Kelleys Island, Ohio Bird Banding – Avian Research Project Summary of 2022 Data H. Thomas Bartlett

Introduction:

2022 marks the 27th year of this bird banding/avian research project on Kelleys Island. This banding project began in the spring of 1996 in conjunction with the Kelleys Island Audubon Club's spring "Nest with the Birds" program. A monthly survey route was begun in November of 1997 and ended in 2018. All research activities have been sponsored and/or supported by the Kelleys Island Audubon Club, the Cleveland Museum of Natural History, Morse Farms Trust & Morse family, Kelleys Island Field Station, Huntington Bank, Pat and Lori Hayes, Lee and Sandy Tkach, Bill and June Campbell, Delores Cole (late), Fred & Betsy (late) Walcott, Kyle and Jeri Yoest, Jim and Barb Zeller, Camp Patmos & staff, Kathy Reddinger, Karen Hoy, and the Kelleys Island School (and School Board). Special thanks to the 2022 volunteers: Paula Bartlett, Leslie Brown, Erin Bartlett, Alexi Panehal, Chris Ashley, Patti Wainwright Haley, Kit Kilen, Sandy Teliak, Tyler McClain, Mariah Scherer, Shane & Laura Roberts, Ed Toll, Emily Beal, Steve Henthorne, Dr. Kelly Williams, Gabi Lindsey, Dave Sellers, Sarah Romer, and Tom & Jennifer Pieratt. As always, we thank Kevin Ertley of the Morse family for his meticulous efforts to maintain the Morse Farms property and make our job easier.

As far as public outreach, this had to be our best year ever with **2339** visitors to the banding stations. Programs like Kelleys Island Audubon Club's Nest with the Birds and Feathers and Foliage, Road Scholar programs, Kelleys Island Field Station programs, Cleveland Museum of Natural History programs and Western Reserve Land Conservancy programs were conducted with us. The November Owl Festival had over 360 people attendees at the various programs and banding activities

Since the Spring of 1996, 25,641 individuals of 122 species of birds have been banded on Kelleys Island. When we include recaptures, escapes/released birds, and casualties, we have handled 29,351 birds over the twenty-seven years. Overall, we have an average rate of 10.0 % recaptured birds, 2.4 % escaped/released birds, and a 0.38 %casualty rate over the twenty-seven years. The 2022 banding had no casualties.

The top ten species banded during 2022 were (49.1% of this year's birds banded):

1. Northern Saw-whet Owl	134	6.	Swainson's Thrush	86
Golden-crowned Kinglet	134	7.	Northern Cardinal	82
3. Hermit Thrush	117	8.	Purple Martin	72
4. Yellow-rumped (Myrtle) Warbler	100	9.	Yellow-bellied Flycatcher	66
5. Dark-eyed Junco	98	10.	White-throated Sparrow	61

The top ten species banded in the 27 years are (45.1% of all birds banded):

1. Golden-crowned Kinglet	2035	6.	Hermit Thrush	1097
2. Magnolia Warbler	1349	7.	Swainson's Thrush	966
3. Ruby-crowned Kinglet	1260	8.	Yellow-rumped (Myrtle) Warbler	937
4. Northern Saw-whet Owl	1206	9.	Dark-eyed Junco	818
5. American Goldfinch	1123	10.	Purple Martin	768

Banding Locations:

Passerine banding activities this year were conducted primarily on Long Point at the Jones Preserve owned by the Cleveland Museum of Natural History and Morse Farm land controlled by the Morse Farm Trust at the Huntington Bank. Additional banding was conducted at The Kelleys Island State Park manager's house/feeders, in the North Quarry of the Kelleys Island State Park (owl banding), at the North Pond State Nature Preserve (owl and passerine banding), Kyle & Jeri Yoest's martin colony, and at the Scheele Preserve owned by the Cleveland Museum of Natural History. In 2022, 82 species and 1,937 individual birds were banded in 62 days. We had 52 days of passerine (songbirds) banding and 41 nights of owl banding. Our numbers were much lower than the previous two years and weather seemed to be the major problem. We had above average number of days in the fall with southwesterly, southerly, and westerly winds which are not good winds for birds trying to migrate south across the lake. In the spring we did not band in April which also affected our numbers.

Passerine Banding

Spring banding began on May 16 and ended on May 27 at the Jones Preserve on Long Point resulting in eleven days of banding. The only summer banding was at the Yoest's Purple Martin colonies on July 5. We did not attempt to band other nest boxes this year. The fall passerine banding at the Jones Preserve began September 18 and ended November 10. Passerine banding was conducted on Long Point for 41 days (11 days in May, 6 days in September, 14 days in October, and 12 days in November), six days at the North Pond SNP, and five days at the Kelleys Island State Park feeders. The passerine banding totals were 1796 individuals of 80 species. The spreadsheet for the daily banding records is very long, so is not included in this report. If it is wanted, I can email it. Just the totals for the year are included in this report. The areas on Long Point is made up of the Cleveland Museum of Natural History's Jones Preserve and the Morse Farm property have been our primary banding location since beginning in 1996. To date, that site has seen 20,549 individuals of 82 species banded.

In May we banded 11 days, banding 687 individuals of 50 species. There were several species which are uncommon or in high numbers which we banded this spring. They included two White-eyed Vireoes, two Warbling Vireoes, one Marsh Wren, one Golden-winged Warbler, one Connecticut Warbler, 24 Mourning Warblers, two Northern Parula, and two Blackburnian Warblers. For the spring season we banded a total of 24 species of warblers. The Spring season was 687 individuals and 50 species of birds banded.

Over the summer we only returned to band on July 5th to band young Purple Martins at the Yoest colony. This colony is at the residence of Jeri & Kyle Yoest. We banded 72 young martins that day. We were unable to do any nest box banding this summer.

As has also become routine we banded the third week of September (from the 18th through the 23rd) on Long Point. For the week we banded 174 individuals of 42 species. Highlights included a White-eyed Vireo, an early Hermit Thrush, an early Dark-eyed Junco, an early Yellow-rumped Warbler and 14 species of warblers. We returned to Long Point on October 14th and banded for another 24 days, taking the nets down November 11. We then did some songbird banding on the trail of the North Pond SNP (6 days) and five days at the Kelleys Island State park. Over that time period we banded an additional 1178 individuals of 60 species. Highlights included two Red-bellied Woodpeckers, 22 Downy Woodpeckers (record), two White-eyed Vireoes, five Fox Sparrows, 98 Dark-eyed Juncoes (record), and 68 Northern Cardinals (record). Northern Cardinals appeared to have a record breeding season in 2022. For the year we banded 82 Northern Cardinals and most were young. This beat our previous best year of 60 in 2020. We banded 1559 individuals of 78 species on Long Point this year. This brings the **total number of birds banded on Long Point to 20,549 individuals of 115 species**.

Owl Banding Research

2022 owl banding research began in October. After a record year in 2020 with 174 Northern Saw-whet Owls banded and having 5 foreign recaptures and also 126 NSWO banded and three foreign recaptures in 2021, we didn't expect 2022 to be a very good year. The general feeling is that saw-whets follow a four-year cycle, peaking every four years, then crashing before peaking again. 2020 was a peak year but we didn't see the expected crash in 2021 so we were expecting in 2022. That didn't happen, again! Our final count was 134 Northern Saw-whet Owls and 7 Eastern Screech-Owls banded with four foreign recaptures.

The fall owl banding began at the Scheele Preserve, Kelleys Island State Park – North Loop, and North Pond State Nature Preserve on October 13 and continued through December 17. We attempted to band owls on 41 nights (16 nights in October, 17 nights in November, and 8 nights in December). The continued addition of nets at the North Pond SNP trail and along the North Loop trail at the state park again proved to be very productive.

We recaptured four foreign banded Northern Saw-whet Owls and had seven of our banded saw-whets recaptured elsewhere this fall. St. Ignace, Michigan recaptured three of our owls; one from 2019, one from 2020, and one from 2021. One of our owls was recaptured at Sandy Hook, New Jersey. Another was recaptured on Pelee Island, Ontario. Another at Long Point Bird Observatory near Port Rowan, Ontario. And our oldest saw-whet was recaptured in Vinton County, Ohio on November 14. We had banded it on October 24, 2018. In addition, we received word of a recapture from October 21, 2021 near Brooktondale, New York which we had banded October 13, 2020. There was also a recovery of a dead Eastern Screech-Owl at the Kelleys Island State Park on October 15. We had banded this owl on November 11, 2020 at the State Park. But our best recapture of the year was of an Eastern Screech-Owl on our first night, October 13. She carried band number 0745-90840 and it was a lock-on band which I haven't used in 10 years. She was banded on March 5, 2012 as an AHY-F so she is a minimum of 11 years old!

The fall 2022 migration of saw-whets was expected to be below normal due to the normal Northern Saw-whet Owl cycle. But for much of the country it was a normal fall movement. But again Kelleys Island was not. In Ohio, 326 saw-whets were banded during the fall of 2022 at 7 banding locations. A couple of other Ohio stations also had higher than expected numbers. 2023 season will be interesting. Our age and sex ratio this year was what would normally be expected during a down year. Most years after a crash 80% of our captured owls are young and 20% are adults. In 2021, 60% were hatch-year, 30% were second-year, and 10% were after-hatch year or after-second year. The sex ratios were 66% female, 9% male, and 25% undetermined. This year (2022), 77% were hatch-year birds, 10% were second-year birds, and 13% were after-hatch year or after-second year birds. This was more typical of a year following a down year. 86% of our birds were females, 4.5% were males, and 9.5% were unknown sex.

We are looking into putting radio tags on some of the owls in the future. The island has a MOTUS tower at the State Park which is designed to pick up signals from the tags and it would give us a better idea of the owls staying and for how long. We have secured funds to purchase nanotags thanks to an islander, Karen Hoy. We are now working on the permits and training to get it started in 2023 or 2024.

Our tenth annual Kelleys Island Owl Festival with the Kelleys Island Audubon Club and the Kelleys Island Field Station was over the weekend of November 4-6, 2022. More than 360 people showed up to view the banding and listen to talks. Dr. Blake Mathys, Ohio Dominican University and an owl bander was the featured speaker. His talk was on the his Center Ohio Owl Project. We banded 8 Northern Saw-whets over the three nights. In addition we recaptured two Northern Saw-whets and one Eastern Screech-Owl. The 11th Annual Kelleys Island Owl Festival is schedule for November 3-5, 2023.

Again this year we had some big nights but nothing like November 3 and 4, 2021when we captured 75 owls in the two nights. This year October 28 and 29 resulted in the capture of 32 owls. November 21 we banded 15 owls. Then, quite unexpectedly on December 11, we captured 10 owls. I have always said, if you want to see saw-whet owls, come to Kelleys island the last week of October or 1st week of November. December, you never know...

Banding Highlights:

Banding highlights for 2022 do not include any new species to the island. Uncommonly banded species included: 2 Warbling Vireoes (7th and 8th), a Marsh Wren (4th), an Eastern Towhee (7th) and a Golden-winged Warbler (4th). Twenty species were banded in record high numbers and another 4 species tied their high number. Perhaps the biggest banding highlight of the year was a Golden-crowned Kinglet banded October 25th. It was the 25,000th bird banded on the island. Another big banding highlight was a Northern Saw-whet Owl on December 1. It was the 1200th Northern Saw-whet Owl banded on the island. See the Kelleys Island Banding Totals 2022 page for all the banded individuals. For the year we banded 1937 individuals of 82 species, 322 recaptures, 23 escapes/released birds, and ZERO casualties. In total we handled 2282 individuals birds.

Recaptures:

In 2022, we handled 2279 individual birds; 1937 birds were banded, 322 birds recaptured, 23 birds escaped or were released before banding, and **0** casualties. One of the major reasons for banding birds is for the purpose of recapturing them. Recaptures tell us things like how long they may live, migration routes, migration site fidelity, and breeding site fidelity. The 322 recaptured birds represent 219 individuals of 33 species. Of this year's recaptures, 46 individuals were recaptured twice during the year, 17 were recaptured three times, 5 were recaptured four times, one was recaptured 5 times, and 1 was recaptured six times. Our oldest recaptures were an Eastern Screech-Owl originally banded March 5, 2012 as an AHY-F, making it a minimum of 11 years old. And a Yellow Warbler originally banded May 15, 2012 as an SY-M, making it 11 years old. Next was a Black-capped Chickadee banded September 20, 2016 as a hatch-year bird, so it is 6 years old. Another three individuals (two Black-capped Chickadees and a Baltimore Oriole) were a minimum of 5 years old. Of the recaptures this year, two were banded in 2012, one in 2016, three in 2017, six in 2018, three in 2019, eleven in 2020, twenty-one in 2021 and the rest (172 individuals) from earlier in 2022. We also were notified that an young Yellow-rumped Warbler which we banded on October 16,2021 was recaptured on December 24, 2021 near Huddleston, Virginia. Data on Northern Saw-het Owls is in the Owl Banding Research section of this report.

In addition we recaptured individuals which were not banded by us on Kelleys Island. Four of the Northern Saw-whet Owls we captured were banded elsewhere. One from Whitefish Point, Michigan which was banded in 2020. Another from near St. Williams, Ontario which also banded in 2020. Another (was we captured twice in the fall) was from near Cayuga, Ontario earlier in the fall 2022. The final recaptured owl was from Pelee Island, also earlier this fall. We have discussed others recovering our owls previously. A Goldencrowned Kinglet which we captured on November 1st, had been banded at Long Point Bird Observatory near Port Rowan, Ontario on October 21, 2021. And a first year Herring Gull we spotted on a dock near Carpenter's Point on Kelleys Island had a metal band on one leg and a white plastic band with 1Y0 on the other leg. This bird had been banded on June 16, 2022 at Turning Point Island off Sandusky, Ohio. Bruce Buckingham has been marking young Herring Gulls in this colony for several years to study their movements. Watch those gulls carefully. All sightings are useful.

Audubon Christmas Bird Count:

On December 18, the 35th Lake Erie Islands Christmas Bird Count was conducted. This is one of the few counts which covers areas in two different countries, the United States and Canada. Groups on South Bass, Middle Bass, Kelleys, and Pelee Islands were out all day counting each species of bird and individuals on each island. The count was first run in 1987 and has been run each December since except for 1994. John Pogacnik has been the compiler and all the data is stored by the National Audubon Society. Over the 35 years of this count we have averaged 73 species of birds and 27,731 individuals. The highest species count was 92 species in 2016 and the lowest count was 47 species in 1990. The highest count of individuals was 104,553 in 1992 and the lowest count was 4930 in 1991.

This year the groups observed 71 species and 19,802 individuals. This was below the average 73 species observed over the 35 years and below the 35 year average of 27,731 individuals. Unusual species

observed this year were: Trumpeter Swan (3rd), Red-necked Grebe (3rd), Lesser Black-backed Gull (4th)Merlin (7th), and Red-headed Woodpecker (2nd). Kelleys Island counters were: Chris Ashley, Tom & Paula Bartlett, Emily Beal, Tyler McClain, Mariah Scherer, Alexi Panehal, John Pogacnik, Sean Williams, and Kari Warner. Feeder watchers were: Lee & Sandy Tkach.

The pages which follow this summary list totals, raw data from all banding and survey days including birds banded, recapture data, compilations of yearly banding data, Christmas Bird Count data, and selected photographs. Normally, I also include daily banding data with this report but with 71 days of daily banding that would add 50 extra pages. That information can be supplied electronically for those who request it.

Special thanks to Paula Bartlett, Alexi Panehal, and Chris Ashley for going above and beyond in helping out and making much of another outstanding year possible. For the continued financial support from Jim & Barb Zeller. And Karen Hoy for a special donation to support our owl banding program.

2022 Volunteers:

Chris Ashley Paula Bartlett Erin Bartlett Emily Beal Leslie Brown
Bill & June Campbell Dave Coon Patti Wainwright Haley
Steve Henthorne Bobbie-Jo Kennedy Chris Kipfer Kit Kilen
Gabi Lindsey Tyler McClain Beck Miller Alex Panehal
Tom & Jennifer Pieratt Sarah Romer Dave Sellers
Shane & Laura Roberts Mariah Sherer Sandy Teliak Jim & Barb Zeller

H. Thomas Bartlett

Federal Bird Banding Permit # 21624

Ohio Division of Wildlife Animal Permit # 20-164 and 24-039
Ohio Division of Natural Areas and Preserves Permit # RP 2022-04
Cleveland Museum of Natural History Natural Areas Access Permit
Kelleys Island State Park Research Permit
Kelleys Island Private Lands Permit – Morse Farm Trust
Kelleys Island Private Lands Permit – Pat & Lori Hayes

Partners











