females aged were second year, and 13 were after second year. The age of the rest of the nine adult females remains unknown.

Site	# of cavities	# of active nests	% occupied	Total # eggs	Total # hatched	Total # fledged	% hatched	% egg to fledge	%young to fledge
T-14	14	12	85.7	66	50*	30*	83.3*	45.5*	60.0*
Gourds	18	18	100	110	90	72*	81.8	65.4*	80.0*

Table 2 2021 Summary of Results from PIBO's Purple Martin next boxes





*Hatchling Purple Martin in the nest
Photo by Gabriel Evans-Cook*

Species at Risk (SAR) Monitoring 2021

Species at Risk Act (SARA) is a law that protects Canada's native wildlife from extinction. The Act states our legal responsibilities for studying and finding ways to aid the recovery of endangered species. The Species at Risk refers to both the natural habitat and the population that occupies that habitat. This Species at Risk is threatened by human activity and classified as either Endangered, Threatened, or Special Concern. In Ontario, nineteen species of birds were classified as Species at Risk under the Act. The determination of the classification of a species is the responsibility of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), a group of experts which assesses and identifies Species at Risk.

Towards the end of May, we started seeing some Species at Risk at the Fish Point Provincial Nature Reserve study site. A pair of Red-headed Woodpeckers (of Special Concern), displaying territorial behaviour at the pond, and a male Prothonotary Warbler (Endangered), singing every morning after the middle of May. An Acadian Flycatcher (Endangered) has been observed along the census route annually around the same time. Once the weather warmed up, the unique call of the Yellow - breasted Chat, (Endangered) is heard along the Stone Road and the East West Road. A few Eastern Meadowlarks (of Special Concern) are

seen along the edges of the field. The sightings of Species at Risk were documented from April to November and added to the migration and the non-breeding bird reports.

Every summer, from June to July, PIBO has been monitoring Species at Risk on Pelee Island. The task of monitoring Species at Risk is time-consuming and takes expert knowledge and a keen ear. The observer must be familiar with which season the species will arrive at the breeding ground, the best location to observe them, what time of day is better to watch them, and how they behave during their nesting period. Many species become quiet and secretive to avoid predators once they start laying eggs. To obtain better evidence of breeding, the observer has to spend many hours listening, searching and observing without disturbing them, which is a challenge.

Species at Risk classified as endangered, threatened, or special concern in Ontario

Prothonotary Warbler (Endangered) monitoring 2021

Prothonotary Warbler Monitoring (in progress)

PIBO monitors and maintains a series of 21 Prothonotary Warbler nest boxes at the Fish Point Provincial Nature Reserve (Ontario Ministry of Natural Resources - Ontario Parks). The nest boxes are arranged relatively linearly from the northwest end of the standardized count area at Fish Point along the western boundary of the nature reserve, following McCormick Road. Most can be monitored easily from the road, depending on vegetation cover. The purpose of these nest boxes is to provide Prothonotary Warblers with ample breeding sites in suitable habitat. However, Tree Swallows and House Wrens do not hesitate to take advantage of these opportune sites. Breeding activity for each species was observed within the area, and about half of the Prothonotary nest boxes were taken up by Tree Swallow residency. One male Prothonotary Warbler built and maintained a nest of fresh moss in nest box 13; however, his nesting efforts were futile due to the lack of a female. Five singing males were located throughout the Fish Point area, but only one was paired with a female. This pair had an incredibly successful breeding season: raising one brood of at least four young to fledge using a natural cavity nest site and a sequential brood in the “old” nest box 07 (unfortunately, we couldn’t confirm if the nest was successful or not, we will open the box later to find any evidence once the water is low, we do not know how many there are or when they will fledge, it was too flooded for me to check the box before I leave). One of the singing males was located nearby Fox Pond at Fish Point, but no other females were located.

Prothonotary Warbler monitoring consisted of frequent checks along the McCormick Road and Fox Pond for breeding activity such as singing males or other visual and audio cues. Initially, playback was used to determine the number of males defending territories in the Fish Point area. Notes were taken on the number of males singing at each site and approximate territory size, the number of females observed, and the presence of other breeding bird species in the area. The first observation of singing male Prothonotary Warblers within the habitat was on May 17th. The nest boxes were closely inspected on several occasions to determine if there was evidence of nesting. Only one nest box had consistent evidence of Prothonotary Warbler use due to the presence of a maintained cup of moss. However, subsequent checks revealed a lack of a female within the territory and, consequently, no breeding success. Only one pair of Prothonotary Warblers was located, and their nest was situated in a natural tree cavity close to nest boxes 07 and 05. They raised at least four young to fledge at this site; the cavity was closely inspected twice to monitor the number of young and their development progress. The female was first observed feeding and bathing regularly in the territory on May 18th, the nest with young located on June 16th, and the young fledged on June 23rd. Additional notes were taken from distant observations on how frequently the young were fed and the parents' behaviour. On July 14th, the same pair was observed bringing food to a new nest site: the "old" nest box 7, revealing that they had moved on to raising their second clutch of the season.

Table 3 Prothonotary Warbler nest box monitoring

Observers: Alessandra Wilcox, Sumiko Onishi, Gabriel Evans-Cook
of visits (May 17, 18, 21; June 3,4,5,10,14,16,17,20,22,23,26; July 2,4,14,15)
Hours 10.1
Tree swallows were observed nesting in boxes; one pair of Prothonotaries raised one brood in a natural cavity and a proceeding brood in a nest box in the same territory; one other male prepared a nest site in a nest box but there were no other females present; a total of five confirmed males and one female around the Fish Point area; at least four fledglings were produced.

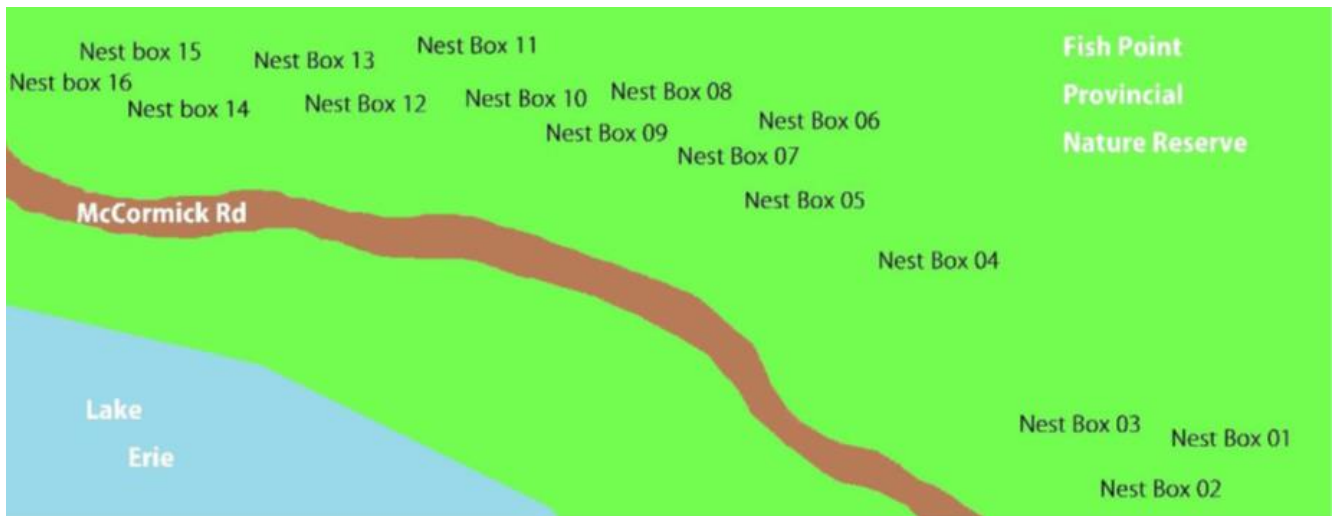


Figure 1: Prothonotary Warbler nest boxes at Fish Point. Locations approximate



A Prothonotary Warbler was observed at the same nest site during the 2020 survey. However, we could not confirm if they are actually nesting or not since a House Wren was seen entering and leaving this nest site for the next few visits. We were very lucky to confirm that they were nesting in the natural tree cavity this year. Please see the Species at Risk chapter in the 2020 PIBO Annual Report to find out more about the previous status of the Prothonotary Warbler.





Prothonotary Warbler by Sumiko Onishi 2020

Yellow-breasted Chat (Endangered) monitoring 2021

Yellow-breasted Chat monitoring was very successful this year, culminating with three pairs located in three separate territories across Pelee Island. Monitoring consisted of regular visits to suitable habitats starting at the end of May. Playback was initially used at locations where there had been Yellow-breasted Chat sightings in previous years and sparsely used to determine territory size when individuals had been observed at a site. The first observation of Yellow-breasted Chat in the breeding territory was on June 4th in the Krestel Property (NCC) along East West Rd. A singing male was observed that morning, and a check later in the evening revealed that the male was contacting a female nearby as both their responses could be heard. On June 8th, a male was observed singing in the Stone Rd. Alvar (NCC). It was later confirmed to be a separate individual from the male in the Krestel Property. On June 29th, a female was heard calling in response to the male within this territory. An additional pair of Yellow-breasted Chats were located in the NCC Property along Brown's Rd on June 23rd.

On this day, the male was observed singing and carrying food throughout the territory, indicating a nest with young; the female was observed flying across the trails with the male. Subsequent checks confirmed the consistency of the pair. All three males were highly responsive to playback; the individual at Brown's Rd even performed his characteristic flight display on more than one occasion; this is encouraging evidence of breeding for Yellow-breasted Chat on Pelee Island. Monitoring breeding Yellow-breasted Chats is a considerable challenge due to their secretive nesting behaviour; it requires numerous expeditions through the thorny alvars and a perpetually tuned ear. Even after their initial discovery, finding consistent confirmed breeding evidence was challenging because individuals could cover a substantial area in little time, using the dense brush to protect their movement and behaviour.

Table 4: Yellow-breasted Chat observation

Observers: Alessandra Wilcox, Sumiko Onishi, Gabriel Evans- Cook
of observations: 12 (June 4,8,23,24,26,28,29; July 4,5,6)
Hours: 6.1
Three separate pairs were identified in three territories in the alvar habitat across Pelee Island; breeding confirmed with one pair: male was observed carrying food across territory, no nests were found.





Least Bittern (Threatened) monitoring 2021

Breeding Status: Possible

Territories: one

Breeding evidence: respond to playback CD

Observation dates: June 6th

Location: Lighthouse Point Provincial Nature Reserve

Threats: Loss and destruction of wetland, change in drainage, invasive species

2021 Marsh Monitoring Program

After we postponed the survey in 2020 due to COVID-19 staff shortage, we managed to get our canoe out to Lake Henry at Lighthouse Point Provincial Nature Reserve, and we successfully resumed our thirteenth survey for the Migration Monitoring Program (MMP) in 2021. The MMP led by Birds Canada has significantly contributed to studying the quality of wetlands and the diversity of inhabited wildlife in Ontario's wetlands. For the past surveys, PIBO had recorded the secretive 'Threatened' little marsh bird, Least Bittern, at Lake Henry most of the years.

In the summer of 2021, the survey was conducted three times during June and the beginning of July at Lake Henry. As a result, we recorded 33 species, including the targeted marsh bird - a Least Bittern, an American Bittern, Black-crowned Night-Herons - and Great-blue Herons and Green Herons. Unfortunately, both bitterns were seen only once during the three visits this season, but the Black-crowned Night-Herons were seen on the three trips, and their breeding evidence was confirmed by observing their young. Compared to the last survey in 2019, we observed a noticeable change in the vegetation at the time we surveyed.

Please see the Species at Risk chapter on PIBO Year-end-Report/Annual Report 2020 for the previous record.





Bald Eagle (Special Concern) monitoring 2021

Breeding Status: Possible

Territories: at least three

Breeding evidence: Nest site with adult

Observation dates: Early spring

Location: Fish Point Provincial Nature Reserve, and other

Threats: Habitat loss due to shoreline development and pollution

Red-headed Woodpecker (Special Concern) monitoring 2021

Breeding Status: Confirmed

Territories: at least two territories

Breeding evidence: quite frequently suitable habitat

Observation dates: April 28th, 30th, May 2nd- 24th, June 3rd, 4th, 6th, July 3rd

Location: Fish Point and Lighthouse Point Provincial Nature Reserve

Threats: Habitat loss due to clearing dead trees, and other agricultural and forestry land change

In 2021, we started monitoring Red-headed Woodpeckers along with our routine fieldwork at Fish Point since the season's first one was observed on April 28th. Seven were hanging around our census and netting area on May 5th. At least two of them were regularly seen and heard around the pond at Fish Point on the daily census from May to early June, but the nest site was not determined on our visits. In early August, we observed that they were defending a tree cavity on one of the old dead trees at the pond, which we assumed was the nest site. The success of this pair's breeding season was unknown.



Acadian Flycatcher (Endangered) observation 2021

Breeding Status: Possible

Territories: Not confirmed

Breeding evidence: annually observed at the end of May in the suitable habitat

Observation dates: May 21st, 23rd, 24th, Jun 3rd

Location: Fish Point Point Provincial Nature Reserve

Threats: Habitat loss due to clearing forest

Please see the Species at Risk chapter on PIBO Year-end-Report/Annual Report 2020 for the previous record.

Eastern Wood Pewee (Special Concern)

Date added to the Species at Risk in Ontario List June 27, 2014

Breeding status: Confirmed

Territories: Increased from 3 (2010) to 9 at Middle Point Woods (NCC) in 2018

Decreased from 7.4 (2010) to 4 at Fish Point in 2016

Five at Wilds Pelee (NCC) in 2015

Breeding evidence: fledged young

Observation dates: From late May to June

Location: PIBO's breeding bird census plots

Threats: Loss of habitat, change in managing forests, decrease of flying insects, and predation during breeding season.

Eastern Meadowlark (Threatened)

Breeding status: Unconfirmed

Territories: Unconfirmed, at least one or two territories noted

Breeding evidence: Unconfirmed

Observation dates: From June to August

Location: agricultural field along the West Shore Rd

Threats: Loss of habitat, changes in land use such as farming practice, predation by other small mammals.

Barn Swallow (Threatened)

Breeding status: Confirmed

Territories: Numerous

Breeding evidence: Nests with eggs, fledged young

Observation dates: N/A

Location: Various sites such as old barn, walls and foundation of building, under the bridge at canal

Threats: Loss of nesting and foraging site associate with modern farming and use of pesticide.

American White Pelican (Threatened)

Breeding status: Not confirmed on Pelee Island, but confirmed on other surrounding islands

Territories: *observed at Big Chicken Island in 2016, Middle Sister Island in 2016, 2017, and 2018

Breeding evidence: nest, eggs, and fledged young

Observation dates: July to August

Location: N/A

Threats: change in lake water level affect their nesting site, water pollution, predation and human disturbance.

*Citation: ONTARIO BIRDS VOLUME 37 NUMBER 1 APRIL 2019, American White Pelicans expand breeding range into Western Lake Erie, 2016-2018

Ontario Breeding Bird Atlas Summary

This year is an exciting time in the breeding bird world because it is the beginning of the third Ontario Breeding Bird Atlas, a vast project that only occurs every 25 years and spans five years. With the combined knowledge and effort of nature lovers and birders alike, we will have a detailed account of all breeding bird evidence across Ontario by the end of the five years. Collecting this data is very similar to how breeding bird evidence has been documented at PIBO in previous years, but of course, on a much larger scale. Anyone can contribute general observations for the Breeding Bird Atlas. Community involvement in this project is essential; volunteers and participating organizations are central to the success of the Atlas. To cover such a large area in such detail, 10x10 km squares were designated and surveyed by local bird enthusiasts. Pelee Island falls within three of these 10 km squares: 17TLG62, 17TLG52, and 17TLG63.

PIBO has contributed to the Ontario Breeding Bird Atlas data collection by conducting a series of point counts within each square. Point counts require a higher degree of birding prowess because all species must be confidently identified by sight and sound in a short time. These point counts help to determine breeding evidence and the abundance of bird species in a standardized and reliable manner so that the data can be used to help support

conservation studies. Within the five minutes of the point count, PIBO staff would identify every bird within a 100 m radius by sound and sight and, if applicable, record the breeding evidence associated with each bird. The minimum required point counts must be completed once within the five-year period and during peak breeding season: from May 24th to July 10th in Southern Ontario. Point counts must also be conducted during peak bird activity, from half an hour before sunrise to five hours afterwards. PIBO ran point counts on calm mornings from June 13th to July 6th.

Table 5 Point counts completed for the Ontario Breeding Bird Atlas in 2021

Square ID	#of points within square	Minimum #of point counts required	#of point counts completed	Outstanding point counts	Observers	Hours
17TLG52	49	25(20 predefined, 5 off-road)	48	1(1)	Alessandra Wilcox, Sumiko Onishi, Graeme Gibson	20.3
17TLG62	6	6 (pre-defined)	6	N/A	Alessandra Wilcox	0.95
17TLG63	9	9 (pre-defined)	9	N/A	Alessandra Wilcox	1.8

Another aspect of the Ontario Breeding Bird Atlas is submitting checklists that detail general observations across Atlas squares. PIBO contributed to general observation by submitting detailed checklists of species counts and any breeding bird evidence from locations across the entire island. General observation was conducted as frequently as weather and time permitted, from June 6th to July 14th.

Table 6 summary of general observations for the Ontario Breeding Bird Atlas

Observers: Alessandra Wilcox, Sumiko Onishi, Gabriel Evans-Cook, Graeme Gibson
of Checklists*: 63
Hours: 52.9
Notes: Confirmed breeding evidence was documented for 29 species across the island. One pair of Red-headed woodpeckers was observed at Fish Point Provincial Park: probable breeders. Seven pairs of Dickcissel, and two additional males, were located between Henderson Road. (3 pairs) and the FDNR SE field (4 pairs): probable breeders.

* This only included checklists in which the main purpose was general observation for the Atlas.



Additional observation during the summer

Dickcissel: June 14, 22, 24, July 5th; First observation of two singing males on Henderson Rd June 14th and six individuals (2 pairs) at the FDNR SE field June 22nd; 3 pairs in breeding habitat on Henderson Rd by June 24th and four pairs and two additional males at the FDNR SE field July 5th.

In the past years, we used to see some Dickcissels along the field, which was not our breeding bird survey plot. In the summer of 2021, quite a few - at least 20 - were recorded on the Island. We observed some pairs which showed behaviour like defending the nesting site; however, the grass site along the ditch was cleared by farming a couple of weeks later.

White-eyed Vireo: This rare species in Canada has been observed on the Island during migration and breeding season. However, the breeding site and evidence had not been confirmed on the Island for more than five years. On June 19th, 2021, we observed a consistently singing White-eyed Vireo in the shrubby habitat nearby the area we were monitoring Yellow-breasted Chat during our species at risk observation. Additionally, a young White-eyed Vireo was observed at the same site later in the summer.

Cliff Swallow: At least two nests were found. one at the water.

2021 Botham Cup Bird Race

Summary

The annual Pelee Island Bird Race corresponded with World Migratory Bird Day on May 8th. The race lasted 24 hours, from noon on May 8th to noon on May 9th. The PIBO team of Alessandra Wilcox and Gabriel-Evans Cook ended the race with 101 species and biked/walked 53.6 km! Despite poor weather conditions for the first 12 hours, the PIBO team was delighted to have an opportunity to explore so much of this beautiful Island and see some fantastic birds. The highlight was a Sedge Wren at the FDNR SE Field.

The first day of the Bird Race began at the PIBO cottage directly after PIBO's regular migration monitoring at Fish Point. To keep efforts environmentally friendly, the only method of transportation used between birding locations was bicycles. Biking across the Island worked in the team's favour, as many of the species listed were observed either by sound or sight from the road en route to the next birding hotspot. At the cottage, species such as Baltimore Oriole, White-crowned Sparrow, and many other common species frequented the feeders could be checked off immediately. From the staff house, the team biked to Fish Point along East West Road. Many migrants could be heard from the road along this route, such as several warblers (Blackburnian, Pine, Yellow, Yellow-rumped, and others), Wood Thrush, Purple Finch..., and some local breeders such as Horned Lark, Downy Woodpecker, and Wild Turkey. When they reached the west end of the Island, they began to make their way up north to Sheridan Point. As they traversed into the more developed housing area, species such as House Finch, House Sparrow, Chipping Sparrow, and European Starling became more abundant. Not many new species were accounted for at Sheridan Point, but a Green Heron that flushed and squawked as it awkwardly flew deeper into the overgrown pond made the trek worth it.

The next stop was the Florian Diamante Nature Reserve (NCC), a plot of land in the early stages of succession; due to the rainwater collection over the past year, this area had become the perfect mudflat habitat for migrant shorebirds and waterfowl. The team decided this would be the ideal mid-afternoon stop because the thick air and hot sun would not deter many species that would frequent this habitat; most migrant passerines had ceased singing and were resting out of sight. It seemed like the PIBO team was not the only group with this idea because they met up with five other birders, including PIBO's very own Rob Tymstra, participating in the Global Big Day. Here, they not only checked off all the listed sandpipers, but they also picked out a Bank and Cliff Swallows from the crowd of Barn and Tree Swallows, taking full advantage of the bounty of flies over the water. The team also saw a small flock of Buffleheads and plentiful Blue-winged teal. By around 3:00 pm, the threat of a storm loomed over the Island, and the PIBO team had to quickly revise their route so that good weather could be maximized. Unfortunately, this meant missing out on Lighthouse Point Provincial Park, where Mute Swan and other waterfowl could have been observed. However, everything worked out for the better because, thanks to the lovely birders at Florian Diamante, they received a tip about a Sedge Wren that had been seen earlier that morning at the FDNR SE field site. On the way over from the mudflats, it had begun to rain, and they began to doubt birding success. Thankfully, this bought of rain was only a trial run for the storm ahead and, almost like fate, cleared up as soon as they arrived at the field. The team spent a significant amount of time painstakingly listening for the sharp clicks and chips of the sedge wren, carefully covering as much land as possible. With such effort, they also heard a Sora and observed a Wilson's Snipe resting along the banks of the southeast pond. The team eventually found the Sedge Wren singing amongst the long grasses by the south bank of the central pond; what a treat it was! By 4:30 pm, an actual storm had begun to pass, so the PIBO team retired for the day to the cottage. Lucky for them, they could still gain new species between breaks in the rain, such as a Ruby-throated Hummingbird that came to inspect the fresh fruit feeder. The next day began before dawn as the team biked to the netting area at Fish Point for regular migration monitoring. In the standardized count area throughout the morning, they could pick out many warblers and other migrants that had been missed the day before, such as Blue-winged Warbler, Blue-headed Vireo, White-throated Sparrow, Ovenbird, and Northern Waterthrush.

A lull in banding allowed the team to investigate Fish Point briefly for additional species. They could observe Swamp Sparrows scurrying among the fallen branches at the tip, and a couple of Greater-black Backed Gulls resting on the exposed sand bar. After banding, the team made a last-minute dash to the Red Cedar Trail nearby to see if they could check off any species before the clock struck 12. Here, Rose-breasted Grosbeak and a bold American Redstart were added to the list. The final, 101st bird was a Magnolia Warbler that had magically dropped into view seconds before the clock struck noon.

Considering the weather setbacks, PIBO's 24 hours of birding were highly successful. Some other notable finds were a Golden-winged Warbler and Yellow-throated Vireo that Sumiko Onishi had spotted in the early afternoon of May 8th on the Red Cedar Trail.

TABLE – SPECIES RECORDED ON BOTHAM CUP BY PIBO TEAM

1. Canada Goose	51. Brown Creeper
2. Wood Duck	52. House Wren
3. Blue-winged Teal	53. Sedge Wren
4. Mallard	54. Carolina Wren
5. Bufflehead	55. European Starling
6. Wild Turkey	56. Gray Catbird
7. Mourning Dove	57. Brown Thrasher
8. Ruby-throated Hummingbird	58. Eastern Bluebird
9. Sora	59. Veery
10. Killdeer	60. Hermit Thrush
11. Least Sandpiper	61. Wood Thrush
12. American Woodcock	62. American Robin
13. Wilson's Snipe	63. Cedar Waxwing
14. Spotted Sandpiper	64. House Sparrow
15. Solitary Sandpiper	65. House Finch
16. Greater Yellowlegs	66. Purple Finch
17. Lesser Yellowlegs	67. American Goldfinch
18. Bonaparte's Gull	68. Chipping Sparrow
19. Herring Gull	69. Field Sparrow
20. Ring-billed Gull	70. White-crowned Sparrow
21. Great black-backed Gull	71. White-throated Sparrow
22. Double-crested Cormorant	72. Savannah Sparrow
23. Great Blue Heron	73. Song Sparrow
24. Great Egret	74. Swamp Sparrow
25. Green Heron	75. Eastern Towhee
26. Turkey Vulture	76. Eastern Meadowlark
27. Bald Eagle	77. Baltimore Oriole
28. Red-tailed Hawk	78. Red-winged Blackbird
29. Belted Kingfisher	79. Brown-headed Cowbird
30. Red-headed Woodpecker	80. Rusty Blackbird
31. Red-bellied Woodpecker	81. Common Grackle
32. Downy Woodpecker	82. Ovenbird
33. Northern Flicker	83. Northern Waterthrush
34. Great Crested Flycatcher	84. Blue-winged Warbler
35. Eastern Kingbird	85. Black-and-white Warbler
36. Blue-headed Vireo	86. Tennessee Warbler
37. Warbling Vireo	87. Nashville Warbler
38. Blue Jay	88. Common Yellowthroat
39. American Crow	89. American Redstart
40. Black-capped Chickadee	90. Northern Parula
41. Horned Lark	91. Magnolia Warbler
42. Northern Rough-winged Swallow	92. Blackburnian Warbler
43. Purple Martin	93. Yellow Warbler
44. Tree Swallow	94. Chestnut-sided Warbler
45. Bank Swallow	95. Black-throated Blue Warbler
46. Barn Swallow	96. Palm Warbler
47. Cliff Swallow	97. Pine Warbler
48. Ruby-crowned Kinglet	98. Yellow-rumped Warbler
49. Red-breasted Nuthatch	99. Black-throated Green Warbler
50. White-breasted Nuthatch	100. Northern Cardinal
	101. Rose-breasted Grosbeak



*Pine Warbler at Fish Point
Photo by Gabriel Evens-Cook*



*Red-breasted Nuthatch at Fish Point
Photo by Alessandra Wilcox*



*Baltimore Oriole indulging in fresh
oranges at the PIBO staff cottage.*

Photo by Gabriel Evans-Cook

Great Canadian Birdathon 2021 (written by Sumiko Onishi)

On September 19th, 2021, I started my Great Canadian Birdathon (<https://www.birdscanada.org/birdathon2021/>) to support Birds Canada while the fall migration monitoring just passed the busiest first week of the month. The wind had been north overnight the day before, so chilly autumn-like air temperature was expected. However, the morning temperature was already 19C and reached 27C by the afternoon with the wind from the southeast. I started my count along with the census and observation during the netting at Fish Point. The census and the netting area were quiet for the morning, except a group of Nashville and Tennessee Warblers came through occasionally, and stable flies were terrible! I didn't count any species we captured in the nets, which the rule is usually set by myself for the birdathon. Because the wind got stronger, it bothered me to find birds from hearing them. I counted mainly in the area nearby the water since it became dry after the last rain more than a week ago. I recorded 88 species, including some shorebirds (Greater Yellowlegs, Spotted Sandpiper, Ruddy Turnstone, Sanderling, Common Snipe), 18 warbler species (many Tennessee, Nashville, Cape May, Yellow-rumped, Black-throated Green, Western Palm, Blackpoll). No exciting highlight species was found for the day, but the view I looked down from the bank at the NCC's big marsh on Henderson's Rd refreshed my thirst after the busy day. A Northern Harrier gliding above the green reed fluttering by in the breeze. For next year, I might do this birdathon in October to see some more sparrows.



Common Snipe
Photo by Sumiko Onishi

TABLE - SPECIES RECORDED ON GREAT CANADIAN BIRDATHON 2021 (September 18th-19th)

1. Pied-billed Grebe	31. Downy Woodpecker	61. Nashville Warbler
2. American White Pelican	32. Yellow-shafted Flicker	62. Chestnut-sided Warbler
3. Double-crested Cormorant	33. Eastern Wood-pewee	63. Magnolia Warbler
4. Great Blue Heron	34. Least Flycatcher	64. Cape May Warbler
5. Green Heron	35. Eastern Phoebe	65. Black-throated Blue Warbler
6. Turkey Vulture	36. Red-eyed Vireo	66. Blackburnian Warbler
7. Canada Goose	37. Philadelphia Vireo	67. Yellow-rumped Warbler
8. Wood Duck	38. Blue Jay	68. Black-throated Green Warbler
9. Mallard	39. American Crow	69. Western Palm Warbler
10. Bald Eagle	40. Horned Lark	70. Bay-breasted Warbler
11. Northern Harrier	41. Barn Swallow	71. Blackpoll Warbler
12. Sharp-shinned Hawk	42. Black-capped Chickadee	72. Black-and-white Warbler
13. American Kestrel	43. Red-breasted Nuthatch	73. American Redstart
14. Merlin	44. White-breasted Nuthatch	74. Prothonotary Warbler
15. Peregrine Falcon	45. Brown Creeper	75. Ovenbird
16. Wild Turkey	46. Carolina Wren	76. Northern Waterthrush
17. Killdeer	47. House Wren	77. Common Yellowthroat
18. Greater Yellowlegs	48. Winter Wren	78. Northern Cardinal
19. Spotted Sandpiper	49. Ruby-crowned Kinglet	79. Rose-breasted Grosbeak
20. Ruddy Turnstone	50. American Robin	80. Indigo Bunting
21. Sanderling	51. Wood Thrush	81. White-throated Sparrow
22. Common Snipe	52. Veery	82. Lincoln's Sparrow
23. Ring-billed Gull	53. Swainson's Thrush	83. Swamp Sparrow
24. Herring Gull	54. Gray-cheeked Thrush	84. Brown-headed Cowbird
25. Great Black-backed Gull	55. Gray Catbird	85. Red-winged Blackbird
26. Mourning Dove	56. Brown Thrasher	86. Common Grackle
27. Great Horned Owl	57. European Starling	87. House Finch
28. Belted Kingfisher	58. Cedar Waxwing	88. American Goldfinch
29. Red-headed Woodpecker	59. Northern Parula	Total: 88 species
30. Red-bellied Woodpecker	60. Tennessee Warbler	

2021 Christmas Bird Count (CBC) - Lake Erie Islands Region, December 19th

The Christmas Bird Count, recording all the birds seen and heard on Pelee Island over a twenty-four-hour period, was scheduled to take place on December 19th, 2021. According to Birds Canada, it is the longest-running citizen science survey since the 1900s and has involved thousands of citizens and birders each season. On Pelee Island, the count was led by PIBO, a knowledgeable island birder Rob Tymstra and his birding friend from Sarnia, Paul Carter, and conducted jointly with the other Lake Erie Islands (Kelley's and Bass islands). Since COVID-19 had been spreading, the regional governments requested the cancellation of the count last winter, unfortunately.

It was enjoyable to do this count this year, although we missed some joyful parts of the count, like birdwatching as a group and the before and after gathering with participants. On December 19th, the sky was gloomy, and the temperature was minus 1C to 1C with a north wind of 10km/hr. Eleven participants drove around 74km for 15 hours and walked 35km for 10 hours from the south shore to the north shore, including the lakeshore, the farm field, the marsh, and bird feeders at home, during the bird count. As a result, 9,228 birds of 55 species were recorded.

There were a noticeable number of waterfowls, including thousands of scaups, hundreds of Red-breasted Mergansers, Buffleheads, Common Goldeneyes and Mallards along the shore and the big marsh maintained by Nature Conservancy of Canada (NCC). Especially, the NCC's marsh seemed to attract other ducks (Anas) like American Black Ducks, Gadwalls, Northern Pintails, and Green-winged Teals, along with a big group of Mallards. On the other hand, the Fox Pond at Fish Point Provincial Nature Reserve had been quiet for those ducks this season on the census before we wrapped up our fieldwork season.

Another exciting sighting from other islands was hundreds of American Crows and Robins on Kelley's Island, which contrasted with our count - no crows and robins were recorded. Of course, those numbers fluctuate yearly under different weather conditions and depending on where their food sources and the open water were. Once all the results from the whole region are studied, it will show how the current winter weather condition affected these birds' movement. PIBO wishes to thank all the volunteers who participated in the 2021 Christmas Bird Count and hope we all get together again to chat about our sighting for the next season.



Christmas Bird Count on December 19th 2021
Photo-by Sumiko Onishi

TABLE - SPECIES RECORDED ON DECEMBER 19th 2021 FOR THE CHRISTMAS BIRD COUNT ON PELEE ISLAND

Species	2021	2020	2019	2018	2017	2016	2015	2014	2013
Common Loon									1
Horned Grebe	19	5	3		1		1	1	
Pied-billed Grebe					1		1		
Double-crested Cormorant	1			1			3		
Great Blue Heron					2			1	
Mute Swan	4	3							
Trumpeter Swan	2					1			
Tundra Swan		2	2		10	144	3	2	4
Canada Goose	120	450	65		502	844	293	135	271
Wood Duck			1						
Mallard	550	35	5	2	9	24	119	48	3
American Black Duck	8		1			2	3		
Gadwall	144	94	2				70	40	
Northern Pintail	1								
Am. Green-winged Teal	5								
Ring-necked Duck	4								
Greater Scaup	503		4		13	5		12	5
Lesser Scaup	3				8	22			
Long-tailed Duck								1	
Black Scoter								4	
White-winged Scoter						2			
Common Goldeneye	132	30	166	58	319	447	13	143	436
Bufflehead	310	71	194	146	259	408	104	266	205
Hooded Merganser	1								
Common Merganser					10	2			33
Red-breasted Merganser	657	389	205	23	890	19	166	554	935
Ruddy Duck						1			
Turkey Vulture			1						
Northern Harrier					1	13		1	1
Sharp-shinned Hawk		1						1	
Cooper's Hawk	3	5	2	1	2	2	3	3	1
Red-shouldered Hawk						1	1		
Red-tailed Hawk	8	2	4	3	11	9	8	7	4
Rough-legged Hawk					2	1	1		
Bald Eagle	10	10	6	6	13	10	5	16	7
American Kestrel			1						
Peregrine Falcon						1			
Ring-necked Pheasant	4		3	3	22	30	1	10	5
Wild Turkey	240	620	50	50	303	158	119	3	4
American Coot		35							
Sandhill Crane			12			83			23
Killdeer						2	4		
Bonaparte's Gull			3		8		73	5	4
Ring-billed Gull	70	60	20		60	9	21	80	11
Herring Gull	41	51	46		76	14	57	101	26
Great Black-backed Gull	1	7			5	4		10	1
Common Tern		3							
Mourning Dove	135	40	36	3	8	24			10
Great Horned Owl	7	2	8		3			2	
Snowy Owl					1			1	
Northern Saw-whet Owl	1								
Eastern Screech-Owl	2				3	1			
Belted Kingfisher		1							
Red-bellied Woodpecker	14	14	3	2	20	28	8	21	6
Yellow-bellied Sapsucker	3				2	2			2
Downy Woodpecker	47	32	8	9	44	43	27	49	20
Northern Flicker	41	12	3		35	10	18	32	10
Eastern Phoebe	1				2				
Northern Shrike					1				
Blue Jay	45	35	6	41	49	24	28	33	23
American Crow					2	49		4	
Horned Lark	2	14	10		23	59	1	1	72
Black-capped Chickadee	32	87	12	28	89	50	29	102	65
Red-breasted Nuthatch			2	8		1			
White-breasted Nuthatch	15	14	11	6	10	14	1	11	1
Brown Creeper	5		1		1	12	12	21	10
Carolina Wren	14	22	10		18	16	2	12	6
Winter Wren	2		2		1	1	3		
Golden-crowned Kinglet			8	6		13	1	7	5
Ruby-crowned Kinglet				1					
Eastern Bluebird	21	11	7	7	14		32		
American Robin	1	6	4	25	12	27	111	26	12
Hermit Thrush						6	1		
European Starling	42	254	97		1043	814	996	3417	1268
American Pipit						40			
Cedar Waxwing	9	25	15		77		6		
Yellow-rumped Warbler					3	7	2	7	12
Western Palm Warbler					1				
Common Yellowthroat								1	
Northern Cardinal	29	19	21	15	102	103	15	64	17
Eastern Towhee						2			1
American Tree Sparrow	76	6	15	18	140	142	19	7	17
Field Sparrow			2					2	
White-throated Sparrow	42	5	20		34	20	18	26	31
Eastern White-crowned Sparrow	1	1							
Song Sparrow	3	2	10		8	9	1		
Swamp Sparrow	1				1				
Dark-eyed Junco	102	33	12		103	118	2	17	51
Lapland Longspur						1			1
Snow Bunting					5	98			3
Brown-headed Cowbird		1	15		52	192	2		34
Red-winged Blackbird			2		2	44	4		10
Rusty Blackbird					1			3	
Common Grackle		15			9	30			4
House Finch	40	32	66	1	9	14	2	29	12
American Goldfinch	28	3	8		16	35	15	1	11
Pine Siskin								8	
House Sparrow	54	63	187		165	97	12	66	147
Swan Species	1								
Duck species	130								
Scaup species	5400	2350							
Hawk species	1								
Gull species	40								
Total	9228	4972	1396	470	5054	6231	1077	1468	4600
Total Species	55	46	52	25	61	61	50	51	48

Note: Bold-faced type showed species which had not recorded for the past eight years.

Migratory monarch butterfly and dragonfly count

During the 90-minute census count, the number of monarch butterflies and dragonflies is also recorded along the Fish Point Provincial Nature Reserve census route. This monarch count became one of PIBO's variable records as the longest consistent monarch butterfly counts on their migration in Essex County. The data (since 2003) is shared with researchers and the public on the NatureCounts (Birds Canada) website through the Trinational Monarch Knowledge Network. This extensive database shares the collected observation and counts of monarchs and milkweed across Canada, Mexico, and the United States - in which Birds Canada takes part.

[NatureCounts - Trinational Monarch Knowledge Network \(birdscanada.org\)](https://birdscanada.org)

In 2021, PIBO recorded a total of 421 monarchs during the census from August 5th to October 31st. The total number of observed monarchs was 1.5 times more than (increased from)the previous season. The noticeable peak occurred in the shorter period in the first half of September. Another slight rise was seen in mid-October, which differed from the evenly spread peak in the more extended period in 2020's count. We also observed some other butterfly species with warmer weather in the late fall.

As we introduced in our 2020 Annual Report, the number of monarchs counted at Point Pelee and Pelee Island showed nonsignificant change/decline over the last ten years in contrast to the significant decrease at Long Point (*Danielle M. Ethier at Birds Canada in 2020*). Among the population passing through north Lake Erie, the different migratory groups, flyways, stopover sites, and breeding ranges were considered the fluctuation factor, although further studies are needed.

According to the specialist, the different population trend was observed among the western and the eastern monarchs. The western monarch migrates in the range of the west side of the Rocky Mountains and roosts for the winter in California. Meanwhile, the eastern monarch migrates in the range of the east side of Rocky Mountain and roosts for the winter in Mexico. To move between the summer and winter ranges, the western monarch migrates a shorter distance but difference in elevation, while the eastern monarch migrates a long horizontal distance from Canada to Mexico. Those western and eastern monarchs are genetically the same, and the ecological difference was slight, but the morphology was different.

The decline of the winter population in Mexico and the summer population in North America is continuously observed. If learning about their migration pattern is critical to conserving their

population, we hope our continuous count of migratory monarchs and migratory birds will support the study to protect the eastern monarch population.

(Citation)

*Are eastern and western monarch butterflies distinct populations? A review of evidence for ecological, phenotypic, and genetic differentiation and implications for conservation
Micah G. Freedman, Jacobus C. de Roode, Matthew L. Forister, Marcus R. Kronforst, Amanda A. Pierce, Cheryl B. Schultz, Orley R. Taylor, Elizabeth E. Crone
First published: May 02nd 2021 <https://doi.org/10.1111/csp2.432>

We started unofficial dragonfly counts in 2017 with the routine monarch count during census - 90 minutes standardized bird count. The following table shows the number we recorded each morning in 2021. Two hundred twenty-five dragonflies, including Saddlebag, Green Darners, and Blue Darners, were recorded from August 05th to October 31st.

We only had the fifth annual count so far and learned about many species such as darners and saddlebags observed in the region. Like birds and monarchs, the dragonflies we are counting are migrants, which we knew. However, it is hard for us to imagine that they do quite a dynamic migration like monarchs. A study* about isotopes on the wing of green darter was published on December 19th, 2018 (*Biology Letter*). In the study, the specialist found a pattern of migration across the different generations from their wintering ground in the Gulf of Mexico to summer ground in Canada. It was fascinating to learn that they travel an average of 400 miles and can travel as far as 900 miles. We hope our data will also support the future study about dragonfly migration.



TABLE - MONARCH BUTTERFLIES RECORDED DURING CENSUS IN 2021

Date of Month	August	September	October
1	0	0	0
2	0	160	0
3	0	35	0
4	0	6	1
5	4	2	0
6	3	1	1
7	0	7	0
8	2	8	0
9	1	0	0
10	0	44	0
11	2	9	0
12	0	8	0
13	1	20	0
14	0	3	0
15	6	3	0
16	0	3	0
17	4	1	30
18	1	1	3
19	3	1	3
20	7	1	0
21	2	0	0
22	1	0	0
23	1	0	0
24	0	1	0
25	2	0	0
26	4	6	1
27	1	0	0
28	0	5	0
29	7	1	0
30	1	2	0
31	1	0	0
Sub total	54	328	39
Total	421 Monarch were recorded		

TABLE - DRAGONFLIES RECORDED DURING CENSUS IN 2021

Date of Month	August	September	October
1	0	3	0
2	0	5	0
3	0	3	0
4	0	0	0
5	3	1	0
6	1	1	2
7	0	0	2
8	0	0	1
9	4	0	0
10	0	10	5
11	5	12	0
12	0	1	0
13	6	2	3
14	3	0	0
15	75	0	0
16	0	2	0
17	12	1	8
18	3	3	6
19	2	2	8
20	4	0	0
21	1	0	0
22	1	0	0
23	5	0	0
24	3	0	0
25	1	0	0
26	3	0	0
27	1	0	1
28	0	0	0
29	2	0	0
30	2	1	0
31	5	0	0
Sub total	142	47	36
Total	225 dragonflies were recorded		

Introduction of 2021 field assistants and student volunteers

Alessandra Wilcox assisted with all aspects of spring and summer fieldwork as the Assistant Field Biologist. She has been an avid bird bander since 2014 and was delighted to join the PIBO team for her first paid field position. She is going into her fourth year of Wildlife Biology and Conservation at the University of Guelph. She plans to draw from her experience at PIBO to continue studying bird conservation and environmental education while applying her developed skills and knowledge to future research endeavours.

Chloë Chang helped with the banding operations at PIBO as a volunteer from May 9th to May 15th. She is entering her second year of Wildlife Biology and Conservation at the University of Guelph. As an avid birder and quick learner, she was an excellent addition to the team; although it was her first time banding birds, she excelled in all aspects. During her time with PIBO, she processed 15 birds and invested 16 hours into migration monitoring.

Gabriel Evans-Cook is an exceptional wildlife enthusiast and artist who stayed with PIBO from April 29th to June 22nd. As a volunteer, he diligently supported work at PIBO by helping with bird banding, Purple Martin nest box monitoring, species at risk monitoring, marsh bird monitoring, and general observation for the Ontario Breeding Bird Atlas. During his stay with PIBO, he processed 87 birds and invested 88 hours into migration monitoring and additional breeding bird monitoring programs. Gabriel is a phenomenal photographer; his photos helped give life to the 2021 annual report and spring newsletters.

Hannah Mittelstaedt volunteered during the spring migration and was hired as an assistant bander for the 2021 fall migration. She is a photographer by trade and has taken many shots of the birds at the banding station. She said it is quite dramatic to see them up close. She has been a long-time visitor to Pelee Island since her family has been coming to the island since she was born. She is drawn by the incredible and rare Carolinian forest habitat that is a magnet for so much wildlife. She started volunteering several years ago after visiting the banding station for many years since she was a child. Now she learned how to handle the birds, take them gently from the net and band them. She enjoys the experience of working at the banding station, getting more comfortable handling the birds, and taking lots of photos. She thinks it's a joy to be on Pelee Island, one of Canada's little-known natural gems, and to be surrounded by nature every day.







Section 2: Education and Outreach

Bird Friendly Windsor:

With a successful Ontario Trillium Foundation application, PIBO hired a Bird-Friendly City Education Coordinator for 2021. Jennifer Nantais worked diligently throughout the year on many education and outreach events. Keira McManus assisted her, our summer student hired through the Canada Summer Jobs Program. Together they accomplished the following in 2021:

Held a *Creating pollinator and Bird Habitat in your Backyard* talk via Facebook live on July 13. Created a *How to Reduce Light Pollution from your Home* video posted on Instagram and uploaded to YouTube on July 8. Created a *How to Assess the Windows in your Home for Window Collision Prevention Retrofits* video for Instagram and uploaded to YouTube on July 2. We worked with volunteers to create a Windsor landscaper survey on bird friendly gardening. We created a *How to use Paint Markers to make your Windows Bird Safe* video for Instagram and uploaded to YouTube on June 25. We held a virtual art exhibit for kids and adults on June 18.

We created a *How to apply FeatherFriendly tape to your Windows* video for Instagram and uploaded it to YouTube on June 16. As part of our virtual gala, our guest birder, David Lindo aka The Urban Birder recorded a short talk on *Urban Birding*, now on PIBO's YouTube channel.

PIBO held two Winter Birding Walks at Ojibway Nature Centre in late 2021

Winter Birding

Sunday, November 28th

Learn to identify and understand the birds that spend the winter here in Essex County.

During this hike we will practice using:
Merlin Bird ID
eBird
iNaturalist
and more!

Free Event!
Ojibway Nature Centre
9:00am
Pre-register

Bring your binoculars,
cell phone or camera,
and dress for the
weather!

For questions contact:
education@pibo.ca



ESSEX COUNTY NATURE
Essex County Field Naturalists' Club



A Bird Safe Window Contest for the fall season. The winning entry was from Annie Xia Li. Prize was a bag of Atwood Blend bird friendly coffee from Balzac's coffee roasters.



Small changes can have a large impact

Bird Safe Window Contest

SAVE BIRD LIVES - WIN A PRIZE!

How To Enter:

- Find or create a bird safe window
- Can include commercially available products or DIY methods
- Snap a picture

Share your photo to:

education@pibo.ca
 #GlobalBirdRescue
 #BirdSafeWindows
 #peleebird
 @PeleelIslandBirdObservatory

Window collisions are one of the leading causes of urban bird deaths
 Humans altered their habitat
 Birds adapted, but still face many threats in cities and towns
 Window collisions can be prevented

Contest closes on World Migratory Bird Day - October 9th

Find out how to make your windows safe:
globalbirdrescue.org

A fall bird photo contest.

Fall Photo Contest

Leaves are changing, temperatures are falling, and birds are on the move!
Let's show the world how much we love birds in Essex County!



Submit your photos to: education@pibo.ca

Category: Adult Fall Scenery

Show us your bird photos that incorporate beautiful fall scenery.



Category: Kids Nocturnal or Creepy

Owls, Crows and Vultures...oh my! Snap a photo of a bird that you think seems mysterious or interesting in a fun, "creepy" way.



Category: Adult Fall Plumage

Capture birds sporting their best fall looks.

Category: Kids Black and Orange

Snap a photo of a bird with black, yellow or orange feathers!



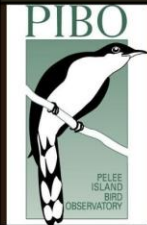
Category: Adult Seasonal

Migrants passing through; overwintering birds feeding, stashing or otherwise preparing for colder weather; send an image that you think captures birds in fall and tell us your story.



Category: Kids Birds and Seasonal Decor

Spy a bird perched on a pumpkin, hanging out on a hay bale, or feeding with frightful ghosts and ghouls? Send a photo!



pibo.ca
[#peleebird](https://twitter.com/PeleelIslandBird)
[@PeleelIslandBird](https://twitter.com/PeleelIslandBird)
[@birdteamwindsor](https://twitter.com/birdteamwindsor)

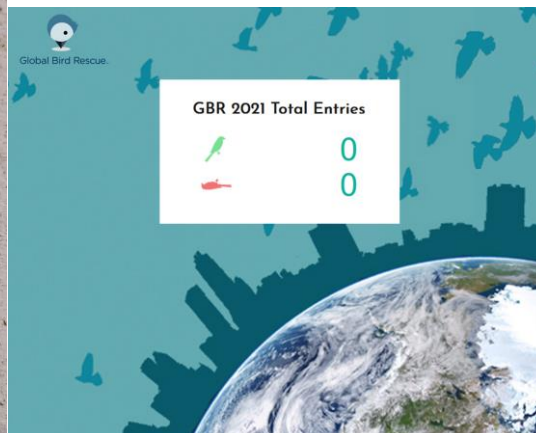
Contest closes October 31st, 2021

Chosen photos will be posted at pibo.ca and on the Bird Friendly Windsor facebook page





We participated in the Global Bird Rescue from September 27-October 3 in which we logged data into the Global Bird Collision Mapper on birds that had fatally struck windows. This Common yellowthroat was one of the fatalites from our walks in downtown Windsor.



We held a Bird Friendly Cities panel discussion August 31 via Zoom where four panellists discussed their experiences in obtaining Bird Friendly City Status moderated by Ian Davidson of BirdLife International. The talk now is on the PIBO YouTube channel.



PANEL DISCUSSION

AUGUST 31 ST

FREE EVENT

SARA JORDAN-MCLACHLAN

GUEST (CALGARY BIRD TEAM)

ANDRÉS JIMÉNEZ MONGE

GUEST (BIRDS CANADA)

JENNIFER NANTAIS

GUEST (WINDSOR BIRD TEAM)

BRENDON SAMUELS

GUEST (LONDON BIRD TEAM)

IAN DAVIDSON

MODERATOR (BIRDLIFE INTERNATIONAL)

SUZANNE FRIEMANN

HOST (PELEE ISLAND BIRD OBSERVATORY)

BIRD FRIENDLY WINDSOR

TO REGISTER CONTACT INFO@PIBO.CA

AUGUST 31

7PM EDT

VIA ZOOM

We presented a virtual talk on how to participate in the Global Bird Rescue to the Essex County Field Naturalists Club on September 8.

Help Save Birds



Join FLAP Canada, the Pelee Island Bird Observatory, conservation groups and volunteers around the world to rescue and document birds that have collided with buildings to help make the urban environment safer for them.

The Essex County Field Naturalists Club will be hosting a virtual meeting on September 8th at 7:30pm to raise awareness about the GBR, recruit volunteers to search for bird collisions in their communities and demonstrate how to record your observations in the Global Bird Collision Mapper and iNaturalist.

To learn more, visit:
essexcountynature.com
pibo.ca

 @birdteamwindsor
 @essexcounty
globalbirdrescue.org



We held a Bird Safe window contest for the spring. The winning entry was from Hannah Ezwawi. Hannah received a gift bag with bird related things.



We hosted an Owl Prowl on October 28th and 29th at the Ojibway Nature Centre.

OWL PROWL

THURSDAY, NOVEMBER 4TH

7:00-8:30PM
OJIBWAY NATURE CENTRE
FREE EVENT!

WWW.EVENTBRITE.CA/E/OWL-PROWL-TICKETS-196161974747

JOIN BIRD LOVERS THIS OWLOWEEN TO
SEARCH FOR NOCTURNAL OWLS AND OTHER
CREATURES OF THE NIGHT!

YOUR GUIDE WILL TALK ABOUT
LOCAL OWLS, FOLLOWED BY AN
EVENING HIKE THROUGH THE FORE

PRE-REGISTRATION
REQUIRED

SOLD OUT!



IT'S GONNA BE A
HOOT!

RESCHEDULED



ESSEX COUNTY NATURE
Essex County Field Naturalists' Club

FOR QUESTIONS
CONTACT
EDUCATION@PIBO.CA

A spring photo contest.

CHECK OUT THESE UPCOMING ACTIVITIES



Photo Contest

Submit your bird photos along with your name, age (for youth and elementary entries) and location where the photo was taken. Winning photos will be featured on our website and social media.

Contest runs until May 29th

- Category: Adult
- Category: Youth (11-17yrs.)
- Category: Elementary (up to age 10)

Send photos to education@pibo.ca



Virtual Art Exhibit

Celebrate and recreate the beauty of birds using pencil, ink, crayons, cut-outs, clay...the options are as varied as the birds that are flocking back to Essex County this spring! Please provide name and age along with entry to be shared on our website and social media.

Contest runs until May 29th



CHECK OUT THESE UPCOMING EVENTS



© Sara Wolman - World Migratory Bird Day

MAY 8TH WORLD MIGRATORY BIRD DAY 2021

Sing, Fly, Soar – Like a Bird!

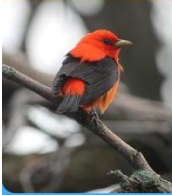
Fun For All Ages!

Virtual Scavenger Hunt

8:00am-8:00pm

Free, fun, educational, and perfect for bird lovers of all ages! To play, grab your phone, follow the directions below and head outside. The first team to complete their mission will win a prize!

- Download the GooseChase App from Google Play or the iTunes Store.
- Open the App and select the "Play as Guest" option.
- Enter the game code 97Z9P8 and click "Submit".
- Choose "Select Team & Join Game".
- Select one of the 3 available teams and you're ready to play!
- Be the first team to complete all 25 missions!



Art Exhibit

Celebrate and recreate the beauty of birds using pencil, ink, crayons, cut-outs, clay...the options are as varied as the birds that are flocking back to Essex County this spring! Please provide name and age along with entry to be shared on our website and social media.

Contest runs until May 29th

Online Gala

Second annual PIBO/ Springsong virtual Gala to benefit Pelee Island Bird Observatory & Pelee Island Heritage Centre featuring a fun-filled evening of birds, books and special surprise guests!

7:00-8:30 Tickets \$85
Door Prizes, Auction Items

Visit pibo.ca for tickets

Photo Contest

Submit your bird photos along with your name, age (for youth and elementary entries) and location where the photo was taken. Winning photos will be featured on our website and social media.

Contest runs until May 29th

- Category: Adult
- Category: Youth (11-17yrs.)
- Category: Elementary (up to age 10)

Send photos to education@pibo.ca



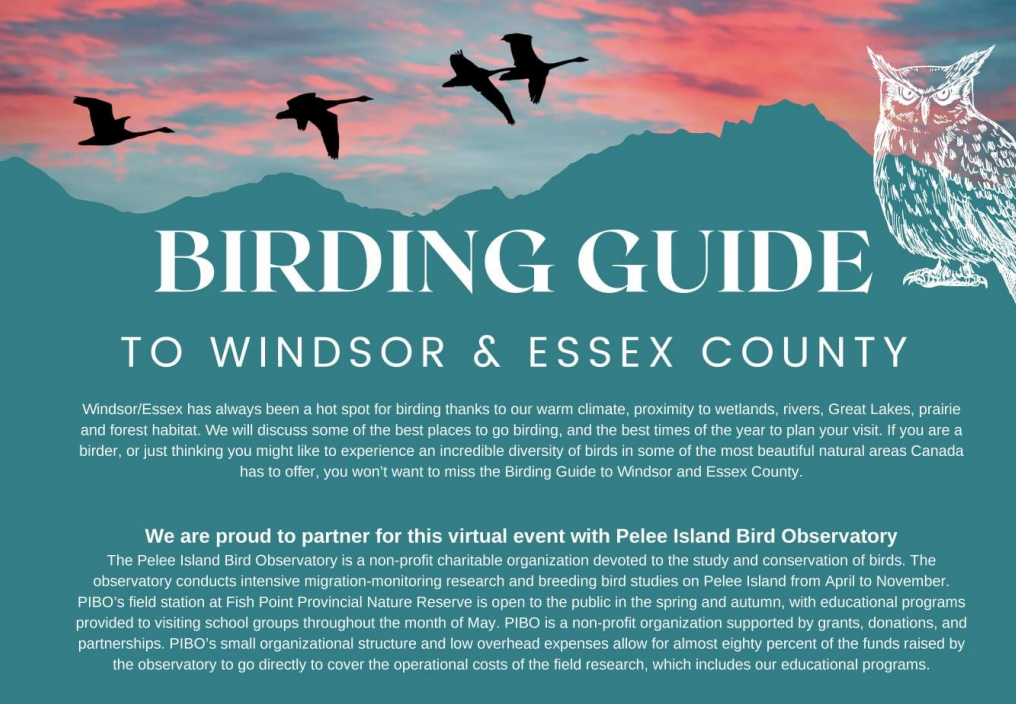
PIBO



PELEE
ISLAND
BIRD
OBSERVATORY

We hosted a World Migratory Bird Day online event with a virtual scavenger hunt, photo contest, art exhibit and online gala.

We did a presentation for The Rotary Club on the birding guide to Windsor and Essex County on April 21 for Earth Day.




BIRDING GUIDE

TO WINDSOR & ESSEX COUNTY

Windsor/Essex has always been a hot spot for birding thanks to our warm climate, proximity to wetlands, rivers, Great Lakes, prairie and forest habitat. We will discuss some of the best places to go birding, and the best times of the year to plan your visit. If you are a birder, or just thinking you might like to experience an incredible diversity of birds in some of the most beautiful natural areas Canada has to offer, you won't want to miss the Birding Guide to Windsor and Essex County.

We are proud to partner for this virtual event with Pelee Island Bird Observatory

The Pelee Island Bird Observatory is a non-profit charitable organization devoted to the study and conservation of birds. The observatory conducts intensive migration-monitoring research and breeding bird studies on Pelee Island from April to November. PIBO's field station at Fish Point Provincial Nature Reserve is open to the public in the spring and autumn, with educational programs provided to visiting school groups throughout the month of May. PIBO is a non-profit organization supported by grants, donations, and partnerships. PIBO's small organizational structure and low overhead expenses allow for almost eighty percent of the funds raised by the observatory to go directly to cover the operational costs of the field research, which includes our educational programs.




Guest Speaker
Jennifer Nantais, Urban Bird Educator
Pelee Island Bird Observatory


Jennifer's love of nature has enabled her to study, appreciate and share the incredible diversity of habitats and species that can be found in Windsor and Essex County. Through work with the City of Windsor, the Essex Region Conservation Authority and Pelee Island Bird Observatory, Jennifer has been able to share her knowledge and experience with students, residents, and visitors from around the world. Jennifer's goal is to inspire others to protect and preserve our native species and natural areas, and to work toward a sustainable future for humans and wildlife.

EARTH DAY
22 APRIL @ 7:00PM

[REGISTER ONLINE](#)

<https://bit.ly/3seGlcI>



Rotary  **Club of Windsor (1918)**

Additional media, outreach, and education

The observatory connected with thousands of additional viewers this year through the PIBO website and social media sites such as Facebook, Twitter and Instagram. Our Facebook site has drawn a very faithful group of followers who are attracted to the page by its focus on the daily happenings at the field station at Fish Point each spring and fall, accompanied by a wonderful selection of photos. Perhaps more than anything else, the observatory's Facebook page conveys what PIBO does and what PIBO is. Our Twitter site has maintained a steady following over the years, while PIBO's Instagram page is continually growing with over 1100 followers so far. Additionally, bi-monthly updates of migration activity on the island were sent out to members and posted on social media in the spring and autumn. Lastly, regular newsletters were emailed to members on a monthly basis. The newsletter is another effective way to keep PIBO's friends and supporters up-to-date with the latest bird news from the island, along with recent developments at the observatory.

PIBO was featured several times in the media in 2021.

PIBO in the news Nov 9th [CBC https://www.cbc.ca/news/canada/windsor/bird-fall-banding-1.6241332](https://www.cbc.ca/news/canada/windsor/bird-fall-banding-1.6241332)

Windsor

Nets 'filled with birds' this fall surprise Pelee Island field bander after quiet spring season



"This is maybe the first time I saw such a big difference between spring and fall:" Pelee field supervisor

Jennifer La Grassa - CBC News - Posted: Nov 09, 2021 4:00 AM ET | Last Updated: November 9, 2021



The golden crowned kinglet (left) and ruby crowned kinglet (right) were some of the birds banded during this year's fall migration season. The Pelee Island Bird Observatory saw an increase in warblers this time around. (Submitted by Sumiko Onishi)

PIBO in the news June 29th <https://www.cbc.ca/news/canada/windsor/pelee-island-birds-migration-1.6082243>

Windsor - Video

Pelee Island's bird banding season sees unusual dip, but expert says no need to 'raise alarms' yet



'It shocked me a little bit,' says bird bander of this year's banding numbers

Jennifer La Grassa - CBC News - Posted: Jun 29, 2021 6:14 AM ET | Last Updated: June 29, 2021



Alessandra Wilcox, 20, is a fourth year University of Guelph wildlife biology and conservation student. Nearly every weekend for the last six years she's volunteered to band birds. This year, she landed her first job in the field on Pelee Island. (Submitted by Hannah Mittelstaedt)

PIBO in the news Feb 10th <https://windsorstar.com/news/local-news/local-group-aims-to-make-windsor-a-bird-friendly-city?fbclid=IwAR0SWdwnyOXWJrsWTiMdoPnhBpnlWoszz0EgWaL-zjNzLs6NVIVE6dCOwg0>

WINDSOR STAR

Local News



Local group aims to make Windsor a bird-friendly city



Mary Caton

Feb 10, 2021 • February 10, 2021 • 2 minute read • [Join the conversation](#)



PIBO was featured in the March/April 2021 issue of CWF magazine *Coming Home: Canada's migratory birds and the many challenges they face.*

Section 3: Grants, Fundraisers, Acknowledgements

The second online fundraiser for PIBO was held on May 8th streamed via YouTube. *Margaret Atwood Presents* - featured special guests Louise Penny and David Lindo and artists including Trevor Strong, Karen Kain, Joshua Hopkins, Molly Johnson and others. This event benefitted PIBO in numerous ways, thanks to the generosity of everyone who organized and supported it. The restrictions of COVID-19 brought many people from around the world together for the evening. In addition to the online gala, PIBO hosted a very successful online auction on our website with over 90 items.

MAY 8, 2021
7-8:30 PM (EST)

**SECOND ANNUAL
PIBO/SPRINGSONG
VIRTUAL GALA**
TO BENEFIT PELEE ISLAND BIRD
OBSERVATORY & PELEE ISLAND
HERITAGE CENTRE

JOIN MARGARET ATWOOD
AUTHOR LOUISE PENNY &
URBAN BIRDER DAVID LINDO
FOR A FUN-FILLED EVENING
WITH BIRDS, BOOKS AND SPECIAL
SURPRISE GUESTS!

TICKETS \$85
DOOR PRIZES
FABULOUS AUCTION ITEMS
ART, BIRD TOURS, A WEEK IN A CASTLE
FAMOUS RUBBER CHICKEN CHOIR

CONTACT: INFO@PIBO.CA
PELEEISLANDHC@GMAIL.COM

PIBO
PELEE ISLAND BIRD
OBSERVATORY

**PI HERITAGE
PELEE ISLAND
CENTRE**

Other fundraisers:

PIBO cookbook- A Birdwatcher's Banquet: Recipes from Birders and Worders

Giving Tuesday Campaign

The Art of Nature Birds calendars to benefit PIBO

Great Canadian Giving Challenge

The Great Canadian Birdathon

Grants:

A grant from The Donner Canadian Foundation.



A grant from The Ontario Trillium Foundation Resilient Communities Fund.



An agency of the Government of Ontario
Un organisme du gouvernement de l'Ontario

A grant from the WindsorEssex Community Foundation for a BIPOC Youth and Urban Wildlife Project.



A grant from the TD Friends of the Environment for the Backpacks for Birding project.



**TD Friends of the
Environment Foundation**

A grant from Employment and Social Development Canada (Canada Summer Jobs) to hire a summer student

Foundations and Grantors:

Chandisherry Foundation

Clench House Foundation

The Donner Canadian Foundation

Mclean Smits Family Foundation

Pamela Dillion and Family Gift Fund

The Murray Frum Foundation

Data usage:

PIBO's long-term migration monitoring data has been submitted by the Canadian Migration Monitoring Network and the Canadian Bird Banding Office at the end of each season for analysis as part of a nation-wide effort to track changes in the populations of native songbirds. The submitted data set and the analysis are presented in the website 'Nature Count' (naturecounts.ca) managed by Birds Canada with a view of understanding the patterns and dynamics of bird populations across the Western Hemisphere. Additionally, PIBO's Species at Risk records are sent each year to the Natural Heritage Information Centre (OMNR) and added to the province's historical database and used currently by species recovery teams.

PIBO's substantial database of 19 years, accumulated millions of standardized sightings of more than 300 species. The full biometric (species, age, sex, wing-length, mass) of more than 60,000 birds banded at Fish Point since 2003. The information collected by PIBO's many dedicated seasonal staff and volunteers is being used by several organizations and individuals including government ministries (Environment and Climate Change Canada & the Ontario Ministry of Natural Resources and Forestry), public and private institutions (the Nature Conservancy of Canada & Nature Canada). The website 'Nature Counts' data set are available to the general public including universities, graduate & undergraduate students, at naturecounts.ca.

An ongoing co-research project of Environment and Climate Change Canada and CMMN identifies the breeding and the migration range of Blackpoll Warbler whose population has declined significantly since the 1970s. Blackpoll Warbler | Partners in Flight PIBO's banding data including age, sex and wing chord contributed to the research project.

Although it is an exceedingly small portion of the data, one significant contribution from our database provides information for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to assess the avian species at risk of extinction.

There were seven data requests in 2021 through Nature Counts.

Acknowledgements:

The Pelee Island Bird Observatory depends on the generous support of the many organizations and individuals who all contributed to the success of PIBO's operations in 2021. This help comes in many forms ranging from grants from major charitable foundations and government and donations from the public, sewing bird bags, and organizing events. PIBO is grateful for the collective effort of so many people, their show of support for the work we do, and the vote of confidence it provides us.

We would also like to thank all the many folks who made our second online gala a great success! From the hosts, guest artists (Louise Penny, David Lindo, Molly Johnson, Joshua Hopkins, Karen Kain, Lemara Reiyia, Trevor strong of the Arrogant Worms) the design and technical support teams, the generous people who donated items for the silent auction and the door prizes, and the recipe contributors to those who purchased tickets and participated in the silent auction. So many people made this event a great night that we could not list all the names.

Finally, thank you everyone who donated, volunteered, shared our posts and newsletters, liked our pages and followed us throughout the year. It has been a tough year, but we made it because of you.

Our Partners:

Birds Canada
Canadian Migration Monitoring Network
Nature Canada
Nature Conservancy Canada
Ontario Bird Banding Association
Essex County Field Naturalists' Club
Essex Region Conservation Authority
Ojibway Nature Centre

Point Pelee National Park
Avinet
Jack Miner Migratory Bird Foundation
Ontario Parks
Pelee Island Heritage Centre
Smithsonian Migratory Bird Centre
Chatham-Kent Tourism
Municipality of Leamington
Municipality of Pelee Island
Tourism Windsor Essex Pelee Island

Friends of PIBO:

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Louise Penny
MasterClass
McClelland & Stewart
Marshall Dane
John Degan

Lisa Kellett
Les Stroud
Karen Albu
Margaret Atwood
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Danny Catt
Alanna Cavanagh
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Tess Houstoun
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ECW Press
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Penguin Random House Canada
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University of Windsor

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Keri Levinsky
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Nancy Lockhart
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Patricia Toal
Richard Woodruff

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*Great Crested Flycatcher
Photo by Sumiko Onishi*

