

Pelee Island Bird Observatory 2012 Year-end Report



**Graeme C. Gibson, Michelle Bondy & Sumiko Onishi
Pelee Island Bird Observatory
585 South Shore Road
Pelee Island, Ontario
N0R 1M0**



DECEMBER 2012

Pelee Island Bird Observatory (PIBO)

Address: 585 South Shore Road, Pelee Island, Ontario, Canada N0R 1M0
Phone: 519-724-2829
Email: graeme.gibson@pibo.ca – Managing Director
Website: www.pibo.ca

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 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.

PIBO Board – Graeme Gibson, the Elder (Chair), Ramsay Cook (Treasurer), Elizabeth Agnew, Wayne Grady, Janet Graybiel, Paul Vasey.

Advisory Board – Margaret Atwood, Ian Davidson, Matthew Mann Gibson, Dr. David Hussell, Penny Kavanaugh, Philip Slayton, Dr. Bridget Stutchbury.



Suggested citation: Gibson, Graeme C., Michelle Bondy, and Sumiko Onishi. 2012. **Pelee Island Bird Observatory – 2012 Year-end Report**. An unpublished report by the Pelee Island Bird Observatory for Ontario Parks/Ontario Ministry of Natural Resources. 39 pp., including appendices.

EXECUTIVE SUMMARY

The Pelee Island Bird Observatory reached a milestone in 2012 with the completion of its 10th year of operations on Pelee Island. It was a productive twelve months of research, education and outreach, and a good year of organisational growth and structural development. Positive advances in 2012 included our hugely successful spring fundraiser in Windsor, our annual island community BBQ event, the generous proceeds donated to PIBO by the Pelee Island Winery with the sale of their new book “Southern Exposure”, and the observatory’s acceptance of the Essex Region Conservation Authority’s 2012 conservation award for environmental education in Essex County. These, and other developments in 2012, helped make for a memorable silver anniversary.

The observatory’s 10th spring and fall of migration monitoring studies at Fish Point Provincial Nature Reserve, Ontario Parks, was conducted this year from April 4th – June 10th and August 1st – November 15th. Ten staff, interns, and volunteers contributed 1585 field-hours to the project and documented 201 species in PIBO’s official ‘count’ area on 174 standardised count days. During the bird banding phase of the study a total of 3772 birds of eighty-one species was captured in 4300 net-hours, for an average catch-rate of 0.88 birds/net-hour. In ten years the observatory has now compiled a wealth of migration data as part of its commitment to the Canadian Migration Monitoring Network. In all, PIBO’s migration file contains more than 2.5 million individual bird records of 269 species, along with 35,000 banded birds of 110 species.

Additional research in 2012 included our usual cycle of summer breeding bird studies and Species at Risk research. The field effort this year – part of PIBO’s long-term Breeding Birds of Pelee Island project – included a series of point-count surveys carried out on properties under the stewardship of the Ontario Ministry of Natural Resources and the Nature Conservancy of Canada. Other activities included transect surveys designed to detect the presence or absence of Species at Risk, marsh bird monitoring, and a variety of other annual studies. ‘Non-bird’ research included standardised monarch butterfly surveys and amphibian monitoring. PIBO was also active this summer in a multi-year study of the endangered Blanchard’s Cricket Frog headed up by the Toronto Zoo.

PIBO’s education and outreach programs continued to thrive in 2012 with the hiring this fall of a seasonal Species at Risk Coordinator for the third year in a row. With generous funding support from the Ontario Ministry of Natural Resource’s Species at Risk Stewardship Fund, this year PIBO was able to reach our widest audience to date with our science-based conservation and education curriculum. The Coordinator kept active from September to December, first and foremost, delivering in-class presentations about Species at Risk, bird migration, and biodiversity in the Essex region, to more than 43 classes and 860 students.

The Coordinator also organized our first live video-conference from the island with a local secondary school in Harrow. PIBO staff captured and banded a number of songbirds during the hour long session and fielded questions from students about birds, bird migration, and conservation. The feedback from teachers and students was very positive. Due in part to Pelee Island’s relative inaccessibility – and thanks to the success of our first video link-up – the observatory plans to launch a comprehensive video-conferencing education project in 2013 that will reach out to students across the Americas. Additional education and outreach activities this year included our popular public owling nights, bird banding demonstrations offered to 391 visitors at Fish Point, an activities day at the Pelee Island Public School, our new and improved website, along with many other developments.

The observatory made headway in 2012 thanks to the combined support and encouragement of many organisations and individuals (please see Acknowledgments section). This support has come from all quarters – from our friends and the local community to far-flung government offices, and everywhere between. Speaking on behalf of everyone at PIBO, a sincere thank you.

TABLE of CONTENTS

Executive Summary	iii
Table of Contents	iv
List of Maps and Tables	v
Introduction	6
<u>Section 1 – Research</u>	6
Migration	6
Songbird migration monitoring	6
Northern Saw-whet Owl monitoring	20
Breeding Birds	22
Point-count surveys	22
Marsh bird monitoring	22
Species at Risk transects	23
Chimney Swift monitoring	23
Species at Risk	23
Migration Monitoring and Species at Risk	25
Monarch Butterfly Migration	25
Blanchard's Cricket-Frog Monitoring	27
2012 Field Effort	27
<u>Section 2 – Education & Outreach</u>	28
In-school programming	28
Student evaluations	29
Teacher evaluations	29
On-site Programming (Pele Island)	30
Video-conferencing	30
Essex County Field Naturalists' Meeting	31
Communications	31
PIBO website, Facebook, Twitter	31
Future Directions	31
Acknowledgements	32

Appendices

Appendix 1 – Student evaluation quiz	34
Appendix 2 – Species at Risk section of the Fall 2012 'The Auspice' newsletter	35
Appendix 3 – PIBO education program advertisement	37
Appendix 4 – Birds captured at Fish Point from 2003 – 2012	38

MAPS & TABLES

Map 1 – Pelee Island, Essex County, Ontario	5
Table 1 – Spring coverage effort	10
Table 2 – Fall coverage effort	17
Table 3 – Combined Spring and Fall coverage effort	17
Table 4 – Birds captured in 2012	18
Table 5 – Northern Saw-whet Owls captured in 2012	19
Table 6 – Species at Risk documented on Pelee Island in 2012	22
Table 7 – Species at Risk breeding evidence documented in 2012	23
Table 8 – 2012 Monarch butterfly migration counts	25
Table 9 – 2012 Field effort	26
Table 10 – Schools visited in 2012	27
Table 11 – Average scores of teacher evaluations	28

INTRODUCTION

This year's report is presented in two sections – Research and Education/Outreach. Section One summarises the results of the 2012 research season including details from PIBO's migration monitoring program, our summer point-count surveys, marsh bird and amphibian studies, Monarch Butterfly counts, Species at Risk transects, and a range of other projects. Results are presented in tables throughout the section including: Species recorded on Pelee Island in 2012, Birds banded and recaptured this year at Fish Point, Northern Saw-whet owl capture totals, Species identified in 2012 as confirmed, probable, or possible breeders on Pelee, Seasonal comparisons, 2012 Field effort, Volunteer participation, and Species at Risk in 2012, among others. The section also contains an edited version of the spring and fall migration updates posted this year on PIBO's website.

Section Two includes an update of PIBO's education and community outreach programs in 2012 and describes a wide range of activities carried out this year both on the island and further afield. Details include information about our in-class presentations at local schools, the results of our first online video conference from the island with a secondary school on the mainland, the number of visitors at Fish Point for bird banding demonstrations, the turn-out at PIBO's public owling nights, our spring island sausage-fest celebration, and a variety of other events.

Map 1 – Pelee Island, Essex County, Ontario



A range of other topics are discussed in Section Two including the Pelee Island Winery's generous support of PIBO through the sale of its new book, PIBO's acceptance of the Essex Region Conservation Authority's conservation award for environmental education, some media exposure in Porter Airlines September inflight magazine, our updated website, PIBO cards and T-shirts, plans for next year's bird watching trip to Cuba, and other initiatives at the observatory in 2012.

SECTION ONE – RESEARCH

Songbird Migration Monitoring

Long-term migration monitoring research is an effective method for tracking changes in bird populations through the counting and capture of migrants. The data collected at migration stations is used to detect population trends of small landbirds that migrate to and from their breeding and wintering grounds each year. Many songbirds summer in remote northern regions and winter in equally isolated areas, which makes it difficult to survey these species using other monitoring methods. The Canadian Migration Monitoring Network (CMMN) oversees migration studies in Canada. The network is made up of more than twenty-five permanent sites established across the country that, like PIBO, generate daily migration counts

for a wide range of species. Monitoring stations are committed to collecting standardized data that contributes to our collective understanding of the changes taking place in populations of migratory birds, as well as to document migration at the station itself, and many other bird-related studies.

PIBO's 10th year of spring and fall migration monitoring coverage at Fish Point Provincial Nature Reserve (Ontario Parks – Ontario Ministry of Natural Resources) ran from April 4th – June 10th and August 1st – November 15th, 2012, for a total of 174 coverage days. Ten participants contributed 1585 hours to the migration study. A total of 201 species was recorded at Fish Point during PIBO's standard count period and 3772 birds of eighty-one species were banded in 4300 net-hours, for an average catch-rate of 0.88 birds/net-hour.



Fish Point

Spring Migration

PIBO's 10th spring migration monitoring season at Fish Point Provincial Nature Reserve concluded on June 10th after 68 consecutive days of coverage from April 4th. In all, 159 species were documented in PIBO's official 'count' area during 436 person-hours of standardized field observation and bird banding. Twenty-nine warbler species were tallied on the island this spring by staff and volunteers including Yellow-throated, Worm-eating, Cerulean, and Hooded, along with a variety of other notable species such as Least Bittern, Willet, Lesser Black-backed and Iceland Gull, Sora, and Northern Mockingbird. No new species were added to PIBO's official Pelee Island species list (currently 269) and no new species were banded (109 species have been captured at Fish Point since 2003).

PIBO's mist-netting operation was conducted on forty-four mornings from April 13th to June 5th. In all, 863 birds of sixty-three species were captured, and 56 individuals were recaptured, in 1484 net-hours, for an average catch-rate of 0.58 birds/net-hour. An interesting range of birds were banded including 24 warbler species (Worm-eating, Hooded, Orange-crowned, Blue-winged), Red-bellied Woodpecker, Black-billed Cuckoo, Great Crested Flycatcher, Acadian Flycatcher, Rose-breasted Grosbeak, and Rusty Blackbird, among others. Five staff and volunteers contributed 432 field-hours to the spring migration program.

The following migration summaries include excerpts from PIBO's weekly migration updates and from written narratives found in PIBO's 2012 Daily Log book.

April 4th – April 15th, 2012

PIBO staff and volunteers returned to the island on April 3rd and the observatory's tenth year of migration coverage at Fish Point got underway on the 4th. It was clear from the start that the unusually warm weather in March prompted a lot of songbirds to move through in advance of their usual schedule. Species like Winter Wren, Golden-crowned Kinglet, Purple Finch, and Fox and Tree Sparrow, were less evident in the first half of April 2012 compared to previous years. At the same time, no unusually early arrivals were documented during the coverage period.

A variety of other migrants were recorded almost daily during the first half of the month including a nice range of water birds, with Common Loons, Horned Grebes, twelve duck *spp.*, and up to 30 coots noted throughout the summary period. Four gull species were observed including 190 Bonaparte's on April 9th. Raptors were low-key, with moderate numbers of vultures, a few red-tails, some kestrels, and the local eagles, and just two shorebirds – Killdeer and American Woodcock.

Migrant songbirds and near-passerines including Yellow-bellied Sapsucker, Purple Martin, Tree and Barn Swallow, Hermit Thrush, Ruby-crowned Kinglet, and eight sparrow species, all made an appearance during the summary period, although just one warbler *spp.* – Yellow-rumped – was observed up to the 15th. Rusty Blackbirds were noted in good numbers along with lots of redwings, grackles and starlings. Robins and Northern Flickers were also active.



Worm-eating Warbler

April 16th – 22nd, 2012

Migration activity was fairly low-key early in the week due in part to some cool weather and strong north winds, although there was a noticeable upswing towards the end of the summary period. Seventeen spring 'firsts' were recorded from April 16th – 22nd along with increased totals for a range of familiar species including Hermit Thrush, Yellow-rumped Warbler, and White-throated Sparrow. New arrivals for the spring included Virginia Rail, Greater Yellowlegs, Gray Catbird, Wood Thrush, Black-throated Green Warbler and Ovenbird.

Diversity increased steadily from the 19th – 22nd and 43 species were recorded on April 21st including Blue-headed Vireo, 51 Tree Swallows, Eastern Bluebird, 10 Hermit Thrushes, Pine and Black-throated Green Warblers. Forty-seven species were tallied on the final day of the summary period including a banded Worm-eating Warbler. A nice range of other neotropical migrants were observed including four additional warbler *spp.* – Yellow-rumped, Palm, Pine, and Ovenbird.

April 24th – 30th, 2012

A mixture of rain, cool weather, and strong north winds made for a relatively quiet week, although conditions improved towards the end of the summary period. Diversity at the station, for example, ranged from thirty-one species on April 26th to forty-seven species on the 29th during our official count period, compared to a Daily Total (DT) of 71 species recorded last year on April 26th. Despite the less than ideal conditions, migrants continued to make their way north in small numbers and a variety of species were noted daily throughout the week.

Nine warbler species were tallied from the 24th – 30th including spring 'firsts' for Black-and-white, Nashville, Yellow, and Northern Waterthrush. Swallows were active from the 27th – 29th, with 75 Barn Swallows on the census on the 27th, and five species recorded on the 29th. Forty-seven species were recorded at Fish Point on the 29th along with a Whip-poor-will and Northern Mockingbird near the PIBO cottage in the afternoon. The 30th was extremely wet, yet there were some birds around, including six warbler species, lots of swallows, and a Willet.



Yellow-bellied Sapsucker

April 24th – 30th, 2012

A mixture of rain, cool weather, and strong north winds made for a relatively quiet week, although conditions improved towards the end of the summary period. Diversity at the station, for example, ranged from thirty-one species on April 26th to forty-seven species on the 29th during our official count period, compared to a Daily Total (DT) of 71 species recorded last year on April 26th. Despite the less than ideal conditions, migrants continued to make their way north in small numbers and a variety of species were noted daily throughout the week.

Nine warbler species were tallied from the 24th – 30th including spring 'firsts' for Black-and-white, Nashville, Yellow, and Northern Waterthrush. Swallows were active from the 27th – 29th, with 75 Barn Swallows on the census on the 27th, and five species recorded on the 29th. Forty-seven species were recorded at Fish Point on the 29th along with a Whip-poor-will and Northern Mockingbird near the PIBO cottage in the afternoon. The 30th was extremely wet, yet there were some birds around, including six warbler species, lots of swallows, and a Willet.

May 1st – 10th, 2012

It was a busy ten days from May 1st – 10th. In all, 46 spring 'firsts' were recorded and 452 birds of fifty-one species were banded, including twenty-two warbler *spp*. The month started off on a positive note with nine spring 'firsts' on May 1st including a male Cerulean Warbler on census and two Blue-winged Warblers in the netting area. The 2nd was active as well – 61 species were recorded including a Least

Bittern calling at Fox Pond, a singing White-eyed Vireo, and Northern Parula. A large 'fallout' on May 3rd produced 71 species, including sixteen 'firsts', and sixteen warbler species.

Seventy-one species were recorded on the 4th and 108 birds of twenty-eight species were banded. Nashville Warblers led the way (32 banded) followed by moderate numbers of thirteen other banded warbler *spp.*, including 2 Orange-crowned. The 5th was also busy, with 64 species noted and 84 birds of twenty-five species banded. A nice variety of birds were observed in moderate numbers including 25 Blue Jays, 12 Gray Catbirds, 26 Nashville, 16 Magnolia, 6 Ovenbirds, 10 Rose-breasted Grosbeaks, and a Red-headed Woodpecker.



Magnolia Warbler

The final two days of the summary period were less active, although a combined 96 birds were banded on the 9th and 10th including 40 Yellow-rumped Warblers. Species observed over the two mornings: Sora, Merlin, Wood Thrush, Northern Parula, Cape May Warbler, and 7 Scarlet Tanagers. A small group of shorebirds at the tip in the late afternoon on May 10th included Black-bellied Plover, Dunlin, Ruddy Turnstone and dowitcher *spp.*

May 11th – 20th, 2012

Migration activity at the Point was steady from the 11th – 20th. In all, ten spring 'firsts' were recorded and 202 birds of forty-one species were captured in 488 net-hours. Diversity at the station ranged from a low of 53 species on May 20th to a high of 66 on the 14th. Northwest winds and a dawn temperature of 12° C on May 11th made for a fairly active day, with 57 species tallied, including fourteen warbler species. A similar morning on the 12th produced 59 species, 15 warblers *spp.*, and the first Blackpolls of the year. May 14th was the most active day of the summary period with 66 species, 17 warbler *spp.*, the second banded Worm-eating Warbler of the spring, and a Blue-winged Warbler.

Another similar day on the 15th was followed by intense thunderstorms on May 16th. There were still lots of birds around and 59 species were tallied in 2.5 hours. Diversity tapered off on the 17th and 18th and there was little to report apart from the first Yellow-bellied Flycatchers of the spring, a noticeable increase of Canada and Wilson's Warblers, and ones-and-tvos of a variety of species including Yellow and Black-billed Cuckoo, Wood and Swainson's Thrush, and Scarlet Tanager. The final days of coverage saw an increase in activity, with 73 birds captured over two mornings and 61 species noted on the 19th, including the season's first Acadian Flycatcher (banded). A captured female Hooded Warbler on May 20th was one of 53 species recorded on the day.

May 21st – 31st, 2012

Migrants were active at the Point during the first half of the summary period and crested on May 27th when sixty species were recorded, including 11 warbler spp. Six spring ‘firsts’ were noted from May 21st – 31st including four shorebird species. May 21st was active, with 58 species tallied, including two singing Acadian Flycatchers and a banded Hooded Warbler. Red-eyed Vireos and Gray-cheeked Thrushes were numerous, along with seven warbler species. An Acadian Flycatcher banded on May 26th was likely the same individual heard singing in the netting area since the 21st. Fifty-three species were noted on the 26th including ten warbler species and the first Semipalmated Plovers of the spring. May 27th was busy too, with sixty species documented including 6 flycatcher spp., 5 thrush spp., and 11 warbler species. An overcast day on the 28th made for a quiet time both on the census and at the banding station, and thunderstorms the following day limited coverage to a late-morning census.

June 1st – 10th, 2012

PIBO’s 10th spring migration monitoring season at Fish Point wrapped up on June 10th after 68 consecutive days of coverage from April 4th. Songbird activity tapered off at the Point in early-June and it was generally quiet from the 1st – 10th with the exception of a variety of shorebirds at the tip on most days, some lingering migrant flycatchers, thrushes and warblers, and ones-and-tvos of a range of other species. Shorebirds included Semipalmated Plovers and Sandpipers, Dunlins, Sanderlings, and Ruddy Turnstones. Species diversity at the station peaked at 40 on June 3rd and dipped to 27 on the 9th. With the exception of some Yellow-bellied, Least, and ‘Traill’s’ Flycatchers, Magnolia Warblers, and a few others, most of the forest birds recorded at the station during the last ten days of coverage were local nesters.

PIBO’s netting effort wrapped-up on June 5th after 44 mornings of operation starting on April 13th. In all, 863 birds of sixty-three species were captured and 56 individuals were recaptured in 1978 net-hours, for an average catch-rate of 46 birds/100 net-hours. An interesting range of birds were banded including 24 warbler species (Worm-eating, Hooded, Orange-crowned, Blue-winged), Red-bellied Woodpecker, Black-billed Cuckoo, Great Crested Flycatcher, Acadian Flycatcher, Rose-breasted Grosbeak, and Rusty Blackbird, among others. A total of 159 species was recorded at Fish Point during PIBO’s standard count period from April 4th – June 10th compared to a five-year average of 168. Five staff and volunteers contributed 432 field-hours to the spring migration program.

Table 1 – Spring Coverage Effort

Description	2012	2011	2010	2009	2008	2007	2006	2005
Coverage	Apr 4-Jun 10	Apr 4-Jun 8	Apr 2-Jun 10	Apr 1-Jun10	Apr 3-Jun14	Apr 1–Jun 15	Apr 2–Jun 8	Apr 5–Jun 6
Coverage days	68	66	70	71	73	76	67	61
Netting period	Apr 13-Jun 5	Apr12-May31	Apr4-May 28	Apr2-May24	Apr 5-Jun 10	Apr 2–Jun 1	Apr 15–Jun 7	Apr 6–Jun 5
Netting days	44	38	47	44	55	48	35	55
Birds banded	863	767	708	825	794	637	1033	1151
Net hours	1484	1106	1442	1640	1927	1373	1347	1667
Bird/net hour	0.58	0.69	0.49	0.51	0.41	0.46	0.77	0.69
Species banded	63	61	67	68	69	67	62	72
Recaptures	56	70	65	77	95	66	68	147
Species recaptured	13	14	11	18	9	10	17	23
Species recorded	159	173	166	170	175	177	181	171

Fall Migration

August 1st – 10th, 2012

PIBO's 10th fall coverage season was launched on August 1st under clear skies, with light northwest winds and warm, humid temperatures. Although the first few weeks of August are a typically quiet time, there was some active migration during the coverage period and a few signs of things to come. Along with a steady passage of swallows (six species recorded) and a few shorebirds – Black-bellied Plover, Ruddy Turnstone, Sanderling, and Least Sandpiper – some migrant songbirds made an early appearance including Swainson's Thrush, Black-and-white Warbler, Canada Warbler, and Northern Waterthrush. Hundreds of swallows were recorded from the 1st – 10th departing south off the tip during the morning census, including 150 Barn Swallows on August 5th, along with smaller numbers of Purple Martin, Bank, and Cliff Swallow. In all, PIBO staff and volunteers documented 71 species on the island from August 1st – 10th and 58 species during our official count period. PIBO's bird banding operation will get underway on August 11th.



Black-throated Blue Warbler

August 11th – August 20th, 2012

It was a low-key start to the summary period but activity picked up on the 13th and migrants continued to arrive in moderate numbers throughout the rest of the week. In all, 26 Fall 'firsts' were recorded over ten days, including eleven warbler species, and a nice variety of birds were banded in small numbers. Despite some warm southwest winds on the 13th, a nice range of birds appeared that morning and 55 species were noted, including the first American Redstarts and Bobolinks of the Fall. A lively Eastern Screech-Owl was the first banded bird of the season. Similar conditions prevailed over the next few days but then the wind shifted to the north, the temperature dropped to 15° C, and a good mix of migrants showed up on the 18th. Ten warbler species were banded including season 'firsts' for Tennessee, Bay-breasted, and Mourning Warbler, and 47 species were observed.

While not as active on August 19th, a noticeable increase in cormorants (3200) and 3 Bald Eagles were observed at the tip and 50 species were recorded. A small but steady stream of diurnal migrants heading south off the tip on census included 22 Barn Swallows, 18 Bobolinks, 18 Cedar Waxwings, 11 Chimney Swifts, and 3 Eastern Kingbirds. Fifty-two species were tallied on the final day of the summary period including eight warbler species, along with small numbers, of Red-breasted Nuthatch, Blue-Gray Gnatcatcher, Veery, and Gray Catbird.

August 21st – August 31st, 2012

The weather remained warm and humid during the first part of the summary period and not much migration activity was recorded from August 21st – 27th, but things picked up considerably on the 28th and it remained busy through to the 31st. In all, 78 species were documented at Fish Point in the final eleven days of August and 250 birds of twenty-eight species were banded. Twenty-one fall 'firsts' were tallied including Black-crowned Night-Heron, Lesser Yellowlegs, Northern Parula, and Scarlet Tanager. Despite less than ideal weather conditions, migrants continued to show up in moderate numbers throughout the summary period including nine warbler species on the 21st, a banded Golden-winged Warbler (22nd), the first autumn Traill's Flycatcher (23rd), 8 Red-breasted Nuthatches (24th), and the first Wilson's Warbler of the fall (25th).

Light steady rain and some northerly winds on the 27th turned things around and a nice variety of birds showed up the next morning, with 57 species recorded and 49 birds banded of sixteen species. Seven fall 'firsts' were tallied including Solitary Sandpiper, Philadelphia Vireo, Nashville and 'Western' Palm Warbler. Fifteen warbler species were observed. Fifty-seven species were noted again on August 29th including 'firsts' for Gray-cheeked Thrush and Blackpoll Warbler, and 85 birds were captured. The final two days of the month saw a drop-off in abundance and diversity but there were still quite a few birds in the area. Fifty-two species were recorded on the 30th including fall 'firsts' for Blue-headed Vireo and Northern Parula, and 55 birds were captured. A group of 30 Cliff Swallows were at the tip on census along with 5000 Double-crested Cormorants.

September 1st – 10th, 2012

It was a productive start to the month and the PIBO crew was kept busy apart from one or two mornings towards the end of the summary period. In all, 92 species were recorded at the 'point' from September 1st – 10th and 461 birds of thirty-one species were banded, including 236 Swainson's Thrushes. The month began on a busy note and a good variety and number of birds were recorded on the 1st. All told, 68 species were noted and 86 individuals of seventeen species were captured. Highlights included 77 Bobolinks heading south off the tip on the census, 62 Swainson's Thrushes (43 banded), 45 Palm Warblers, 25 Magnolia Warblers, and 21 Red-eyed Vireos. Twenty warblers species were tallied on the day. The pace continued on the 2nd when 58 species were counted and 85 birds of thirteen species were banded. Purple Martins and Barn Swallows were numerous, with 64 and 90 individuals counted, respectively, along with Swainson's Thrush (49), Red-eyed Vireo (27), American Redstart (20) and Black-throated Blue Warbler (17, including 11 banded). Another busy morning on September 3rd saw 55 species recorded and 92 birds banded. Six thrush species were noted, including a somewhat early banded Hermit Thrush.

Rain set in on the 4th and field coverage was limited to just three hours, but there were still quite a few birds in the area. Similar conditions prevailed on September 5th, with 37 species tallied, including the first Merlin of the fall. More southwest winds on the 6th and 7th saw a gradual decrease in activity, with 58 birds banded over the two day period, including two Connecticut Warblers. Six Blue-winged Teals and an American Pipit on the census were both 'firsts' for the season. The wind shifted to the north on the evening of the 6th and gale conditions and heavy rain greeted staff and volunteers on the morning of September 7th. No banding was carried out and just twenty-one species were recorded on the census. The north winds continued over the final two days of the summary period and bird numbers rebounded nicely, with 49 species documented on the 9th and 44 birds banded of ten species. Thirteen warbler species were noted on the day along with a nice variety of other birds in moderate numbers. Forty-eight species were tallied on September 10th and 57 birds were captured, including increased numbers of Gray-cheeked Thrush (10 banded) and the first Winter Wren of the season.

September 11th – 20th, 2012

Migration activity was up-and-down at the Point from September 11th – 20th. It was relatively busy on most days with the exception of the 19th when a measly twelve species were recorded thanks to some intense rainfall and gale conditions throughout the morning hours. The busiest day was the 16th when 50 species were tallied and 75 birds of fifteen species were banded. In all, 85 species were documented in the count area from the 11th – 20th and 271 birds of twenty-five species were captured. Twelve fall 'firsts' were

noted. It was moderately active during the first four days of the coverage period. The transition from August and early-September migrants to late-fall species was evident with the arrival of the first Yellow-bellied Sapsuckers (September 11th), Ruby-crowned Kinglets (12th), and White-throated Sparrows (14th), along with Peregrine Falcon (11th). The wind shifted to the north on September 14th, which produced a busier morning on the 15th. Fifty-three birds of twelve species were banded and 50 species were documented, including the first Brown Creeper and Purple Finches of the season. Eleven warbler species were observed on the day. September 16th was also active, with 75 birds banded and 50 species tallied. Thrushes were numerous, with 50 birds captured, along with good numbers of warblers (15 species observed and 8 species banded).



Magnolia Warbler

A Lesser Yellowlegs was noted at the tip on the 17th along with 6 Bald Eagles, and eight warblers species were observed in small numbers. The 18th was a total washout – no banding took place due to rain and gales from the west, and just twelve species were tallied on the census! Conditions improved the next morning, with 46 species on the census on September 19th including fall ‘firsts’ for Northern Harrier, Yellow-throated Vireo, and Hooded Warbler. Fourteen warbler species were tallied along with a range of other birds including 4000 cormorants, 7 Bald Eagles, Sanderlings, 3 Blue-headed Vireos, a Northern Parula, and 3 Rose-breasted Grosbeaks. A captured Sharp-shinned Hawk proved to be a foreign encounter that was originally banded at White Fish Point at the northern tip of the Michigan Peninsula in May 2011. Strong south winds on the final day of the summary period made for a relatively uneventful day apart from a female Peregrine Falcon at the tip.

September 21st – 30th, 2012

It was another mostly active ten days at Fish Point from September 21st – 30th and a nice variety of birds were recorded on most days throughout the summary period. In all, 96 species were documented over ten days and 329 birds of thirty-eight species were captured. There were twelve fall ‘firsts’. The weather was partially cooperative, with just one morning of rain over ten days, but the winds were mostly from the southwest, which made for a somewhat quiet time up to the 26th. Migrants were fairly low-key on the 21st and there wasn’t much to report apart from some thrushes (9 Swainson’s and 9 Gray-cheeks banded) along with small numbers of Red-eyed and Philadelphia Vireos, some Blue Jays and Red-breasted Nuthatches, and three warbler species. The highlight on the 22nd was a station-high 15 Bald Eagles (all sub-adult save one) sitting on the tip during the census. The previous high count for eagles was ten recorded last year. Although thrush activity finally dried up in the netting area, a nice range of other species were captured in small numbers on September 23rd including Yellow-bellied Flycatcher, Red-breasted Nuthatch, and six warbler species. Eleven warbler species were recorded on the day along with

the first Dark-eyed Juncos of the fall. Fifty-five species were tallied on the 24th including fall 'firsts' for Golden-crowned Kinglet and Fox Sparrow. A small pocket of migrants along the east shore on the census included 13 Red-breasted Nuthatches and a surprising 11 Blue-gray Gnatcatchers.

Strong northeast winds on the 27th prompted a good push of migrants and 59 species were documented, including fall 'firsts' for Pine Warbler, Chipping, Lincoln's and Eastern White-crowned Sparrow. Highlights included 6 Northern Harriers, 4 flycatcher species, 175 Blue Jays, and 15 warbler species. The 28th wasn't as active – 51 species were tallied, including nine warbler species, and 54 birds of sixteen species were banded. An Eastern Towhee was new for the fall. The final two days of the month were also moderately active, with 48 species on the 29th including 100 Blue Jays, 77 Golden-crowned Kinglets, and six warbler species. Thirty-four individuals of fourteen species were captured on the 30th including ones-and-twos of Blue-headed Vireo, House Wren, Winter Wren, both kinglet species, three thrush *spp.*, and a Brown Thrasher.



Yellow-rumped Warbler

October 1st – 10th, 2012

Migrants continued to move through the area in good numbers from October 1st – 10th, but activity was somewhat low-key for the time of year. In all, 82 species were recorded in the official count area and 300 birds of twenty-seven species were banded. By comparison, in 2006, more than 450 birds were captured over three days from the 8th – 10th, and in 2005, 716 birds were captured during the ten-day period. The month started off on an active note, however, with 59 species recorded on October 1st and 73 individuals banded. Species on hand included eleven warbler species, three flycatcher and vireo *spp.*, and all four *catharus* thrush *spp.* (Veery, Swainson's, Gray-cheeked, and Hermit). It was rainy on the 2nd and there wasn't much of note apart from the first migrant Swamp Sparrows of the Fall. The 3rd was reasonably active, with 43 species documented including seven warbler *spp.*, 57 Blue Jays, Red and White-breasted Nuthatch, Brown Creeper, both kinglet *spp.*, and a Wood Thrush. Strong southwest on October 4th made for a fairly quiet morning but the 5th was busy, especially for raptors. Birds noted on the morning census included 18 Turkey Vultures, 7 Sharp-shinned Hawks, 3 Ospreys, 2 Bald Eagles, 2 Peregrine Falcons and a Merlin and American Kestrel.

The wind shifted to the north and the tempo picked up considerably, with good numbers of 46 species reported on October 7th including 252 Blue Jays, 69 and 29 Golden and Ruby-crowned Kinglets, respectively, and 18 Hermit Thrushes. The 8th was busy as well – 54 species were documented and 63 birds of fourteen species were captured. Highlights included four woodpeckers *spp.*, 10 Tree Swallows, 22 Red-breasted Nuthatches, 15 Winter Wrens, 136 Golden-crowned Kinglets, 7 warbler *spp.*, and 5 sparrow species.

October 11th – 20th, 2012

Migration activity was up-and-down at the Point from October 11th – 20th due in part to persistent southwest winds and some rainy days towards the end of the summary period. At the same time, the PIBO crew enjoyed a few busy mornings following some north winds on the 12th and 16th. In all, 75 species were recorded over ten days and 392 birds of twenty-nine species were captured. Seven fall 'firsts' were noted including Common Loon, Wilson's Snipe, Eastern Bluebird, Field Sparrow, Vesper Sparrow, and Pine Siskin. A quiet start to the summary period on October 11th was followed by an active morning on the 12th, with 54 species on the day including 123 Yellow-rumped Warblers, 63 Golden-crowned Kinglets, 20 Hermit Thrushes, and four warbler species. The 13th was also busy – 52 species were noted and 115 birds were captured. Highlights included a station-high 88 Pine Siskins on census, 5 raptor species, 110 Yellow-rumps (50 banded), 158 kinglets of both species, and eight sparrow species.

The winds came back out of the north on the 15th which produced a significant fallout of birds the next morning. In all, 51 species were documented and 154 birds of sixteen species were banded. Yellow-rumped Warblers were active, with 223 individuals recorded (71 banded), followed by good numbers of American Crow (142 recorded), Golden-crowned Kinglet (139), White-throated Sparrow (84), Hermit Thrush (44, 31 banded), and Winter Wren (25). The weather took a turn for the worse on October 17th and strong southeast winds put a damper on migration activity right through to the end of the summary period. Nevertheless, a moderate number of birds continued filtering through, with another Peregrine Falcon spotted on the 17th along with small numbers of kinglets, Red-breasted Nuthatches, creepers, and Winter Wrens on October 18th. The 19th saw an exception to the rather low-key pace with a station-high 508 American Robins counted flying south on census, along with 13 Greater Yellowlegs.

October 21st – 31st, 2012

It was a busy final eleven days of the month and lots of birds were documented at the station despite some intemperate weather. Six rain days and Force 10 winds (101 km/hour) towards the end of the month put a damper on the banding effort, but, in all, 87 species were documented in the official count area and 355 individuals of nineteen species were captured. October 21st was active, with 49 species recorded and 88 birds captured. Golden-crowned Kinglets were numerous – 163 recorded (28 captured), along with 53 Dark-eyed Juncos, and 40 Yellow-rumped Warblers. Fifty species were noted on the 22nd including a Northern Saw-whet Owl banded first thing in the morning – the first of the Fall – along with moderate numbers of kinglets, creepers, Hermit Thrushes, and nine sparrow species.



Short-eared Owl

Steady rain, south winds, and warm conditions (17° C at dawn) on the 23rd made for a fairly quiet morning apart from a good push of 289 American Robins. Another 179 robins were noted on October 24th along with 29 Eastern Bluebirds, 37 Pine Siskins, and a Peregrine Falcon. Similar conditions on the 25th produced the first Horned Grebes (28) of the Fall, and 25 Killdeers. Another rainy day on October 26th made for a fairly uneventful morning apart from the arrival of the first Red-breasted Mergansers of the season. Although the wet weather continued into October 26th, the temperature dropped to 8° C and some steady north winds made for a busy morning the next day. Fifty-six species were noted on the 27th and 63 birds were banded. Golden and Ruby-crowned Kinglets showed up in good numbers (115 and 29 individuals recorded, respectively) as well as lots of juncos (142), American Crows (120), Yellow-rumped Warblers (59), White-throated Sparrows (42), and a record-late Eastern Wood-Pewee. Fall-firsts included American Black Duck, Bufflehead and American Tree Sparrow.



Purple Finch

October 28th was the most active morning for banding during the summary period – 134 individuals of ten species were captured. Kinglets led the way with 43 Golden-crowned and 19 Ruby-crowned banded, along with 25 banded Yellow-rumps, 12 American Goldfinches, and 9 Hermit Thrushes. Other highlights included 35 Horned Grebes, 272 American Crows, and a single Clay-colored Sparrow. Some of the effects of Hurricane Sandy were felt on the 29th, with continuous rain throughout the day and north winds building to 50 knots by late-afternoon. The netting effort was a write-off and just the census was completed. While just 38 species were recorded, they included a season-high 46 Song Sparrows and 2 Cave Swallows. The final two days of the month saw the continuation of steady rain and powerful north winds and just the census and a few netting hours were completed. Despite the less than ideal conditions, a nice variety of birds in moderate numbers were noted including the first Snow Buntings and Lapland Longspurs of the Fall on October 30th, and 40 Tundra Swans on the 31st.

November 1st – 15th, 2012

There were lots of birds around during PIBO's final two weeks of coverage and migrants continued to move through the area in good numbers right up to the 15th. In all, 79 species were noted at Fish Point during the summary period and 336 birds of twenty-four species were banded. Although the banding effort wrapped up on the 8th, it was our busiest week of netting at the station in November since operations began in 2003. The month started off on an active note when 48 species were tallied on the 1st and 140 individuals were captured. A variety of species were present in significant numbers including 43 Horned Grebes, 21 Tundra Swans, 152 Golden-crowned Kinglets, 45 Yellow-rumped Warblers, and 57 Dark-eyed Juncos. Some rain on November 2nd didn't affect the netting effort and another 116 birds were captured and 51 species were documented. The 3rd saw another good push that included 10 Red-tailed Hawks along with 340 American Crows, the first Orange-crowned Warbler of the fall, and nine sparrow species. The netting area was active, too, with 67 birds of thirteen species banded, including 31 "Myrtle" Warblers.

Pele Island Bird Observatory – 2012 Year-end Report

While activity in the netting area tapered off after the 3rd, a steady stream of birds continued to move through the area. Highlights from the 4th – 10th included 6 Purple Finches banded on November 4th, the first Eastern Meadowlarks and Common Redpolls on the 6th, a record late Great Crested Flycatcher (7th), 106 Horned Grebes (8th), and a single White-winged Crossbill on November 10th – a first for the station. Some rain and the season's first snow flurries put a damper on things on November 11th and 12th, but the cold weather and light north winds made for PIBO's busiest owl night ever on the 13th. In all, 27 Northern Saw-whet owls were captured on the evening of the 13th, including a surprising 3 foreign encounters (birds originally banded at another location). Data from the banding office revealed that the three birds were originally banded at 1) Long Point, Ontario, 2) Cobalt, Ontario, and 3) Cook County, Minnesota. The final two days of the migration monitoring season saw a wonderful variety of birds both on the morning census at Fish Point as well as around the PIBO cottage. Birds noted on the census over the two days included 45 Tundra Swans, 500 scaup, 4 Hooded Mergansers, a Golden Eagle, and two more White-winged Crossbills. Additional species observed around the cottage included the first Black Scoter of the fall, hundreds of Buffleheads, Common Goldeneyes, Redheads, 2 Sanderlings, and 2 Cave Swallows.

Table 2 – Fall Coverage Effort

Description	2012	2011	2010	2009	2008	2007	2006	2005
Coverage	Aug 1-Nov 15	Aug 1–Nov 15	Aug 1-Nov 15	Aug 1-Nov 15	Aug 1-Nov 15	Aug 1–Nov 15	Aug 7–Nov 15	Aug 4–Nov 14
Coverage days	107	107	107	107	107	107	101	102
Netting period	Aug 13-Nov 8	Aug 11-Nov15	Aug 4-Nov 10	Aug 5-Nov 11	Aug 3-Nov 11	Aug 1–Nov 13	Aug 8–Nov 15	Aug 9–Nov 11
Netting days	80	81	90	90	92	n/a	82	89
Birds banded	2909	1639	2788	2471	2711	2035	3426	4325
Net hours	2816	2250	2837	3002	3149	3366	2435	3137
Birds/net hour	1.03	0.73	0.98	0.82	0.86	0.61	1.41	1.39
Species banded	65	65	74	72	69	74	74	82
Recaptures	130	33	61	59	56	60	77	112
Species recaptured	25	14	18	15	18	18	17	25
Species recorded	176	167	166	172	171	178	174	180

Table 3 – Combined Spring and Fall Coverage Effort

Description	2012	2011	2010	2009	2008	2007	2006	2005
Coverage	Apr 4-Jun 10 Aug 1-Nov 15	Apr 4-Jun 8 Aug 1-Nov 15	Apr 2-Jun 10 Aug 1-Nov 15	Apr 1-Jun 10 Aug 1-Nov 15	Apr 3-Jun 14 Aug 1-Nov 15	Apr 1-Jun 15 Aug 1-Nov 15	Apr 2-Jun 8 Aug 7-Nov 15	Apr 5-Jun 6 Aug 2-Nov 14
Coverage days	174	173	177	178	180	183	168	163
Netting period	Apr 13-Jun 15 Aug 13-Nov 8	Apr 12-May31 Aug 11-Nov15	Apr 2-May 28 Aug 4-Nov 10	Apr 2-May 24 Aug 5-Nov 11	Apr 5-Jun 10 Aug 3-Nov 11	Apr 2-Jun 1 Aug 1-Nov 15	Apr 15-Jun 7 Aug 8-Nov 15	Apr 6-Jun 5 Aug 9-Nov 11
Netting days	123	119	139	134	147	139	117	144
Bird banded	3772	2404	3498	3296	3505	2672	4459	5490
Species captured	81	78	85	88	82	84	81	91
Net hours	4300	3356	4280	4643	5075	4739	3782	4795
Birds/net hour	0.88	0.72	0.82	0.71	0.69	0.56	1.18	1.14
Recaptures	130	103	126	136	151	126	145	259
Species recaptured	25	24	23	28	25	23	24	35
Species documented	201	203	193	198	194	205	201	199

Table 4 – Species and Forms Banded in 2012

Species	Spring	Fall	Total
Swainson's Thrush	29	518	547
"Myrtle" Warbler	80	318	398
Golden-crowned Kinglet		310	310
Hermit Thrush	28	171	199
Gray-cheeked Thrush	16	173	189
Magnolia Warbler	74	101	175
White-throated Sparrow	36	130	166
Ruby-crowned Kinglet	12	147	159
American Redstart	15	101	116
Ovenbird	34	68	102
Black-throated Blue Warbler	9	83	92
Nashville Warbler	63	15	78
Red-eyed Vireo	4	65	69
Veery	11	58	69
Brown Creeper		57	57
Red-winged Blackbird	57		57
American Goldfinch	2	47	49
Black-and-white Warbler	17	31	48
Blackpoll Warbler	1	40	41
Yellow Warbler	41		41
Gray Catbird	31	8	39
Common Yellowthroat	28	6	34
Dark-eyed Junco		32	32
Chestnut-sided Warbler	20	11	31
House Wren	15	12	27
Red-breasted Nuthatch		26	26
Downy Woodpecker	6	19	25
Northern Waterthrush	9	16	25
Swamp Sparrow	16	7	23
Winter Wren		22	22
Northern Saw-whet Owl		20	20
Western' Palm warbler	20		20
Black-throated Green Warbler	19		19
Yellow-bellied Flycatcher	6	13	19
Blue-headed Vireo	3	15	18
American Robin	13	4	17
Philadelphia Vireo	2	15	17
Sharp-shinned Hawk		17	17
Tennessee Warbler	9	7	16
Common Grackle	12	2	14
Canada Warbler	5	8	13
Wood Thrush	9	4	13
Indigo Bunting	9	3	12
Black-capped Chickadee		11	11
Mourning Warbler	6	5	11
Song Sparrow		11	11
Blue Jay	2	8	10
Northern Cardinal	3	7	10
Wilson's Warbler	8	2	10
Bay-breasted Warbler	4	5	9
Blackburnian Warbler	2	7	9
Eastern Phoebe		9	9
Fox Sparrow		9	9
Purple Finch		9	9
Baltimore Oriole	6	2	8

Pelee Island Bird Observatory – 2012 Year-end Report

Eastern White-crowned Sparrow	3	5	8
Eastern Screech-Owl		7	7
Least Flycatcher	7		7
Rose-breasted Grosbeak	6	1	7
Yellow-shafted Flicker		7	7
Trail's Flycatcher	6		6
Lincoln's Sparrow	5		5
Ruby-throated Hummingbird	2	3	5
Cape May Warbler	1	3	4
Carolina Wren		4	4
Yellow-bellied Sapsucker	2	2	4
Blue-winged Warbler	3		3
Orange-crowned Warbler	2	1	3
Acadian Flycatcher	2		2
American Tree Sparrow		2	2
Brown-headed Cowbird	2		2
Connecticut Warbler		2	2
Hooded Warbler	2		2
Northern Parula	1	1	2
Warbling Vireo	2		2
Worm-eating Warbler	2		2
Black-billed Cuckoo	1		1
Brown Thrasher		1	1
Eastern Towhee	1		1
Golden-winged Warbler		1	1
Red-bellied Woodpecker	1		1
Rusty Blackbird	1		1
Total Banded	863	2825	3772
Species	63	65	81
Net-hours	1484	2816	4300
Birds/Net-hour	0.58	1.01	0.88
Includes birds captured but not banded			

Northern Saw-whet Owl Monitoring

PIBO's autumn Saw-whet Owl monitoring program was carried out on twelve nights during the period October 20th to November 20th. Five mist-nets were erected at the south end of Stone Road on property under the stewardship of the Essex Region Conservation Authority and operated approximately four hours each night for a total of 313 net-hours. The average catch-rate over twelve nights was 0.18 birds/net-hour. Of the 61 birds captured, a remarkable six individuals were already banded! While not all the original banding data is available, some of the birds were banded in previous years at locations including Minnesota, Indiana, Pennsylvania, and Northern Ontario.

Table 5 – Northern Saw-whet Owls banded in 2012

Date	Banded	Retrap	Net-hours	Birds/net-hour
20 Oct	0		14	0
21				
22				
23				
24				
25				
26				

Pelee Island Bird Observatory – 2012 Year-end Report

27	1		15	0.07
28				
29				
30				
31				
1 Nov				
2				
3	1		12.5	0.08
4	4		21	0.19
5				
6	0		19	0
7	6		30	0.21
8	2	1	26	0.12
9				
10	2		12.5	0.16
11				
12				
13	25	4	56.5	0.51
14				
15	8	1	39	0.21
16	4		35	0.11
17				
18				
19				
20	2		32.5	0.06
Total	55	6	313	Av. 0.18



Breeding Birds

It was an active summer on the island and PIBO staff and volunteers kept busy conducting a variety of population monitoring surveys. These studies are part of PIBO's long-term Breeding Birds of Pelee Island (BBPI) project, launched in 2006. The goal of the BBPI is to generate data on the current status of the breeding bird communities on Pelee, with an emphasis on provincial, national and international priority species, and to establish permanent survey points for ongoing research designed to monitor changes over time. The results of the BBPI, including those summarized in this report, have produced an accurate inventory of the birdlife on Pelee and a framework for monitoring changes resulting from current and future habitat-restoration projects at the sites. Long-term studies will also measure changes brought about by a variety of other influences ranging from natural succession to climate change.

PIBO conducted several standardized surveys during the bird breeding season on properties under the stewardship of the Township of Pelee Island, Ontario Parks, the Nature Conservancy of Canada, Ontario Nature and the Essex Region Conservation Authority. Monitoring methods included point count surveys following the Ontario Atlas of Breeding Birds protocol, SAR transect surveys using playback tapes, Marsh Bird & Amphibian Monitoring Program surveys, and Chimney Swift population monitoring following the Bird Studies Canada (BSC) protocol. Standardized Monarch Butterfly migration counts were carried out from August to November. Excluding the Monarch and Cricket-Frog surveys, four PIBO staff and volunteers compiled 43 field-hours during the summer breeding bird fieldwork season.

Point-count Surveys

A total of eleven point-count sites situated on Nature Conservancy of Canada and Ontario Parks property were surveyed for five minutes each in early-June and again towards the end of the month. These monitoring efforts are part of PIBO's long term Breeding Birds of Pelee Island project.

Marsh Bird & Amphibian Monitoring

In 2012 PIBO completed its sixth consecutive year of marsh bird and amphibian monitoring coverage at Lighthouse Point and Fish Point Provincial Nature Reserves, Pelee Island. In addition to recording the general abundance and diversity of marsh birds nesting at Lighthouse Point, the bird surveys have produced yearly records for the secretive Least Bittern (Threatened). Three Least Bittern territories were identified in 2012. The amphibian surveys have been conducted regularly now since 2008.



Species at Risk Transect Surveys

PIBO staff carried-out walking transect surveys this June in suitable habitat and played recordings of a number of Species at Risk in an effort to identify new breeding territories. While participants focused on looking for chat territories, some additional time was spent using the play-back tape for Acadian Flycatcher and Henslow's Sparrow, among others. Two, and possibly three, chat territories were identified in 2012.

Chimney Swift Population Monitoring

All data collected during the population monitoring studies of Chimney Swifts in 2012 was submitted to the BSC Swift Watch program as well as the Ontario Natural Heritage Information Centre.

Species at Risk (SAR)

The Pelee Island Bird Observatory is involved in a long-term stewardship strategy to monitor and conserve habitat for multiple Species at Risk and neotropical migrants on Pelee Island, a designated Important Bird Area (IBA). With funding received through the OMNR Species at Risk Stewardship Fund, PIBO was able to hire a temporary SAR Coordinator to implement community-based stewardship projects, specifically educational programs, but also research-related studies that support Pelee's globally significant biodiversity. PIBO completed several SAR research projects in 2012 that will contribute valuable data to recovery and management plans for a variety of species found on Pelee Island including Prothonotary Warbler (Endangered), Chimney Swift (Threatened), Bald Eagle (Special Concern), Least Bittern (Threatened), and Yellow-breasted Chat (Special Concern), among others.

The following table documents all Species at Risk recorded in 2012 on Pelee Island by PIBO staff and volunteers, including local breeding birds and birds detected on spring and fall migration. Some totals – Bald Eagle for instance – represent multiple counts of the same local nesting birds.

Table 6 – Species at Risk documented on Pelee Island in 2012

Common Name	PIBO Records for 2012 (Banded)	Status
Passenger Pigeon	0	Extinct
Greater Prairie-Chicken	0	Extirpated
Eskimo Curlew	0	
Acadian Flycatcher	7 (1)	Endangered
Barn Owl	0	
Golden Eagle	1	
Henslow's Sparrow	0	
King Rail	0	
Kirtland's Warbler	0	
Loggerhead Shrike	0	
Northern Bobwhite	0	
Piping Plover	0	
Prothonotary Warbler	2	
Red Knot <i>rufa</i> subspecies	0	
American White Pelican	0	Threatened
Barn Swallow (Federally THR)	1108	
Bobolink	189	

Pelee Island Bird Observatory – 2012 Year-end Report

Cerulean Warbler	1	
Chimney Swift	44	
Eastern Meadowlark (Federally THR)	5	
Least Bittern	4	
Peregrine Falcon	8	
Whip-poor-will	0	
Bald Eagle	244	Special Concern
Black Tern	0	
Canada Warbler	57 (30)	
Common Nighthawk	0	
Golden-winged Warbler	1	
Hooded Warbler	3 (2)	
Horned Grebe	606	
Louisiana Waterthrush	0	
Olive-sided Flycatcher	0	
Rusty Blackbird (Federally SC)	570 (3)	
Red-headed Woodpecker	12	
Short-eared Owl	0	
Yellow Rail	0	
Yellow-breasted Chat	2	

Table 7 – PIBO 2012 Summer Avian SAR Records on Pelee Island

Prothonotary Warbler

Breeding status: Probable
Territories: 1
Breeding evidence: Singing male on territory, female, nest building; breeding success indeterminate
Observation dates: May 4, 12, 13, 20, 26, 30, June 7, 23
Location: Fish Point PNR, same location as 2010 and 2011 Coordinates: n/a
Comments: Partially built nest found in one box

Yellow-breasted Chat

Breeding status: Possible
Territories: 2
Breeding evidence: Two male chats seen in suitable nesting habitat in response to playback tape
Observation dates: June 22, June 23
Location: Stone Road Alvar Conservation Area: Essex Region Conservation Authority, Ontario Nature, Nature Conservancy of Canada. Coordinates: n/a
Comments: One bird observed on territory from previous years and one male heard in new area.
No nesting evidence at former known sites at Brown's Road, Nature Conservancy of Canada, or Pelee Island Winery property on East - West Road

Chimney Swift

Breeding status: Probable
Territories: 2
Breeding evidence: Two pairs observed entering two chimneys during breeding season

Pelee Island Bird Observatory – 2012 Year-end Report

Observation dates: June 3, 10, 18, 26
Location: West Shore Road at ferry dock. Coordinates: n/a
Comments: 2 known sites from previous years

Barn Swallow

Breeding status: Confirmed
Territories: Numerous
Breeding evidence: Nests with eggs, fledged young
Observation dates: Numerous
Location: Various sites
Comments: At least 15 nest sites at various locations including PIBO cottage

Eastern Meadowlark

Breeding status: Possible
Territories: 1
Breeding evidence: Observed in suitable habitat during nesting season
Observation dates: June 19, 23
Location: East-west Road and Centre Dyke Road. Coordinates: n/a
Comments: No confirmed records on the island from 2003 – 2012

Least Bittern

Breeding status: Probable
Territories: 3
Breeding evidence: Calling males in suitable habitat on numerous visits
Observation dates: May 29, June 13, July 2
Location: Lake Henry, Lighthouse Point Provincial Nature PNR Coordinates: n/a
Comments: Known former nesting site every year from 2006 - 2012

Bald Eagle

Breeding status: Confirmed
Territories: 2
Breeding evidence: Fledged young
Observation dates: N/A
Location: Same locations as previous years Coordinates: n/a
Comments: Information provided by property owners

Migration Monitoring and Species at Risk (SAR)

Using the format specified by the Ontario Natural Heritage Information Centre to report SAR sightings, every bird Species at Risk recorded by PIBO in 2012 was documented and submitted to NHIC. The observations were collected from both standardized migration monitoring as well as incidental sightings made by staff and volunteers.

Monarch Butterfly Migration

For the 10th consecutive fall season PIBO conducted standardized Monarch Butterfly migration counts at Fish Point Provincial Nature Reserve, Pelee Island. The surveys occur along a 2.25 km transect for a period of 90 minutes. In addition to the number of Monarchs observed, wind, temperature, visibility, and cloud cover are recorded. All Monarch records for 2012 have been submitted to the Ontario Natural Heritage Information Centre. It was a quiet time for Monarchs at Fish Point this Fall, with just 323 individuals counted from August 1st to November 15th. By comparison, in 2010 more than 1000 individuals were recorded in one day. PIBO is also investigating the opportunity to launch a Monarch tagging program with both staff and volunteers.

Table 8 – 2012 Monarch Butterfly migration counts

Day	August	September	October	November	
1	3	1	3	0	
2	0	9	0	0	
3	2	6	x	0	
4	1	6	1	0	
5	0	5	0	0	
6	0	5	0	0	
7	2	1	0	0	
8	0	1	2	0	
9	2	25	0	0	
10	3	9	0	0	
11	1	0	1	0	
12	3	0	0	0	
13	15	0	0	0	
14	0	0	0	0	
15	2	5	0	0	
16	2	5	0	x	
17	0	0	0	x	
18	2	0	0	x	
19	5	53	0	x	
20	5	0	0	x	
21	9	1	0	x	
22	4	4	1	x	
23	3	19	0	x	
24	1	35	0	x	
25	2	2	2	x	
26	11	0	0	x	
27	2	20	0	x	
28	4	x	0	x	
29	6	1	0	x	
30	8	x	0	x	
31	2		0		
Total	100	213	10	0	323

90-minute walking survey conducted at Fish Point, Pelee Island,
 from August 1st - November 15th, starting 1-hour after sunrise
 Total hours: 160.5
 x - survey not conducted



Blanchard's Cricket Frog Monitoring

Through a project with the Toronto Zoo, PIBO deployed twelve “frog loggers” at wetlands around the island that were programmed to record in 15 second clips throughout the day. While no cricket frogs have yet been detected for a number of years on the Island, this preliminary monitoring has been identified as a critical step in the recovery plan for the frog. Preliminary analysis has begun on the 2012 data and PIBO completed a full report on the data collection phase of the study in October.

The Blanchard's Cricket Frog is potentially extirpated from Pelee Island. Since 1977, there have only been unconfirmed reports of Cricket Frog sightings from Fox Pond in Fish Point Provincial Nature Reserve, Pelee Island. On October 18, 2011 a ground truthing of the wetlands on Pelee Island was conducted by staff from PIBO and the Toronto Zoo. The summary of their findings ranked habitats on the island that were deemed the most suitable for frogs, including the Blanchard's Cricket Frog.

Twelve monitoring devices were placed throughout Pelee Island in areas that were determined to be the most appropriate by the above mentioned group. The devices recorded the sounds in the area for thirty second intervals, every half-hour between 3:00 p.m. and 8:00 a.m., for approximately 2 months (from May 23 to July 20, 2012). The rationale being that this would be sufficient to indicate if a Blanchard's Cricket Frog was living in these particular habitats.

2012 Field Effort

The following staff, interns, and volunteers logged 1628 hours of fieldwork in 2012 during PIBO's 8-month research season. The totals include spring and fall migration coverage, summer breeding bird studies, marsh bird monitoring, monarch butterfly migration counts, Species at Risk research, and amphibian surveys, not including the Blanchard's Cricket-Frog project.

Table 9 – 2012 Field Effort

2012 Field Effort	Spring Hours	Summer Hours	Fall Hours	Total Hours	Total Days
Sumiko Onishi	239	12	398	649	164
Graeme Gibson	125	25	237	387	172
Sachiko Schott			312	312	66
Ryan Henderson	20	6	105	131	35

Claire Sanders	52		47	99	31
Michelle Bondy			27	27	12
Rhonda Donley			17	17	3
Eric Ororz			3	3	1
Abby Ororz			3	3	1
Peter Coe	1			1	1
Total	436	43	1149	1628	485

SECTION TWO – EDUCATION AND OUTREACH

In-school Programming

For the third year in a row PIBO delivered in-class, curriculum-based, and interactive presentations to local schools. To promote the program we visited local schools and delivered a poster to teachers with details of the program. We also sent the poster to the Greater Essex County District School Board Teacher Consultant for Science, who officially approved our programming, and distributed the poster to all science teachers in the Board.

The SAR Education Coordinator visited ten schools, reaching students from kindergarten to Grade 12 (Table 1). The presentations covered SAR, highlighting the SAR in Essex County and on Pelee Island, along with our work at PIBO monitoring migratory birds and SAR in the area, as well as how students can act as environmental stewards to protect Essex County's unique natural heritage. The high school presentations also included information about volunteer opportunities to encourage students to actively participate in local conservation efforts.

Each presentation, whenever time permitted, had a hands-on component. For elementary students (JK to grade 3) this was a bird-themed craft and a scavenger hunt for pictures of local native species, including SAR. For high school classes we did a mapping activity where students were given bird banding encounter data and were asked to plot it on the map of the Western Hemisphere. This activity led to group discussions about the connectivity of continents and the conservation challenges that are associated with working with migratory birds that require protections in two continents. When class sizes were too large for the mapping activity (i.e. when multiple classes were in attendance), they were shown an educational video produced by PIBO about the importance of Essex County as a stopover location for migratory birds, and the work that PIBO does to monitor migratory birds and SAR.

Table 10 – Schools visited with educational programming

Date	School	Number of Classes	Number of Students	Location
26 Sept	L'Ecole Secondaire L'Eclair	3	69	Tecumseh, ON
5 Oct	Harrow District High School	2	44	Harrow, ON
17 Oct	Kingsville District High School	3	57	Kingsville, ON
18 Oct	Essex District High School	3	61	Essex, ON
19 Oct	Leamington District High School	8	186	Leamington, ON
25 Oct	Catholic Central High School	5	111	London, ON
30 Oct	Cardinal Carter Catholic High School	7	115	Leamington, ON
5 Nov	Pelee Island Public School	2	9	Pelee Island, ON
21 Nov	St. John Elementary School	3	49	Windsor, ON
10 Dec	Holy Names Catholic High School	7	160	Windsor, ON
TOTAL		43	861	

Student Evaluations

To evaluate how much students learned from the in-class presentations, a short, 10-question quiz (Appendix 2) was given to high school students after the presentation. In total, 156 students completed the quiz representing Grades 9 through 12, and ESL, locally developed, applied, and academic classes. The average score was 83%, and 67% of students scored 80% or higher. Elementary school students were more difficult to formally evaluate in a short period of time, given their age (as young as 4 years old). They were asked questions throughout the presentation, and in general provided correct answers and engaged in age level-appropriate discussions about the environment and conservation. Overall, we received an extremely positive response from students of all ages and, in the future, we'd like to further develop our evaluation methods, with one option being an online quiz/survey, which would save paper and also allow us to increase our sample size.

Teacher Evaluations

Teachers were provided with a short questionnaire to evaluate our in-class program. Teachers were asked to score from 1 (poor) to 5 (excellent) various aspects of our presentation. The results of the teacher evaluations are below.

Table 11 – Average scores on teacher evaluations

Presentation objective	Rating (1 – 5)
Encourage students to develop positive attitudes toward nature	5
Met curriculum objectives	4.88
Help students to gain a better understanding of SAR & Migratory birds	5
Professional teaching demeanor of presenter	5
Teaching appropriate to age level	5
Knowledge of subject matter of presenter	5
Enthusiasm of presenter	4.88

In addition to the questions listed in Table 11, teachers were also asked the following:

- 1) Were your expectations of the presentation met?
- 2) Would you like to see this presentation given to your class again in the future?
- 3) Would you recommend this presentation to other teachers?

All teachers responded “yes” to each of these questions, and many provided additional comments, listed below.

- “Michelle was terrific – attracted and retained audience’s attention and presented engaging information – really sparked interest in my students.”
- “Wonderful!!! Thanks!!!”
- “Valuable presentation, thank you.”
- “This is the second time I’ve had a PIBO representative to my classroom, and Michelle certainly upheld the high standard of expertise I experienced during last year’s visit! Students were engaged and challenged by topics presented – two things we look for in the presentations we take part in. Michelle was particularly accommodating when addressing the needs of our English as a Second Language (ESL) students. We look forward to have PIBO back in the future!”
- “Michelle had a great rapport with all 3 classes and got the students engaged and interested.”
- “Michelle was fabulous. The students participated enthusiastically.”
- “Very good. Informative. Was an excellent addition to our ecology unit.”

On-site programming (Field trips to Pelee Island)

Students from two local schools (L'Ecole Secondaire L'Essor and Harrow District High School) came to Pelee Island and participated in PIBO's on-island educational programming. Students visited the PIBO banding station, located in Fish Point Provincial Nature Reserve. At the banding station, PIBO biologists demonstrated the banding process for students and explained that bird banding is an important counting tool to monitor migrants, including avian SAR. Students from L'Essor also took part in a nature scavenger hunt in the Nature Reserve, allowing them to explore the park, home to many SAR. The field trip to Pelee Island complemented the in-class programming (which the students took part in before visiting the island) in that it brought to life the concepts explained in the presentation, and students were able to interact with PIBO biologists as they banded birds.



Video conferencing



While PIBO staff welcome and encourage teachers to bring their classes to Pelee Island to participate in our on-island programming, we realize this isn't always possible given the transportation and financial obstacles involved. However, we see the educational value in students having opportunities to see conservation in action and be able to interact with biologists in the field. As a result, in 2012 we launched a video conferencing program and conducted a pilot with a local school (Kingsville District High School). The students with whom we video conferenced had already participated in our in-class programming, much like students typically would before they visit us Pelee Island (see above). However, we hope to use video conferencing with schools that are too far for the SAR Education Coordinator to visit in person, allowing us to expand the reach of our programming.

During the video conference, students were introduced to the PIBO biologists, and then observed PIBO Managing Director Graeme Gibson, the younger, as he banded songbirds. The students also had many opportunities to ask questions and interact with the PIBO biologists. The PIBO staff and the Kingsville students and teacher (Ms. J. Plumb) found the experience enjoyable and educational.

Essex County Field Naturalists' Club Meeting

In October, PIBO staff (including the SAR Coordinator) gave a presentation about our work for the Essex County Field Naturalists' Club. The presentation largely covered our migration monitoring program, but the SAR Coordinator's portion of the presentation focused on some of the SAR we study at PIBO – Prothonotary Warblers, Yellow-breasted Chats, Least Bitterns, Chimney Swifts, and Northern Cricket Frogs. For each example we discussed the history of the species in Essex County and on Pelee Island, conservation issues, recovery plans, and current population trends in the area. Feedback from the presentation was very positive. The PIBO presentation was also attended by a student reporter from the St. Clair College Journalism program, who wrote a piece about the presentation in the student paper, *The Converged Citizen* (Appendix 4).

Communications

PIBO produces a newsletter - *The Auspice* – with three issues a year and, once again this year, our fall issue was the "Species at Risk Edition". The SAR Coordinator contributed an article highlighting the SAR educational programming we delivered to local schools. The SAR Coordinator also wrote about selected SAR that we encountered and monitored on Pelee Island in 2012. A copy of the *Auspice* was sent to over 400 subscribers and copies were delivered to each of the schools visited by the SAR Coordinator in 2012.

The SAR Coordinator also wrote multiple short (1/4 page) articles published in the *Grapevine*, the Pelee Island Community Newsletter. The articles summarized the work we completed in 2012, including SAR educational programming, SAR projects, and migration monitoring.

Twitter, Facebook and Website Redesign

This past October PIBO unveiled our newly redesigned website. The SAR Coordinator contributed content to the new website including the Environmental Education Programs page, the SAR section, and the "Rare species sightings" page, which includes many SAR. The SAR Coordinator also used Twitter to post updates about our migration monitoring and other work at PIBO, including SAR info. Both the website, Facebook, and Twitter have been extremely useful tools to reach a larger audience and inform the public about conservation efforts on Pelee Island.

Future Directions

- PIBO will continue to reach out to local schools with our island and in-class programs and continue to develop and expand our educational video-conference project to get our message out farther afield.
- The observatory will continue to promote and distribute our 15-minute educational video about birds, bird migration, and conservation, to schools and other educational centres, including recent discussions with the Royal Ontario Museum.

- PIBO will continue to collect long-term data on the significant breeding bird populations on Pelee Island, including numerous Species at Risk, and carry out long-term migration monitoring at Fish Point Provincial Park.
- The observatory has reached an agreement with the Toronto Zoo to assist with Blanchard's Cricket-Frog monitoring on Pelee Island in 2013 and 2014.
- PIBO will summarize ten years of historic data for newly-listed SAR (Eastern Wood-Pewee and Wood Thrush) in 2012 for submission to the Ontario Natural Heritage Information Centre.
- The observatory is currently preparing an official 3-year plan that will include a proposal for the further development of our Species at Risk research and education programs, including future funding sources.
- Another 'Friends and Supporters of PIBO' fundraising dinner will be held in Windsor in May 2013. The evening will include a reading from Giller Prize-winning author Elizabeth Hay, a bucket raffle, and lots of good food and drink.
- Another PIBO island barbecue get-together will take place at the PIBO cottage in May.
- Plans are in place this spring for an inaugural PIBO bird-watching tour to Cuba to help raise funds for the observatory's research and education programs.

Acknowledgements

A special thanks to all the PIBO supporters and volunteers who helped make 2012 a success!

Funding Partners

Margaret Atwood
Balzac's Coffee Roasters
The Chandisherry Foundation – In memory of Letitia Graybiel
Earlaine Collins
EJLB Foundation
D&M Publishers
Elizabeth Denny
David Jiles & Carol
The Donner Canadian Foundation
Fleck Family Foundation
George Cedric Metcalf Charitable Foundation
Graeme Gibson, the Elder
Henry White Kinnear Foundation
House of Words
McLean Foundation
Mountain Equipment Co-op
OLG
Ontario Ministry of Natural Resources Species at Risk Stewardship Fund
Ontario Ministry of Natural Resources Community Fisheries and Wildlife Involvement Program
Walter Schmoranz & The Pelee Island Winery
PIBO Friends & Supporters under \$1000
Rosamond Ivey & Susan Ivey Cook
Rosemary Speirs
The Schad Foundation
The Small Change Fund
TD Bank Group
TD Friends of the Environment Foundation
Tides Canada
The W. Garfield Weston Foundation

Project Partners

Bird Studies Canada - Canadian Migration Monitoring Network
Essex Region Conservation Authority
Explore Pelee
Greater Essex County District School Board
Nature Conservancy of Canada
Ontario Parks
Pelee Island Heritage Centre & Museum
Toronto Zoo
Township of Pelee

Photos thanks to Sumiko Onishi and Ryan Henderson

Appendix 1: Student Evaluations



PIBO Migration and Species at Risk Quiz

Part I. Select the correct answer:

1. Which of the following groups contains the greatest number of Species at Risk in Essex County?

- A) Mammals B) Molluscs C) Plants D) Birds

2. What percentage of Canada's Species at Risk can be found in the Carolinian Zone?

- A) 10% B) 95% C) 26% D) 50%

3. According to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) what are the designations for Species at Risk in Canada?

- | | | |
|-------------|-----------------|-------------------------------|
| A) Abundant | B) Extinct | C) Rapidly Growing Population |
| Common | Extirpated | Slowly Growing Population |
| Uncommon | Endangered | Stable Population |
| Rare | Threatened | Slowly Decreasing Population |
| Very Rare | Special Concern | Rapidly Decreasing population |

4. Which of the following are causing declines in bird populations?

- A) Deforestation/habitat loss B) Bioaccumulation and biomagnification of pesticides
C) Building collisions D) Invasive species E) All of the above

5. Birds are indicator species because:

- A) They are more sensitive to pollution than humans are
B) Their health reflects how healthy the environment they live in is
C) Their populations grow and decrease according to the health of their environment
D) They are not affected by habitat changes
E) All of the above
F) A, B and C are correct

Part II. True or False

- | | | |
|---|---|---|
| 1. Bird Populations have decreased 50% over the last 40 years | T | F |
| 2. Essex County is an important stop over site for birds across Canada because it is where two main migratory routes meet | T | F |
| 3. Habitat destruction only affects birds in Canada | T | F |
| 4. The Carolinian Zone is the most common biome in Ontario | T | F |
| 5. Good habitat at stop over sites helps the birds during their migration | T | F |

Bonus: List 3 things you can do to help bird populations

Appendix 2: The Species at Risk section of the fall 2012 'Auspice' newsletter



PIBO

Pelee Island Bird Observatory

The Auspice

Species at Risk Edition

PIBO's 10th Anniversary!

Fall 2012

Founder
G. Gibson

Founding Patrons
Margaret Atwood
Mysterious Starling Inc.
The Chantrelle Foundation

Patrons
G. Gibson, the Elder
The Henry White Kinnear Foundation
Rosamond Ivey
Suzanne Ivey Cook

Major Supporters
Balzac's Coffee Roasters
EJLB Foundation
D&M Publishers Inc.
David Iles & Carol
Elizabeth Denny
Donner Canadian Foundation
George Cadric Metcalf
Charitable Foundation
Henry White Kinnear Foundation
Fleck Family Foundation
House of Words
McLean Foundation
Mountain Equipment Co-op
OJG
Ontario Ministry of Natural Resources Species at Risk Stewardship Fund
OMNR Community Fisheries and Wildlife Involvement Program
Ontario Trillium Foundation
Pelee Island Winery
Rosamond Ivey & Susan Ivey Cook
Rosemary Spains
The Sched Foundation
TD Friends of the Environment Foundation
Tides Foundation
Garfield Weston Foundation

Encouraging Environmental Stewardship in Schools

by Michelle Bondy



Students from École l'Essor at Fish Point Nature Reserve before visiting the PIBO banding station

This fall PIBO delivered educational programming to students across Essex and Middlesex Counties. Our in-class presentations advanced in 2012 with visits to some new schools, allowing us to reach over 860 students in 43 classes. From kindergarten to Grade 12!

As in previous years, PIBO's 2012 message highlighted Essex County's rich natural diversity. Students were often surprised to learn that the region is a biodiversity hotspot and that the Carolinian Forest biome (which includes Essex) is home to over 75% of Ontario's Species at Risk (SAR). At the same time, Essex is heavily developed, with only 7.5% of its natural habitat remaining. These, and other regional perspectives, helped students appreciate the importance of local environmental stewardship and protection.

Many of the teens were aware of the major reasons why species are declining (habitat loss, invasive species, pollution), but few realized how many migratory birds we lose each year due to collisions with high-rise buildings – an estimated 900 million in North America! Students learned that changing a small habit – turning lights off at night – can save millions of birds annually.

In addition to our Species at Risk presentations, we hosted two groups at our migration-monitoring/bird banding lab at Fish Point. Students from École l'Essor in Tecumseh and Harrow District High School were invited to the island to visit the field station and explore Pelee. Having already taken part in our in-class programming, the students were eager to interact with PIBO staff and volunteers and observe the banding process first hand. The group learned about why so many migrants pass through Southwestern Ontario, as well as the importance of protecting 'stopover' sites like Pelee Island and other green places, where migrants can rest and refuel before continuing on their spring and fall journeys.

While PIBO always looks forward to seeing visitors at the field site, we know it's impractical for school groups to make the trip to Pelee Island. But we recognize the value for students of interacting with biologists and seeing migration 'in action', so we decided to launch a video-conference project!

PIBO teamed up in November with Joanne Plumb's Grade 9 Geography class at Kingsville District High School for a live video presentation, and it was a great success! Ms Plumb commented: "It was amazing to be watching you on Pelee from the classroom – it doesn't get much more real than that!" PIBO staff and volunteers captured and banded a number of songbirds during the linkup and answered questions about birds and bird migration. Everyone at PIBO enjoyed the experience and we look forward to expanding the program next year. A big thanks to Joanne and her class for participating!

Special thanks to the Ontario Ministry of Natural Resources Species at Risk Stewardship Fund for providing funding for these school visits and Michelle's position at PIBO



Species at Risk on Pelee

Pele Island is home to many Species at Risk. Here is a small sample of some of the species we monitor at PIBO.

Yellow-breasted Chat (Special Concern)

While still not uncommon in the U.S., the estimate for the Canadian 'Eastern' Yellow-breasted Chat population is as low as 42 breeding pairs. In Canada, breeding chats can be found in Southern B.C., the prairies, and Southwestern Ontario. From 2003 to 2012, PIBO has identified at least seven breeding pairs on Pelee. The Pelee Island population is significant, representing perhaps one-third of the Ontario population. The main threat to chats is habitat loss due to succession, as they prefer areas overgrown with scrub and thickets. Though PIBO had no confirmation of breeding in 2012, there was 'probable' evidence at two sites where chats have previously bred. We hope for more chat sightings in the future!



The new Blanchard's Cricket Frog display at the Pelee Island Heritage Centre (Photos courtesy of display designer Scott Hughes)

Blanchard's Cricket Frog (Endangered)

We study more than birds at PIBO! Pelee Island is home to the last known Canadian population of Blanchard's Cricket Frog. This tiny amphibian, known for its cricket-like call, is common in the U.S. but extremely rare in Canada. Extirpated from Point Pelee in the 1920s, the last confirmed sighting of a cricket frog on Pelee Island was in the 70s, though there have been unconfirmed sightings as recently as 1997. This year, PIBO partnered with the Toronto Zoo to place recording devices at twelve locations on Pelee suitable for frogs. Unfortunately, after extensive analysis, there were no calls recorded belonging conclusively to Blanchard's Cricket Frog.

Least Bittern (Threatened)

The Least Bittern is the smallest heron in the Western Hemisphere and is extremely secretive, more often

heard than seen in its marsh habitat. Breeding populations of Least Bitterns can be found from Southern Canada (mostly Southern Ontario) to South America. The biggest threat to the Least Bittern is the drainage of wetlands, particularly for agriculture. While the majority of wetlands on Pelee were drained in the late 1800s, at least two remain (Lighthouse Point and Fish Point Provincial Nature Reserves). Over the years PIBO has monitored three active Least Bittern territories on the island. This past year, males were heard calling in suitable habitat on numerous occasions, indicating that the bitterns are still breeding on Pelee!

Ten Years After!



PIBO reached a milestone in November with the completion of ten years of research, education, and community outreach on Pelee Island. Over the years the observatory has collected a wealth of information that attests to the island's status as an Important Bird Area, its 'global' significance as a critical stopover site for migratory birds, and the national importance of Pelee's nesting bird communities.

Our objective has always been to advocate for wild birds by producing good science combined with a strong commitment to sharing our findings with the community. As a result, and despite Pelee's relative inaccessibility, the observatory reaches tens of thousands of adults and kids each year through our in-class presentations, bird banding demonstrations, live video-conferencing, the Auspice newsletter, weekly migration updates, Facebook, Twitter, and PIBO's website (www.pibo.ca).

We also share our research results with numerous government and non-government organisations including Environment Canada, the Ontario Ministry of Natural Resources, the Nature Conservancy of Canada, Bird Studies Canada, the Canadian Migration Monitoring Network, and many others. So here's to another ten prosperous years on Pelee!

Appendix 3: Educational Program Advertisement

In-School Program for Grades 1-12

Free
Program!

Discover Species at Risk in your community through this **free, curriculum-based, interactive** program, now in it's third year, offered by the Pelee Island Bird Observatory





Understanding Life Systems

- Learn about needs of living things, habitats & communities, biodiversity, and how organisms in the environment interact
- Assess local issues related to biodiversity and the benefits humans gain from biodiversity
- Examine impacts of technology on the environment; investigate how balance in local ecosystems has been altered

Sustainable Ecosystems, Diversity of Living Things, Population Dynamics

- Explore the dynamic nature of ecosystems, and assess the impact of human activity on the sustainability of ecosystems and the diversity of living things within.
- Understand what causes wildlife population declines, and how stewardship and conservation can prevent further declines
- Discover careers in environmental science and conservation



Species at Risk In Your Community

- Why do species become 'at risk'? What species are at risk in Essex County? How can you contribute to their recovery and protection? What is PIBO doing to help?

Come visit the Pelee Island Bird Observatory!



Threatened



Endangered



Endangered



Special Concern



Endangered

Program funded by Ministry of Natural Resources Species at Risk Stewardship Fund
BOOK NOW by contacting
 PIBO Species at Risk Coordinator, Michelle Bondy, intern@pibo.ca
 Pelee Island Bird Observatory
 585 South Shore Road, Box E2, Pelee Island, ON, N0R 1M0
www.pibo.ca



Appendix 4: Birds captured at Fish Point from 2003 – 2012

Birds captured at Fish Point (2003 - 2012)											
Species & Forms	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	Total
Swainson's Thrush	547	270	463	272	315	314	389	542	314	312	3738
Magnolia Warbler	175	203	244	289	349	236	617	410	337	335	3195
Golden-crowned Kinglet	310	110	229	244	312	168	218	766	312	151	2820
Ruby-crowned Kinglet	159	82	115	254	211	102	423	485	325	134	2290
Hermit Thrush	199	108	241	176	166	154	228	269	143	141	1825
"Myrtle" Warbler	398	85	168	109	168	143	154	270	156	131	1782
American Redstart	116	172	212	109	161	84	273	162	141	159	1589
Gray-cheeked Thrush	189	190	146	156	152	110	91	222	100	56	1412
White-throated Sparrow	166	53	70	87	112	72	105	146	137	118	1066
Ovenbird	102	87	131	111	95	77	119	107	82	73	985
Black-throated Blue Warbler	92	61	101	93	100	38	84	67	104	60	800
Veery	69	51	62	49	66	74	128	83	67	79	728
Nashville Warbler	79	33	71	46	53	64	67	127	57	90	687
Red-eyed Vireo	69	27	64	30	53	40	141	113	71	48	656
Black-and-white Warbler	48	77	65	44	57	49	146	71	38	39	634
Red-winged Blackbird	57	48	75	103	100	45	35	75	60	34	632
Yellow-bellied Flycatcher	19	27	32	61	76	32	79	134	58	39	557
Yellow Warbler	41	41	34	31	59	50	41	88	45	70	500
Chestnut-sided Warbler	31	26	43	33	39	40	117	75	45	45	494
Canada Warbler	13	50	59	36	50	38	54	60	24	44	428
Gray Catbird	39	31	33	32	39	44	51	48	43	64	424
Blackpoll Warbler	41	41	121	24	28	19	17	41	55	22	409
Common Yellowthroat	34	32	35	34	38	42	41	57	35	43	391
Northern Waterthrush	25	41	57	41	38	26	27	38	35	43	371
Brown Creeper	57	20	28	43	74	21	25	29	30	13	340
Winter Wren	22	13	22	44	48	26	21	80	48	14	338
Dark-eyed Junco	32	18	14	9	29	25	16	91	34	24	292
Tennessee Warbler	16	25	25	5	24	14	39	23	16	85	272
Wilson's Warbler	10	17	29	24	19	30	46	32	33	28	269
Least Flycatcher	7	14	11	13	12	30	36	73	18	51	265
House Wren	27	14	25	23	24	17	28	46	16	22	242
Common Grackle	14	16	54	12	33	15	6	23	18	24	215
"Traill's" Flycatcher	6	7	14	15	17	12	20	57	23	38	209
Blue-headed Vireo	18	17	10	20	16	14	26	36	28	17	202
Swamp Sparrow	23	14	6	12	20	15	2	27	31	17	194
American Goldfinch	49	3	13	2	46	6	4	41	10	14	188
Wood Thrush	13	12	19	11	21	27	24	18	18	12	175
Northern Saw-whet Owl	55	9	21	5	48	44	7	12	1		202
Philadelphia Vireo	17	5	12	8	3	8	27	35	31	15	161
Black-capped Chickadee	16	15	19	8	14	15	8	29	16	21	161
Downy Woodpecker	25	17	27	13	14	13	12	9	12	14	156
Sharp-shinned Hawk	17	24	26	12	14	16	7	11	8	12	147
Mourning Warbler	11	9	26	12	11	12	18	22	8	16	145
Blue Jay	10	5	11	9	14	17	3	50	8	13	140
American Robin	17	11	18	21	34	6	9	6	11	6	139
Blackburnian Warbler	9	14	9	10	6	10	33	31	5	9	136
Baltimore Oriole	8	24	2	20	6	6	12	23	9	15	125
Black-throated Green Warbler	19	14	10	8	10	10	21	7	14	10	123
Northern Cardinal	10	14	18	10	13	9	6	10	9	22	121
Song Sparrow	11	9	12	6	19	10	14	10	5	12	108
Lincoln's Sparrow	5	5	11	6	7	10	11	20	10	18	103
Bay-breasted Warbler	9	11	4	7	4	6	25	19	10	6	101
Indigo Bunting	12	4	9	6	6	9	8	19	4	20	97
Ruby-throated Hummingbird	5	14	7	9	7	7	11	15	4	1	80
"Western" Palm Warbler	20	3	4	5	6	4	1	5	14	2	64
Orange-crowned Warbler	3	5	5	6	1	5	7	4	17	10	63
E. White-crowned Sparrow	8	3	6	3	5	8	9	7	6	6	61

Pele Island Bird Observatory – 2012 Year-end Report

Fox Sparrow	9	4	7	2	6	3	9	14	3	2	59
Rose-breasted Grosbeak	7	8	1	3		3	3	12	13	5	55
Cape May Warbler	4	6	11	2	3	3	6	6	5	6	52
Red-breasted Nuthatch	26		6	2	1	8		5	2	1	51
Carolina Wren	4			1	3	5	9	7	5	13	47
Eastern Phoebe	9	3	1	13	6	2	4	5	3		46
Eastern Wood-Pewee		4	6	2	6	1	4	3	3	7	36
Blue-winged Warbler	3	1	3	2	3	1	5	3	9	4	34
Purple Finch	9		12	1	5	2		1	1	1	32
American Tree Sparrow	2	1	4		7	1	13	3			31
Brown-headed Cowbird	2	2	4	2	2		4	9	1	5	31
"Yellow-shafted" Flicker	7	2	4	5	3	3	1	2	1	2	30
Warbling Vireo	2			1	1		11	6	3	4	28
Northern Parula	2	1	3	1	7	2	6	1	2	2	27
Cedar Waxwing			6	4	5	2		1	2	2	22
Connecticut Warbler	2	2	1	1		2	4	3	2	3	20
Eastern Screech-Owl	7	1	2	1	1	2		1		1	16
Hooded Warbler	2	5	4		2	2	1				16
Rusty Blackbird	1		9	6							16
Brown Thrasher	1		2	2	1	1	1	3	2	2	15
Yellow-bellied Sapsucker	4			3	1		2	2	1		13
White-eyed Vireo			2	3			4	1	1	1	12
Scarlet Tanager		1	1			2	2	3		3	12
Golden-winged Warbler	1	1	3			1	3	1	1	1	11
Eastern Towhee	1		1	1		2	1	3	1	1	11
Chipping Sparrow		3				1		2	1	3	10
Yellow-breasted Chat				1	1	1	1	1	3	1	9
Field Sparrow					1	2		3	3		9
Yellow-billed Cuckoo					1		3		1	3	8
Black-billed Cuckoo	1				2			1	2	2	8
Great Crested Flycatcher				2			1	4		1	8
Orchard Oriole		1						1	1	5	8
Blue-gray Gnatcatcher		1	1						3	1	6
Red-bellied Woodpecker	1		2	1		1					5
Acadian Flycatcher	2		1		1			1			5
Worm-eating Warbler	2		1					1	1		5
Marsh Wren				2					1	1	4
Kentucky Warbler				1		1	2				4
"Brewster's" Warbler					2			1			3
Prothonotary Warbler		2						1			3
Eastern Kingbird									2		2
Yellow-throated Vireo		2									2
Tree Swallow			1	1							2
Louisiana Waterthrush				1		1					2
Summer Tanager								1		1	2
Cooper's Hawk		1									1
American Woodcock			1								1
Mourning Dove				1							1
White-breasted Nuthatch										1	1
European Starling					1						1
Grasshopper Sparrow						1					1
Pine Siskin							1				1
Total Captured	3710	2403	3498	2949	3534	2594	4288	5488	3388	3002	34849
Species & Forms	81	78	85	86	82	84	81	91	87	86	110
Net Hours	4296	3356	4280	4500	5075	4739	3782	4795	2452	3398	40673
Birds/Net Hour	0.88	0.72	0.82	0.66	0.71	0.55	1.13	1.14	1.38	0.88	0.89