Lesser Slave Lake

Bird Observatory

Slave Lake ▪ Alberta ▪ Canada

2013 Annual Report

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www.lslbo.org

2013 Executive Summary

The Lesser Slave Lake Bird Observatory (LSLBO) conducted its 20th year of bird population monitoring in the Lesser Slave Lake Provincial Park, Alberta, in 2013. The LSLBO focuses on bird conservation through research and education in collaboration with the Canadian Migration Monitoring Network / Réseau Canadien de Surveillance des Migrations (CMMN-RCSM), Alberta Parks, and other organizations and institutions. It operates three core monitoring projects: spring migration monitoring, fall migration monitoring and Monitoring Avian Productivity and Survivorship (MAPS); it also conducts northern saw-whet owl fall migration monitoring. The LSLBO contributes to additional research initiatives and has a strong educational component emphasising research and conservation.

This report summarizes all the LSLBO's activities during the 2013 field season. It focuses on the results of the spring and fall migration monitoring, MAPS, and northern saw-whet owl monitoring. It also touches on the additional research projects, including stable isotope feather collection for the University of Alberta and the Canada Warbler Project, as well as the educational events hosted at the LSLBO.

Spring migration coverage lasted for 47 days from April 25 to June 10. Visual counts were conducted daily and weather conditions allowed mist-nets to be set for 81% of the possible net hours. Over 58,000 birds from 152 species were recorded, including the LSLBO's first Eurasian Collared-Dove, which became the 251 species to be recorded at the station. It was a below average banding season, with 720 birds banded representing 41 species.

Fall migration coverage extended from July 12 to September 29 for 80 days of coverage. Visual counts were conducted daily and mist-nets were set for 84% of the possible net-hours. Over 45,000 birds representing 115 species were recorded during monitoring activities. Like the spring, it was a below average fall for banding with 1625 birds representing 58 species. The LSLBO banded its first belted kingfisher, representing the 104th species banded at the station.

The LSLBO operates four MAPS stations from June 11 to August 2. Banding at the MAPS sites was slow with 130 birds banded from 25 species, one of the lowest banding totals for the project at the LSLBO. Two new species were banded at MAPS sites; boreal chickadee and house wren. The breeding statuses for 59 species were determined during visits to MAPS sites.

Northern saw-whet owl fall migration monitoring was conducted on 42 nights from September 1 to October 25. It was a very slow owl season with 46 northern saw-whet owls captured, well below the average.

Table of Contents

2013 Executive Summary 1
Table of Contents 2
Contents 2
Migration Monitoring 3
Spring Migration 4
Daily Totals 5
Mist-netting 6
Net Productivity 7
Spring Migration Summary 8
Fall Migration 10
Daily Totals 11
Mist-netting 12
Net Productivity 13
Fall Migration Summary 14
Monitoring Avian Productivity and Survivorship (MAPS) 18
MAPS Banding 18
Breeding Status 20
Recaptures 21
Northern Saw-Whet Owl Monitoring 22
Determining Migration Timing through Stable Isotopes 23
Canada Warbler Project 23
Staff and Volunteers 24
Visitors and Education 25
Acknowledgements 26

Migration Monitoring

Migration monitoring is a method of monitoring bird populations from a fixed point. Observers combine data from standardized visual counts and constant effort mist-netting to estimate the number of migrants passing through the study area each day during the spring and fall. Daily estimated totals are used to create annual population indices, which are compared to previous years to derive long-term population trends. The Lesser Slave Lake Bird Observatory (LSLBO) has been conducting spring and fall migration monitoring since 1994; 2013 marks the 20th year of monitoring activities at the station. The LSLBO became a full member of the Canadian Migration Monitoring Network/ Réseau Canadien de Surveillance des Migrations (CMMN-RCSM) in 1999. The CMMN coordinates migration monitoring activities across Canada and provides support and resources to member stations, including population trend analysis.

Migration monitoring at the LSLBO follows the standardized protocols described in the 2003 Revised Lesser Slave Lake Bird Observatory Station Manual. These protocols ensure that comparable data is collected each year to create accurate population trends. The LSLBO employs the same monitoring techniques during both spring and fall migration. Although passerines and near-passerines are the primary focus of the LSLBO, all encountered bird species are recorded. Monitoring is conducted for a maximum of seven hours each day, beginning one half-hour before sunrise. A half-hour census is conducted once each day to document bird activity within the entire study site. A five minute visual migration count is conducted once every hour which focuses only on actively migrating birds. All other birds observed during the monitoring period outside the described counts are recorded as incidental observations. The LSLBO operates 12 standard mist-nets and 2 non-standard aerial nets (established in 2010) for a maximum of 98 net hours each day for bird banding. Mist-netting does not occur if the temperature is below 2°C, during periods of precipitation, or if the wind strength is above 3 on the Beaufort Scale.

Each day an overall code is assigned based on the actual migration coverage effort achieved during the count period (Table 1). Coverage code takes into account the skill of the observers and the amount of counting and mist-netting effort. All the listed requirements must be met to obtain a code. Observers should strive for the highest code possible with the available staff and weather conditions. The LSLBO aims to achieve a daily migration coverage code of 4, however often achieves a 3 on poor weather days.

Table 1. Criteria for daily coverage codes.

Code	Coverage	Field Hours	Census	#Vis-migs	%Mist-Netting	Requirements
0	None	0				No Activity
1	Casual	1	Yes	4	>10%	One of the three counts
2	Poor	2	Yes	4	>25%	Census, one of the other two counts
3	Fair	4	Yes	6	>50%	All, one class 1 or 2 observer
4	Good	6	Yes	7	>50%	All, at least one class 1 observer
5	Excellent	10	Yes	8	>90%	All, three class 1 observers

Spring Migration

Spring migration monitoring is conducted from late April until early June. This time period covers the migratory window of the majority of the species expected to be encountered at the LSLBO. Migration monitoring begins late April once daytime temperatures have risen above freezing to allow for banding. Early spring migrant species typically have begun migrating through the area, but the extent of the migratory activity before monitoring begins varies annually depending on the overall spring conditions. Periods of heavy migration can occur at any time during May. Species diversity quickly increases in early May and new species are detected constantly throughout the month. Migration activity slows down in late May with only individuals of a few late migratory species moving through. Many of the observations in late May and June consist of local breeding individuals. Spring migration monitoring ends on June 10.

Spring migration monitoring in 2013 occurred from April 25 to June 10 for 47 days of coverage. Observers were active every day during that time and conducted a census and recorded incidental observations. Observers conducted 8 visual migration counts on all but 7 days when poor weather conditions reduced counts completed. Poor weather conditions prevented mist-netting on 6 days and changing weather reduced the mist-netting coverage on an additional 12 days. Reduced net hours are common early in the spring when overnight temperatures drop below freezing and mist-netting is delayed until conditions warm up. Spring migration received excellent migration coverage consistent with previous years (Table 2).

Table 2. Summary of effort during spring migration monitoring at LSLBO, 2005-2013.

Coverage	2005	2006	2007	2008	2009	2010	2011**	2012	2013
First Day	25-Apr	24-Apr	24-Apr	26-Apr	25-Apr	22-Apr	22-Apr	23-Apr	25-Apr
Last Day	10-Jun	10-Jun	10-Jun	10-Jun	10-Jun	10-Jun	15- May	10- Jun	10-Jun
Number of Days	43	47	48	45	46	50	24	49	47
Person Days	121	127	92	105	89	114	55	96	95
Average Daily Coverage Code	3.62	3.78	3.81	3.78	3.79	3.76	3.91	3.76	3.81
Banding									
Number of Days	43	44	47	43	42	44	23	45	41
Av. Daily Net Hrs	71.2	70.3	73.6	75.8	70.4	64.4	81.8*	80.68*	79.7*
Census									
Number of Days	43	47	48	45	46	50	24	48	47
Vis-Mig									
Number of Days	43	47	48	45	46	50	24	49	47
Av Daily Vis-Migs	8	7.7	7.9	7.8	7.7	7.6	7.8	7.5	7.6

*includes net hours from two non-standard aerial nets.

** Spring migration monitoring season cut short due to wildfire evacuation

Daily Totals

A total of 58,910 birds representing 152 species were recorded using four monitoring methods during spring migration monitoring. Mist-netting accounted for the fewest birds and lowest species diversity with 758 birds (new bands and recaptures) from 41 species. Gray-cheeked thrush, house wren, and Oregon junco were only encountered through mist-netting. Visual migration counts had the second lowest count and species diversity with 7303 birds from 50 species. Barn swallow and Eurasian collared-dove were only detected during visual migration counts. Census accounted for 10,315 birds from 103 species. Baird's sandpiper and Cape May warbler were only detected on the census route. Incidental observations accounted for the highest number of birds and the highest species diversity with 42,811 birds from 145 species. 32 species were only encountered incidentally and included wood duck, semipalmated sandpiper, rufous hummingbird, Say's phoebe, Connecticut warbler, and vesper sparrow, and two of species of concern: olive-sided flycatcher and trumpeter swan. The Eurasian collared-dove is the 251 species to be recorded at the LSLBO.

Daily migration was busy through the first half of the spring then slowed down considerably through the second half of the season (Figure 1). Migration volume was high from April 27 to May 8, with daily totals surpassing 5,000 birds on four dates (April 27, May 4, May 5, and May 8) and surpassing 1,000 birds on another six dates. That period experienced strong migration of both landbird and waterfowl species; migratory activity was high for both groups on May 4 and 5. April 29 and May 2 was primarily songbirds, such as dark-eyed juncos and blackbirds, with very few waterfowl present. May 8 and 9 had a very strong passage of snow geese and greater white-fronted geese, but very few songbirds were observed. Migration activity built up in mid-May leading up to the busiest migration day on May 19 with over 6,000 birds counted consisting heavily of warblers and sparrows. Migratory activity slowed down considerably from May 21 to June 10 with daily totals passing 300 birds only once. Species occurrences during spring migration are listed in Appendix I.

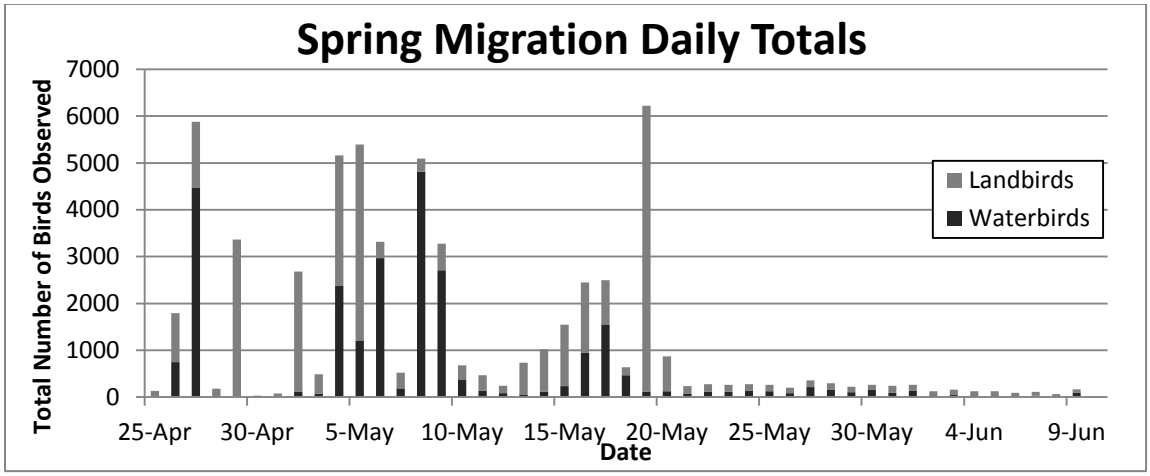


Figure 1. Total number of birds detected each day during spring migration, 2013.

Mist-netting

Mist-nets were set for 3746.63 net hours; achieving 81% of the total possible net hours following the LSLBO's mist-netting protocols. The twelve standard mist-nets were set for 3273.13 net hours, achieving 83% of the possible net coverage, and the two aerial nets were set for 473.5 net hours or 72% of the possible net coverage. A total of 720 birds were banded and 38 recaptured birds were recorded. The banding total fell short of the spring average of 953 birds. Banding was steady, but not overly busy (Figure 2). The busiest banding day was May 2 with 90 birds banded, followed by May 7 with 72 birds and May 19 with 40 birds banded.

A total of 41 species and forms were represented during spring banding, slightly below the spring average of 43 species. The top five banded species were: slate-coloured junco (208), Myrtle warbler (64), white-throated sparrow (56), Swainson's thrush (51), and American tree sparrow (47). These five species combined to account for 59% of all banded birds. Highlights of the banding season included a northern shrike banded on May 1. It represented only the second banding record for the species at the LSLBO, the first occurring during fall migration in 2000. Three Oregon juncos were banded; the first banding records since 2002. A record number of hermit thrush were banded and American tree sparrow tied their highest spring banding total. Complete banding totals for all species are listed in Appendix II.

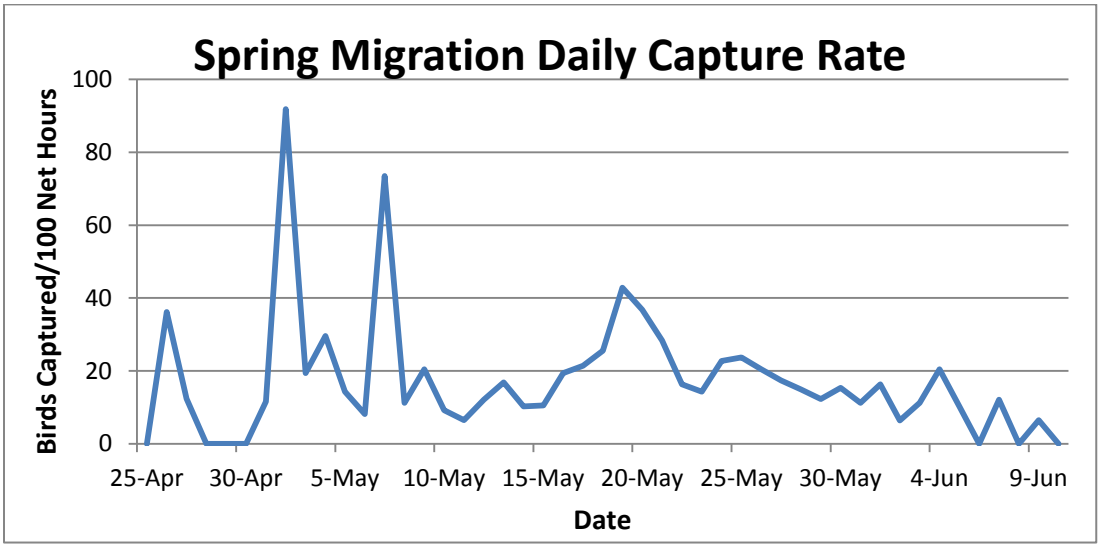


Figure 2. Daily capture rate during spring migration, 2013.

Net Productivity

The twelve standard net-lanes are designated Nets 1 through 12. The two aerial nets, designated 11x and 12x, are located adjacent to the corresponding standard net-lane number. The aerial nets were first used in spring migration in 2011. The three net-lanes located adjacent to the shore-line (nets 6, 11, and 11x) are more exposed to wind and typically have fewer net hours than the rest of the net-lanes, which are sheltered by the forest.

In 2013, the total capture rate was 20.2 birds per 100 net hours (Table 3). Net 6 had the highest capture rate of the individual nets at 52.4 birds per 100 net hours and also captured the highest number of species at 29. This net is typically the most productive net operated by the LSLBO. The next most productive net was net 11x, which has shown great productivity since being introduced. Net 11x has consistently captured more birds than its associated standard net, Net 11, indicating the vegetation structure in that area is influencing bird movement patterns. Netlane 12 and 12x have shown consistent productivity and are usually very close to each other in capture rates and diversity. The net-lanes located deeper in the forest (Nets 2, 4, and 9) have had poor productivity over the past several years which may be a result of the current vegetation structure caused by habitat succession.

Table 3. Capture rates for each net-lane during spring migration, 2013.

Net-lane	Net hours	New Captures	Returns and Repeats	Total Captured	Capture Rate (birds/100 net hours)	Number of Species
1	273.1	26	4	30	11.0	13
2	273.1	20	1	21	7.7	7
3	271.1	41	2	43	15.9	7
4	277.2	22	2	24	8.7	10
5	276.5	49	2	51	18.4	15
6	268.9	136	5	141	52.4	29
7	273.8	42	2	44	16.1	10
8	273.8	39	1	40	14.6	10
9	274.1	14	3	17	6.2	6
10	274.1	28	0	28	10.2	10
11	259.1	61	6	67	25.9	22
12	233.8	71	2	73	31.2	20
Standard Net Total	3228.5	549	30	579	17.9	39
11x	278.4	111	2	113	40.6	24
12x	239.8	60	6	66	27.5	19
Aerial Net Total	518.1	171	8	179	34.5	30
Grand Total	**3746.6**	**720**	**38**	**758**	**20.2**	**41**

The two aerial nets have performed very well since they have been introduced. In 2013, they accounted for 24% of the birds banded in the spring. The aerial nets captured the majority of the alder flycatcher and least flycatcher of the spring, accounted for a large portion of the banded American redstarts and black-and-white warblers, captured almost half of the myrtle warblers, and captured the only house wren and magnolia warblers of the spring.

Spring Migration Summary

Spring migration monitoring coverage began on April 25. Staff spent most of the day setting up the banding station for the season, conducting visual counts, and shovelling. The study area received a large amount of snow over the winter, which was well over 50 cm deep throughout the site and some drifts were well over 1 meter deep. A considerable amount of time was spent removing snow to access the station and net-lanes. Early spring conditions were generally cool, but ranged drastically from very warm spring days to very cold mornings (-15°C on April 30) and periods of heavy snow. We expected the snow cover and cooler conditions to delay the arrival of many migrant species, but the pattern of migration passage was very unpredictable.

April 25 to April 30

Bird activity was quiet on the opening day of spring migration. American tree sparrows trickled through the site and a couple large flocks of common redpolls were observed, but the only other birds observed were a few tundra swans, Canada geese, northern harriers, sharp-shinned hawks, and American pipits. The pace of migration quickly picked up in late April with large flocks of common redpolls, American tree sparrows, and dark-eyed juncos moving through the area. Several new species began to arrive in late April including ruby-crowned kinglet, American robin, myrtle warbler, and white-crowned sparrow. Large flocks of Canada geese began to move over-head and were joined by the first flocks of greater white-fronted geese and sandhill cranes. Waterfowl sightings were scarce due to the lake still being completely frozen, but a couple mallards and common goldeneyes were observed. Weather conditions were not favourable for banding and mist-netting only occurred on two days, both with reduced net hours. As a result only 30 birds were banded in late April.

May 1 to May 7

Weather conditions improved dramatically through the first week of May. Overnight temperatures fell below zero once and day-time temperatures reached 20°C on May 6. Songbird migration was strong for most of the week. Even though the migration of dark-eyed juncos and American tree sparrows tapered off through the week, American robins and blackbirds moved through in large numbers most of the week and large flocks of common redpolls remained in the area. Large flocks of greater white fronted geese, snow geese, and sandhill cranes began to move

through late into the week. Bird banding was conducted every day with 233 birds banded, the majority of those being dark-eyed juncos. There was a very large influx of new species including: least flycatcher, eastern phoebe, horned lark, tree swallow, barn swallow, house wren, hermit thrush, orange-crowned warbler, ovenbird, western tanager, savannah sparrow, LeConte's sparrow, fox sparrow, song sparrow, Lincoln's sparrow, red-winged blackbird, yellow-headed blackbird, common grackle, and purple finch.

May 8 to May 14

Weather conditions fluctuated daily ranging from calm and warm to extremely windy and cool. The greater white-fronted goose and snow goose migration continued from the previous week; peaking on May 8 with 4415 greater white-fronted geese counted. Songbird migration was quiet for most of the week, only picking up again late in the week as myrtle warblers resumed moving through the area. The lack of songbird activity was reflected in banding with only 77 birds banded. Even though there was limited active migration, a large number of new species were observed: olive-sided flycatcher, western wood-pewee, warbling vireo, winter wren (which is normally first recorded singing late April), Swainson's thrush, Tennessee warbler, yellow warbler, palm warbler, black-and-white warbler, northern waterthrush, chipping sparrow, clay-coloured sparrow, swamp sparrow, white-throated sparrow, and rose-breasted grosbeak.

May 15 to May 21

The weather was sunny and warm for most of the week. Several species of waterfowl began to group in the patches of open water forming on the lake including mallard, blue-winged teal, northern shoveler, surf scoter, white-winged scoter, long-tailed duck, and common goldeneye. Several large flocks of both long-billed and short-billed dowitcher were seen, two species not commonly encountered during migration. Songbird migration was fairly steady through the week with myrtle warblers and blackbirds as the most prominent species. May 19 was the busiest songbird migration day of the spring with a large migration of myrtle warblers (3022) and chipping sparrows (769), as well as a good representation of yellow warblers, black-and-white warblers, bank swallows and cliff swallows. A number of new species arrived during the week, with new species observed on almost a daily basis, including eastern kingbird, blue-headed vireo, Philadelphia vireo, red-eyed vireo, bank swallow, cliff swallow, gray-cheeked thrush, magnolia warbler, black-throated green warbler, American redstart, Connecticut warbler, common yellowthroat, and Baltimore oriole. This week also included a number of rare sightings, including trumpeter swan, wood duck, American coot, Eurasian-collared dove, and rufous hummingbird. 165 birds were banded during the week.

May 22 to May 31

Warm weather continued until the end of May, but the accompanying gusty winds reduced the mist-netting effort. Despite the reduced net-hours, 149 birds were still banded. Very little active migration was observed throughout the entire week. Most of the birds detected were singing in

the forest or moving through the trees. Despite the lack of visual activity, a number of new species were observed including cedar waxwing, bay-breasted warbler, mourning warbler, Wilson's warbler, Canada warbler, and American goldfinch. These species represent some of the few late migrant species expected at the station.

June 1 to June 10

The weather for the June portion of spring migration monitoring was a mix of hot and calm conditions, overcast and muggy days, and lots of wind. Rain and dreary weather hit during the last three days of spring coverage. Visual migration through June was very slow and most of the activity consisted of birds in their local breeding territories. Mist-netting was slow with 66 birds banded and the only new species recorded was the Alder flycatcher.

Fall Migration

Fall migration monitoring is conducted from mid-July until late September. This time period covers the migratory window of the majority of songbird species expected at the LSLBO. Late fall migratory species may have incomplete coverage if conditions extend their migratory window into October. Migration is light during the first week of fall monitoring with most of the activity consisting of local breeders. Activity picks up quickly after the first week and there can be consistent and heavy migration and busy banding from late July until early August. Migration activity throughout August and until mid-September occurs in pulses. Pulses of heavy migration are followed by several very slow days. Activity dwindles in the last half of September with most of the activity consisting of a small number of late migratory species and winter residents.

Daily migration monitoring occurred from July 12 until September 29 for 80 days of coverage. The census was conducted every day. Visual migration counts were conducted daily, and observers conducted 8 visual migration counts on 63 days; the remaining days received reduced counts due to poor weather conditions. Poor weather conditions prevented mist-netting on three days and forced reduced net hours on an additional 29 days. During July and August strong winds develop late in the morning which forces exposed nets to be closed early. Fall migration received excellent migration coverage consistent with previous years (Table 4).

Table 4. Summary of effort during fall migration monitoring at LSLBO, 2005-2013.

Coverage	2005	2006	2007	2008	2009	2010	2011	2012	2013
First Day	12-Jul	12-Jul	12-Jul	12-Jul	12-Jul	12-Jul	12- Jul	12-Jul	12-Jul
Last Day	29-Sep	29-Sep	30-Sep	2-Oct	28-Sep	30-Sep	30-Sep	29-Sep	29-Sep
Number of Days	75	77	73	76	77	80	81	80	80
Person-days	170	149	114	131	165	158	140	126	131
Average Daily Coverage Code	3.6	3.69	3.33	3.48	3.73	3.7	3.67	3.78	3.84
Banding									
Number of Days	71	73	68	74	75	77	75	77	76
Av. Daily Net Hrs.	76	73.9	71.9	75.7	78.9	81.5*	77.9*	82.1*	82.7*
Census									
Number of Days	75	77	73	75	77	80	81	80	80
Vis-Migs									
Number of Days	75	77	73	76	77	80	81	80	80
Av Daily Vis-migs	7.7	7.7	7.7	7.5	7.6	7.5	7.3	7.6	7.6

*includes net hours from two non-standard aerial nets.

Daily Totals

A total of 46,010 birds representing 115 species were recorded during the fall migration period. Daily totals and species diversity is typically lower than in the spring because fewer waterfowl and shorebirds are observed. Banding accounted for the fewest birds with 1,767 birds from 58 species. Cooper's hawk and gray-cheeked thrush were only detected through mist-netting. Visual migration counts recorded 9,172 birds of 44 species. American goldfinch and sandhill crane were only encountered on visual migration. Census accounted for 10,753 birds from 85 species. Great-blue heron and western wood-pewee were only detected on the census route. The highest number of birds and species were recorded as incidental observations with 27,640 birds from 106 species. 15 species were only encountered during incidental observations and included northern goshawk, common nighthawk, gray jay, and LeConte's sparrow.

The fall migration consisted of many short low intensity pulses separated by short time periods (Figure 3). Migration began slowly, but the pace picked up quickly after the first week. The first day of birds moving in good numbers was July 26 with over 1,000 birds counted. From then a series of peaks occurred until mid-September. Each peak would last two to three days and they were separated from each other by two to three days .The exception was August 16 to 22, which experienced very poor weather. Each peak also contained fewer birds than the previous peak; August 1 had 2,200 birds compared to August 12 with 2,000 birds and September 6 with 1,000 birds. Most of the observations through the fall consisted of landbirds, with a very small presence of waterfowl. The exception was on the busiest day of the fall, September 16. This was the only day of the fall with substantial waterfowl moving through including large flocks of greater white-fronted geese and snow geese which accounted for almost all the 6,900 birds counted that day. A complete list of each species' occurrence in the fall is listed in Appendix I.

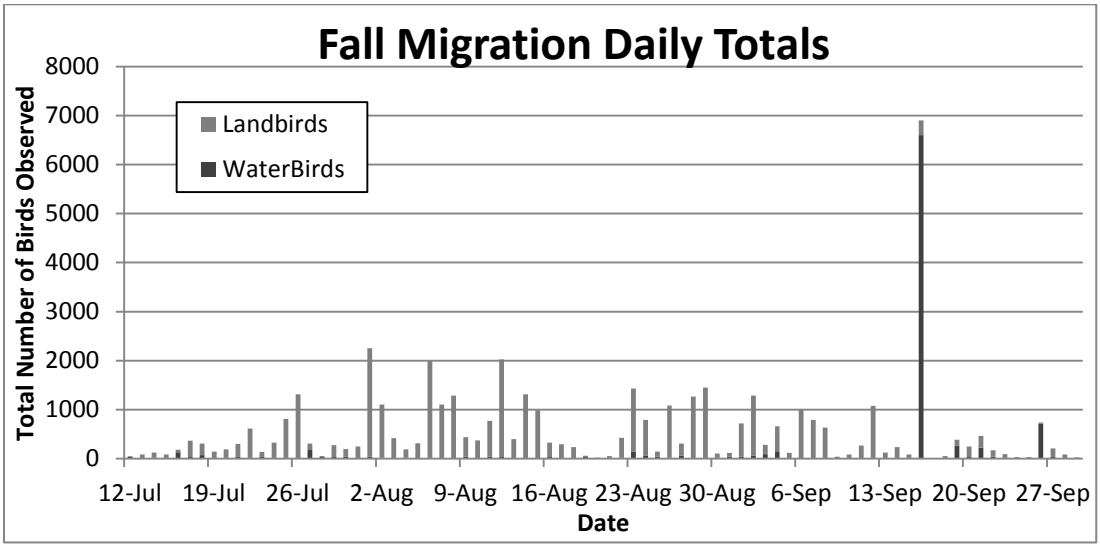


Figure 3. Total number of birds detected each day during fall migration, 2013.

Mist-netting

Mistnets were set for a total of 6615.12 net hours, achieving 84% of the total possible net coverage for the season. The twelve standard net-lanes were set for 5843.95 net hours and the two aerial nets were set for 771.17 net hours; achieving 87% and 69% of possible net hours, respectively. A total of 1625 birds were banded and 142 recaptures were recorded. The capture rate was 26.7 birds/100 net hours and the banding total fell below the seasonal average of 1821 birds. Banding was sporadic throughout the entire season with the first half of the fall much busier than the second fall of the season (Figure 4). The busiest banding day of the fall was August 6 with 94 birds banded, followed by August 12 with 88 birds banded. Banding totals surpassed 50 birds on only four other dates: August 1(59), August 7 (54), August 2 (53), and August 8 (51).

A total of 58 species were banded during the fall, slightly above the fall average of 55 species. The top five banded species were: ovenbird (300), Myrtle warbler (256), Swainson's thrush (234), Tennessee warbler (164), and black-and-white warbler (117). These five species combined to account for 66% of all banded birds. Highlights for the banding season included the LSLBO's first record of a belted kingfisher, representing the 104 species banded at the station. The observatory banded its second black-billed magpie and third Cooper's hawk. Several species received record fall banding totals: ovenbird, black-and-white warbler, song sparrow, and hairy woodpecker. A complete list of all fall banding totals and species is listed in Appendix II.

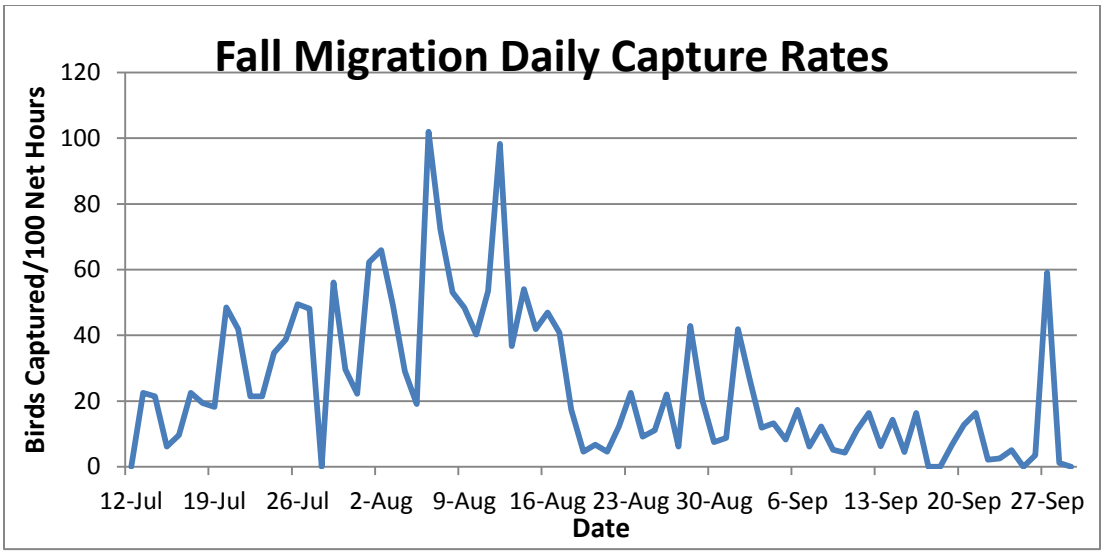


Figure 4. Daily capture rate during fall migration, 2013.

Net Productivity

The twelve standard net-lanes are designated Nets 1 through 12. The two aerial nets, designated 11x and 12x, are located adjacent to the corresponding standard net-lane number. The aerial nets were first used in spring migration in 2011. The three net-lanes located adjacent to the shore-line (nets 6, 11, and 11x) are more exposed to wind and typically have fewer net hours than the rest of the net-lanes, which are sheltered by the forest.

The total capture rate of the fall was 26.7 birds/100 net hours (Table 5). Net 6 had the highest capture rate and highest species diversity of all the nets by a very large margin, 102.7 birds/ 100 net hours from 44 species. Net 11x had the second highest productivity and was much more productive than its associated standard net, Net 11. Net 12x had the third highest productivity, which was higher than its associated standard net, Net 12. The forest net-lanes, particularity net 9, 10, and 4, had very low capture rates. Net 9 had the lowest capture rate since it began operating at the LSLBO.

The aerial nets accounted for 23% of the birds captured in the fall. Although the aerial nets accounted for the LSLBO's first belted kingfisher and the only fall records of black-throated green warblers, no other species had a higher representation in the aerial nets than the standard nets.

Table 5. Capture rates for each net-lane during spring migration, 2013.

Net-lane	Net hours	New Captures	Returns and Repeats	Total Captured	Capture Rate (birds/100 net hours)	Number of Species
1	496.7	102	16	118	23.8	16
2	496.7	89	11	100	20.1	12
3	496.2	61	9	70	14.1	12
4	491.7	32	3	35	7.1	14
5	497.7	116	16	132	26.5	28
6	469.4	457	25	482	102.7	44
7	490.7	94	6	100	20.4	20
8	490.7	49	6	55	11.2	16
9	490.7	11	1	12	2.4	5
10	490.7	19	6	25	5.1	9
11	436.7	117	7	124	28.4	25
12	496.2	92	10	102	20.6	19
Standard Net Total	5843.9	1239	116	1355	23.2	56
11x	367.8	250	13	263	71.5	29
12x	403.3	136	13	149	36.9	19
Aerial Net Total	771.2	386	26	412	53.4	33
Grand Total	6615.1	1625	142	1767	26.7	58

Fall Migration Summary

July 12 to July 17

Fall migration monitoring began on July 12. Very strong westerly winds kept all bird activity to a minimum and made it very difficult to observe any activity. Weather conditions became more favourable after the opening day, but there was little migratory activity. Migration was limited to a few individuals, primarily myrtle warblers, until late in the week when small groups of myrtle warblers, Tennessee warblers, yellow warblers, and sporadic flocks of blackbirds began active migration. 80 birds were banded during the week including the LSLBO's first banding record of a belted kingfisher, the 104th species to be banded at the station.

July 18 to July 24

A weather system brought overcast skies and periods of rain for the first few days of the week, which halted active migration, but occasional foraging flocks moved through the area. The weather improved for the remainder of the week and steady, but not overly busy, active migration was experienced. The most active migrant species throughout the week were myrtle warblers, yellow warblers, Tennessee warblers, and black-and-white warblers. The diversity of active migrants increased as the week progressed as Swainson's thrush, western tanager, American redstart, ovenbird, and sparrows became more frequently observed. When the weather improved, banding also became consistent for the rest of the week and a total of 179 birds were banded.

July 25 to August 1

The week was quite a mixed bag in terms of weather with heavy wind and rain mixed between periods of hot and calm conditions. Migratory activity and patterns fluctuated drastically throughout the week in response to the weather. Migration consisted of light but steady movement of active migrants and foraging flocks until August 1, which experienced the first heavy day of migration of the fall. Birds migrated through in large numbers the whole day and over 1000 myrtle warblers were counted, along with large numbers of black-and-white warblers, Swainson's thrush, ovenbirds, rose-breasted grosbeaks, western tanagers, and blackbirds. Despite some reduced net hours due to rainy weather conditions, banding through the week was steady with 224 birds banded.

August 2 to August 8

Migration activity was good and consistent through most of the week and at times quite heavy. Most of the active migration was restricted to the early morning hours; once the sun rose above the treeline it became too hot and activity died down. Myrtle warblers, yellow warblers, Tennessee warblers, black-and-white warblers, and Canada warblers were the most common species observed throughout the week. The week's migration activity peaked on August 6 with a large push of Tennessee warblers. Banding was busy and steady through the entire week, resulting in the busiest banding week of the fall with 337 birds banded. August 6 was the busiest banding day of the fall with 94 birds banded. Tennessee warbler, Swainson's thrush and ovenbird were the top banded species of that day.

August 9 to August 15

The weather was very good for most of the week and migration remained steady, but a little lighter than the previous week. Tennessee warblers and myrtle warblers remained the most active migrant species, and the migratory presence of previously prevalent species, such as yellow warbler and black-and-white warbler, began to decrease. Sharp-shinned hawks began to move steadily through the station. August 12 was another big day of songbird migration, with another

push of Tennessee warblers that were joined by a large number of sparrows consisting mostly of chipping sparrows and clay-colored sparrows. It was another steady week of banding with a total of 319 birds banded. Swainson's thrush and ovenbird were still consistently captured in good numbers.

August 16 to August 22

The week saw extremely poor weather conditions that consisted of rain early in the week and very strong westerly winds late in the week. The strong migration experienced over the past few weeks died down and only light migration was observed through the first half of the week. The weather system that brought the heavy winds arrived during the second half of the week and hampered efforts to monitor migration for three consecutive days. As a result only 2 days of the week received full net hours and only 88 birds were banded.

August 23 to August 29

The weather through the week improved greatly compared to the previous week. Most days were sunny and warm, with only a slight breeze and a few isolated rain events. Myrtle warblers took advantage of the improved conditions with strong migration that lasted most of the week. Their daily totals surpassed 1000 on a couple days late in the week. Almost all the migrants observed through the week were myrtle warblers accompanied by small numbers of Tennessee warblers and an unexpected pulse of yellow warblers and American redstarts. Waterfowl sightings were scarce up to this point in the fall, but the first evidence of waterfowl staging occurred this week with rafts of more than 30 common loons observed. Despite the good migratory activity, banding was slow through the entire week with a total of 121 birds banded.

August 30-September 5

The weather was mostly sunny and warm with only a bit of wind and small amounts of rain. Migration was relatively light for most of the week and consisted of myrtle warblers trickling through the area. Another pulse of myrtle warblers occurred mid-week and their daily totals ranged from a few hundred to over 1000. The first orange-crowned warblers, Wilson's warblers, and white-crowned sparrows of the fall began go move through the area. Several flocks of greater white-fronted geese and sandhill cranes were also observed over the lake. Banding produced 111 birds.

September 6 to September 12

Once again the weather through the week was mostly sunny with only one day of heavy winds. Several pulses of myrtle warblers occurred during the week. Moderate numbers occurred during the first days of the week, and then all activity was quiet until the end of the week when another very strong day of over 1000 myrtle warblers occurred on the 12th. Orange-crowned warblers and

American pipits were the only other species observed in large numbers. Banding remained light with only 69 birds banded. Two highlights species were banded; a pileated woodpecker and a Cooper's hawk.

September 13 to September 19

Most of the week brought gusty winds that became quite heavy in the middle of the week. Songbird migration was light largely due to the weather and consisted of myrtle warblers, orange-crowned warblers, and American pipits. September 16 saw the largest movement of greater white fronted geese of the fall with several large flocks totalling over 6,000 individuals. Banding was very slow and only 39 birds were banded.

September 20-29

Fall migration monitoring ended very quietly. The weather conditions were windy and cool. Early morning temperatures fell below 0 on the 27th. Overall bird activity was very quiet. Myrtle warblers continued to move through the area, mostly in small numbers. On a few occasions large foraging flocks consisting of a few hundred myrtle warblers were observed, which was unusual that late in the season. A relatively large number of golden-crowned kinglets were also in the area. Common goldeneye and bufflehead began to group up on the lake in front of the banding lab over the final week. Typically American tree sparrows, dark-eyed juncos, and fox sparrows move through the area in large numbers during late September, but only a few individuals of American tree sparrow and dark-eyed junco were observed and fox sparrows were absent. 61 birds were banded during the final stretch of fall monitoring. The last day of migration monitoring occurred on September 29 and the station was shut for the winter.

Monitoring Avian Productivity and Survivorship (MAPS)

Monitoring Avian Productivity and Survivorship (MAPS) is a continent wide monitoring program coordinated by the Institute for Bird Populations. It provides long-term data on population and demographic parameters for landbird species on the breeding grounds. The LSLBO has participated in the MAPS program since 1994 and it remains one of the core monitoring projects. 2013 marks the 20th year that the LSLBO has contributed to the MAPS program.

The LSLBO currently operates four MAPS stations: Far-and-Away (FAWA), Fern Gully (FEGU), Roadside (ROAD), and Residence (RESI). Three stations, FAWA, FEGU, and ROAD, are located in the forest bordering the migration monitoring station, while RESI is located near the Boreal Centre for Bird Conservation. FAWA and ROAD have operated for all 20 years. FEGU operated from 1994 to 2000. It was reopened in 2003 and has since operated for 11 consecutive years. RESI was established in 2000 and completed its 13th consecutive year of operation. Each station is visited once every 10 day period. Each visit consists of constant-effort mist-netting and visual observations to determine breeding status following the operating protocols outlined in the MAPS Manual. The LSLBO operates through 6 of the periods; the dates that each station was visited in 2013 were:

	FAWA	**FEGU**	**ROAD**	**RESI**
Period 5 (Jun 10 – 19)	June 11	June 13	June 17	June 18
Period 6 (Jun 20 – 29)	June 22	June 23	June 24	June 25&28
Period 7 (Jun 30 – Jul 9)	July 1	July 2	July 3	July 4
Period 8 (Jul 10 - Jul 19)	July 11	July 13	July 14	July 10
Period 9 (Jul 20 – 29)	July 21	July 22	July 23	July 20
Period 10 (Jul 30 – Aug 8)	July 30	July 31	-	August 2

MAPS Banding

Each MAPS station operates 10 mistnets for 6 hours each visit for a maximum of 360 net hours for the season. No station received maximum mist-netting coverage in 2013. RESI received 328 net hours due to net 7 being flooded for two periods and a rain interruption during the 9 period. FAWA received 355 net hours, but a black bear in the area forced an early closure during period 10. FEGU received 330 net hours, but the black bear from FAWA was encountered again and the station was closed early on period 10. ROAD received 300 net hours and was not operated during period 10 because the frequent black bear encounters were causing safety concerns.

A total of 198 birds were captured; 130 banded and 68 recaptured, representing 28 species (Table 6). RESI had the highest banding total with 77 birds banded from 19 species, FEGU recorded 61 captures from 12 species, ROAD 33 birds from 10 species, and FAWA had the lowest with 27 birds from 9 species. Two new species were recorded on the MAPS capture lists: a boreal chickadee was banded at RESI and a house wren was banded at FEGU. FEGU also recorded its first capture of a clay-coloured sparrow.

Table 6. Number of birds banded and recaptured in the four MAPS sites in 2013.

Species	**FAWA**		**ROAD**		**FEGU**		**RESI**		**Total**
	Band	Recap	Band	Recap	Band	Recap	Band	Recap	
Sharp-shinned Hawk								1	1
Yellow-bellied Sapsucker	1	1		1			3	1	7
Northern Flicker				1					1
Least Flycatcher							1		1
Red-eyed Vireo	1								1
Blue-headed Vireo							1		1
Boreal Chickadee							1		1
Brown Creeper							1		1
House Wren					1				1
Winter Wren							1		1
Swainson's Thrush		2	3	2	1	1	2	2	13
Hermit Thrush							2		2
American Robin							1		1
Tennessee Warbler							2		2
Yellow Warbler					2				2
Magnolia Warbler							4		4
Yellow-rumped Warbler	1		1	5			17	1	25
Black-and-white Warbler			1	2	1				4
American Redstart	1		2	3	5	6	2		19
Ovenbird	4			3	13	1	8	2	31
Mourning Warbler	2	1					3	1	7
Canada Warbler	3	2	2		9	13	2	3	34
Chipping Sparrow				2					2
Clay-colored Sparrow					1				1
Song Sparrow					1				1
Lincoln's Sparrow					1		2		3
White-throated Sparrow	3	5	3	2	3	1	10	3	30
Rose-breasted Grosbeak					1				1
Total	16	11	12	21	39	22	63	14	198

Breeding Status

Breeding status was determined for the 59 species encountered during MAPS station visits in 2013 (Table 7). The breeder status (B) was given to species with strong evidence supporting breeding activity within the boundaries of the MAPS station. Likely breeders (L) were species frequently observed at a station, but lacked strong evidence of breeding activity within the station's boundaries. Transient species (T) were observed at a station, but it is unlikely that they were breeding within the stations boundaries. Observations were restricted to MAPS banding site visits only.

Table 7. Breeding Status of MAPS birds in 2012.

Species	RESI	ROAD	FEGU	FAWA	Species	RESI	ROAD	FEGU	FAWA
Canada Goose	T				House Wren			T	
Green-winged Teal	T				Winter Wren	B	T		
Mallard	B				Ruby-crowned Kinglet	T			T
Common Goldeneye	B				Swainson's Thrush	B	B	B	L
Bald Eagle		T	T	T	American Robin	B	T	T	
Sharp-shinned Hawk	T				Cedar Waxwing	L	T	T	T
Ruffed Grouse	B	B	B		Tennessee Warbler	B	B	B	T
Killdeer				T	Yellow Warbler	L	B	B	B
Franklin's Gull		T			Magnolia Warbler	L			
Yellow-bellied Sapsucker		T		B	Yellow-rump'd Warb.	B	B	B	B
Downy Woodpecker			T	T	Black-thrt'd Grn Warb.	B	T	L	T
Hairy Woodpecker	T		L		Bay-breasted Warbler	B			
Northern Flicker		T		T	Black-and-white Warb.	B	B	B	B
Pileated Woodpecker	T			T	American Redstart	B	B	B	B
Western Wood-Pewee	T				Ovenbird	B	B	B	B
Alder Flycatcher	L	L	L		Mourning Warbler	B	T	B	B
Least Flycatcher	B			T	Canada Warbler	B	B	B	B
Blue-headed Vireo	B	T			Western Tanager	B	L	B	T
Warbling Vireo	B		T	T	Chipping Sparrow	B	L		
Philadelphia Vireo		T		L	Clay-colored Sparrow			T	
Red-eyed Vireo	B	B	B	B	Song Sparrow		B	B	T
Blue Jay	T	T	T	T	Lincoln's Sparrow	B			
American Magpie		T			White-thrt'd Sparrow	B	B	B	B
American Crow		T	T	B	Rose-breast'd Grosbeak	B	T	B	B
Common Raven	B			T	Pine Siskin	T	T	T	T
Tree Swallow	T	T			Purple Finch	T			
Black-capped Chickadee	B	L	B	B	Red Crossbill				T
Boreal Chickadee	T				Evening Grosbeak	T	T	T	T
Red-breasted Nuthatch	L	T							
White-breasted Nuthatch				T					
Brown Creeper	T		T						
						RESI	ROAD	FEGU	FAWA
					Total sp. Breeder (B)	28	12	16	13
					Total sp. Likely (L)	5	4	3	3
					Total sp Transient (T)	14	19	13	20
					Total sp.	47	35	32	36

Recaptures

The LSLBO recorded 256 recaptures during the 2013 banding season: 38 during spring migration, 142 during fall migration monitoring, 68 during MAPS, 4 during Canada warbler target banding, 3 through ovenbird target banding, and 1 during northern saw-whet owl monitoring. These recapture records represent 179 individuals: 116 were banded in 2013 and recaptured later in the season, 34 were originally banded in 2012, and 29 were banded previous to 2012 and represent some of the oldest known aged birds encountered during the banding season (Table 8). All birds were originally banded by the LSLBO; there were no foreign bands recovered during banding activities.

Table 8. Age of recaptured birds originally banded at the LSLBO before 2012.

Species	Band Number	Original Banding			Recapture		Age
		Date	Location	Age	Date	Location	
Canada Warbler	2590-65039	18/07/2011	Mig	HY	13/06/2013	FEGU	2
Sharp-shinned Hawk	1543-06220	04/08/2011	Mig	HY	04/07/2013	RESI	2
Black-capped Chickadee	2590-65309	26/08/2011	Mig	HY	26/04/2013	Mig	2
Canada Warbler	2590-66006	20/06/2011	RESI	SY	25/06/2013	RESI	3
Ovenbird	2311-97515	28/06/2011	LSLPP	SY	10/07/2013	RESI	3
American Redstart	2530-53007	02/07/2011	LSLPP	SY	13/06/2013	FEGU	3
Canada Warbler	2590-66020	02/07/2011	FEGU	SY	31/07/2013	FEGU	3
White-throated Sparrow	2341-50310	28/07/2010	Mig	HY	22/06/2013	ROAD	3
Northern Saw-whet Owl	0924-32980	12/10/2010	NSWO	HY	09/10/2013	NSWO	3
American Redstart	2520-57756	13/07/2011	Mig	AHY	24/07/2013	Mig	3+
Swainson's Thrush	2341-50621	14/07/2011	Mig	AHY	30/07/2013	FAWA	3+
Canada Warbler	2500-78957	23/06/2010	ROAD	SY	13/06/2013	FEGU	4
Canada Warbler	2350-47689	30/06/2009	Mig	Local	20/06/2013	LSLPP	4
Canada Warbler	2500-78969	03/07/2010	ROAD	SY	11/06/2013	LSLPP	4
Black-and-white-Warbler	2500-78663	18/07/2009	Mig	HY	18/05/2013	Mig	4
Swainson's Thrush	2341-50702	07/06/2011	LSLPP	ASY	05/06/2013	Mig	4+
Ovenbird	2311-97989	11/06/2011	LSLPP	ASY	19/06/2013	LSLPP	4+
Canada Warbler	2590-66009	22/06/2011	FEGU	ASY	02/07/2013	FEGU	4+
Swainson's Thrush	2291-01474	03/07/2011	ROAD	ASY	31/07/2013	FEGU	4+
American Redstart	2520-57799	23/07/2011	Mig	ASY	24/06/2013	ROAD	4+
Northern Flicker	1543-06221	04/08/2011	Mig	ASY	03/07/2013	ROAD	4+
Ovenbird	1741-02809	26/05/2009	Mig	SY	04/06/2013	Mig	5
Ovenbird	1741-02824	29/05/2009	Mig	SY	19/05/2013	Mig	5
Mourning Warbler	2500-78965	02/07/2010	RESI	ASY	28/06/2013	RESI	5+
Red-eyed Vireo	2311-97027	27/07/2009	Mig	AHY	24/07/2013	Mig	5+
Canada Warbler	2500-78568	07/06/2009	Mig	ASY	11/06/2013	LSLPP	6+
White-throated Sparrow	1721-63948	13/06/2009	FEGU	ASY	01/07/2013	FAWA	6+
Mourning Warbler	2350-49984	01/07/2008	FAWA	ASY	01/07/2013	FAWA	7+
Red-eyed Vireo	2181-79836	17/07/2003	Mig	AHY	17/07/2013	Mig	11+

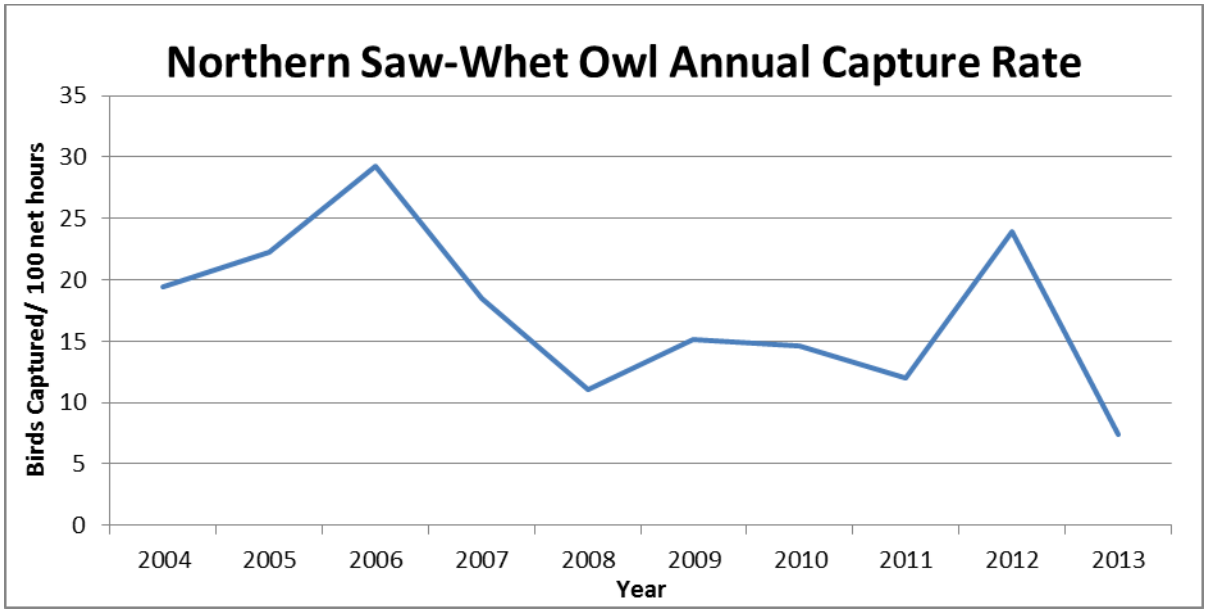
Northern Saw-Whet Owl Monitoring

Northern saw-whet owl fall migration monitoring was conducted for the 10th year at the LSLBO. The objective of this ongoing project is to monitor the population of northern saw-whet owl through mist-netting. The LSLBO conducts northern saw-whet owl banding in the fall from early September until late October. Four nets are set up 1 hour after sunset for four hours. A call playback is used to lure the northern saw-whet owls into the nets. A stereo broadcasts the call on a continuous cycle. Nets are not set if the temperatures become too cold or during rain or heavy wind.

The owl nets were moved approximately 500m from their original location into a forested area in 2013. This move was required because the original location was altered through some necessary maintenance in the area. Other owl banding operations have had luck with boreal owls responding to call, so we included a boreal owl call into the call playback sequence.

Northern saw-whet owl banding occurred on 42 nights from September 1 to October 25. Weather conditions, including heavy winds and rain prevented netting on 12 nights and reduced net hours on an additional 7 nights. A total of 46 northern saw-whet owls were captured, 45 banded and one recapture over 612 net hours for a capture rate of 7.5 owls per 100 net hours. This is the lowest capture rate since the LSLBO began northern saw-whet owl banding (Figure 5).

Figure 5. Annual capture rate of northern saw-whet owls.



Determining Migration Timing through Stable Isotopes

The LSLBO has been contributing to a Joint Research Project between the University of Alberta and Alberta Parks since 2010. One of the objectives of this project was to collect feathers from individuals of four focal species (Swainson's thush, Tennessee warbler, Myrtle warbler, and American redstart) for stable isotope analysis. Stable isotope signatures would determine the location the bird was in when the feather was grown. This information will help the LSLBO understand the migratory patterns observed by determining when and where migrants breeding in other areas move through the LSLBO.

This project originally focused on the four species and fall migration patterns. The majority of species were captured during fall migration and some individuals were captured during MAPS to obtain a local isotope signature. The feather collection continued in 2011 and 2012 and included collecting feathers from the four species during spring migration to provide connectivity between the two seasons. One limitation to this project was that the number of Tennessee warbler and American redstart captured was highly variable and we were not able to meet the target number of feather samples.

Feather collection continued in 2013. New partners from other areas of Alberta joined this project to create a larger map of migratory patterns across Alberta. To avoid limiting species that may not be represented in all areas of the province, the University of Alberta requested feather samples be collected from all species captured. The LSLBO collected 2,103 feathers from 61 species captured during spring and fall migration and MAPS.

Canada Warbler Project

In 2012, the LSLBO reinitiated the Canada Warbler Project and completed the second year of field work in 2013. The goal of this project is to determine the habitat use of Canada warbler breeding in the Lesser Slave Lake Provincial Park. Radio-transmitters were placed on 16 individuals each year at four study sites throughout the Park. The transmitters were used to locate the bird to obtain a location point. These points were then used to estimate the Canada warbler's territory size and delineate the territory boundaries. Detailed vegetation surveys then followed to describe the fine scale habitat features and forest structure used by Canada warblers.

This was the second and final year for the field data collection. This is a stand-alone project initiated by the LSLBO to study the poorly understood Canada warbler habitat requirements. This project will help identify critical breeding habitat, guide future conservation efforts and be used as a benchmark to future projects studying the response of Canada warblers to various land-use practises. Data for this project has not been prepared for this report. The results will be submitted to a peer reviewed journal.

Staff and Volunteers

The LSLBO accumulated nearly 300 person days between staff and volunteers during the various monitoring projects in 2013 (Table 9). The LSLBO operated with two licensed banders during the 2013 field season. The bander-in-charge has been working at the LSLBO since 2004 and the assistant bander has been at the LSLBO since 2008. These banders are responsible for all aspects of the monitoring projects at the LSLBO. Four other staff members at the boreal centre for bird conservation were able to join the banders, Cori Klassen, the boreal educator, and Ryan O'Neill, Stephanie Jean, and Della Drury who were working on the Canada warbler project.

Volunteer activity was low in 2013. Six volunteers accumulated 24 volunteer days at the migration station. All but one day was spent assisting during fall migration monitoring. All volunteers stayed at the lab for multiple days, allowing the banders an opportunity to work with them and develop their skills. All volunteers worked during a very busy period of the fall, when MAPS overlaps with fall migration, which was very helpful to the banders.

Table 9. Number of staff and volunteer days spent on monitoring projects in 2013.

LSLBO Staff	**Spring**	**MAPS**	**Fall**	**NSWO**	**Total**
Richard Krikun	39	9	59	1	108
Nicole Linfoot	38	19	45	42	144
Cori Klassen	4		3		7
Ryan O'Neill	9	1			10
Stephanie Jean	4				4
Della Drury	1				1
Total	**95**	**29**	**107**	**43**	**274**
Volunteers					
Jordan Lange		1	7		8
Myles Grieve			5		5
Jeff Manchak			4		4
Amelie Roberto-Charron			3		3
Kevin Methuen			3		3
Tobi-Anne Lange			2		2
Total	**0**	**1**	**24**	**0**	**25**

Visitors and Education

Education is an important component of the LSLBO's mandate. Various education programs provides the Boreal Centre for Bird Conservation (BCBC) an opportunity to highlight the migration monitoring programs conducted at the LSLBO while tying in curriculum connections for elementary, secondary, and post-secondary classes. The LSLBO also hosts drop-in events for visitors to learn more about birds, migration, and conservation. These programs and events are constantly evolving to allow the visitors a unique experience while maintaining bird safety and data collection.

In 2013 the LSLBO had just less than 1000 visitors to the bird banding operations (Table 10). Spring migration had the most visitors, with a large number of children from school programs. Spring banding lab tour programs were hosted on 13 mornings for 16 school classes from grades 1 to 12 plus Post Secondary. Other groups included a High School outdoor education club and a Junior Forest Warden group. The annual Songbird Festival was held on June 1. Most of the activities were held at the Boreal Centre, but hiking and bus tours brought attendees to the banding lab to check out the banding lab. It was a slow day at the lab and only about half the visitors were able to see birds being banded.

Fall migration generally has fewer visitors than the spring because of fewer organized tours. Through July and August, the BCBC advertises drop-in visitor tours twice a week which cater to families and campers. The LSLBO hosted 13 drop-in public lab tours as well as 8 special banding lab tours for two Junior Forest Ranger Crews, a local seniors tour, three elementary school classes, an adult education class from Loon Lake, and students from Portage College.

For northern Saw-whet owls the BCBC really pushed to expand the education component with 2 school groups, a junior high class from Ardrossen and a local school and hosted several public events including a family owl night on September 28, which drew approximately 70 visitors.

Table 10. Number of visitors to the banding station in 2013.

	Adults	Children	Total
Spring Migration	178	285	463
Fall Migration	268	115	383
Saw-whet Owls	60	86	146
Total	506	486	992

Acknowledgements

The LSLBO would like to thank the follow people and organizations whose hard work, dedication, and contributions made 2013 a very successful year.

Board of Directors: Bob Deacon (Chair), Terry Kristoff (Vice-chair), Ronda Groom (Treasurer), Tyler Flockhart (Director of Field Operations), Nelson Lutz (Director at Large), Cherie Friesen (Director at Large), and Neal Knoot (Director at Large).

Executive Director: Patti Campsall

LSLBO Banders: Richard Krikun (BIC) and Nicole Linfoot (Assistant BIC)

Boreal Centre Staff and Educators: Cori Klassen, Susie Vandervaart, Michelle Karpa

Canada Warbler Field Staff: Ryan O'Neill, Della Drury, and Stephanie Jean

Alberta Parks: Reg Arbuckle

University of Alberta: Dr. Erin Bayne and Samuel Hache

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Our Good Friends: Aaron Lehman, Wayne Bowles, and everyone else who visits us every year!

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Canadian Migration Monitoring Network- www.bsc.org/cmmn.html
Nature Counts- www.naturecounts.ca
Institute for Bird Populations- www.birdpop.org

Stephen Partington
Canada Summer Jobs
Alberta Community Spirit Grant

Appendix I. 2013 Migration Occurrence Records

The following charts summarize the occurrences of the 159 species encountered during spring and fall migration monitoring in 2013. The charts include the average number of birds encountered each week during migration. The first and last encounter date and the peak date for each species is included along with the number of individuals encountered on each of those dates. The # processed is the number of birds banded. If any recaptures occurred the number banded is followed by the number of returns then the number of repeats (banded-return-repeat). Notes are included with species with special occurrences.

Greater White-fronted Goose (*Anser albifrons)*

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	62.00	433.57	979.29	218.14				**249.51**
# Days Observed	1	4	5	5				**15**
	FIRST OBSERVED: April 27- 310		LAST OBSERVED: May 18- 20			PEAK DATE: May 8- 4415		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								16.00		934.86	5.71		**83.70**
# Days Observed								4		3	3		**10**
	FIRST OBSERVED: September 1 -11				LAST OBSERVED: September 22- 25				PEAK DATE: September 16- 6540				

Snow Goose (*Chen caerulescens*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		84.14	28.00					**16.70**
# Days Observed		3	3					**6**
	FIRST OBSERVED: May 4- 9		LAST OBSERVED: May 9- 73			PEAK DATE: May 6- 520		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										42.57	118.43		**14.09**
# Days Observed										2	3		**5**
	FIRST OBSERVED: September 16- 48				LAST OBSERVED: September 26- 685				PEAK DATE: September 26- 685				

Canada Goose (*Branta canadensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	790.20	106.57	43.57	3.00	5.29	5.86	2.57	**108.91**
# Days Observed	4	6	7	7	7	7	4	**42**
	FIRST OBSERVED: April 25- 24		LAST OBSERVED: June 7- 4			PEAK DATE: April 27- 3194		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.29		0.14	7.14	1.29	0.71	0.71	0.14		**0.91**
# Days Observed				1		1	5	5	3	1	1		**17**
	FIRST OBSERVED: August 4- 2				LAST OBSERVED: September 26- 1				PEAK DATE: August 27- 42				

Trumpeter Swan (*Cygnus buccinator*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.43				**0.06**
# Days Observed				1				**1**
	FIRST OBSERVED: May 16- 3		LAST OBSERVED: May 16- 3			PEAK DATE: May 16- 3		

Note: only the sixth sighting of Trumpeter Swans at the LSLBO, last sighting occurred in 2010.

Tundra Swan (*Cygnus columbianus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	187.00	59.00	0.86					**28.81**
# Days Observed	3	5	2					**10**
	FIRST OBSERVED: April 25- 2		LAST OBSERVED: May 11- 4			PEAK DATE: April 27- 929		

Wood Duck (*Aix sponsa*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 18- 1		LAST OBSERVED: May 18- 1			PEAK DATE: May 18- 1		

Note: only the second recorded sighting at the LSLBO, the first occurred on May 3, 2001

Gadwall (*Anas strepera*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.43	0.14				**0.09**
# Days Observed			1	1				**2**
	FIRST OBSERVED: May 12- 3		LAST OBSERVED: May 18- 1			PEAK DATE: May 12- 3		

American Wigeon (*Anas americana*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		2.00	2.14	2.43				**0.98**
# Days Observed		1	2	5				**8**
	FIRST OBSERVED: May 5- 14		LAST OBSERVED: May 20- 8			PEAK DATE: May 5- 14		

Mallard (*Anas platyrhynchos*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	7.80	7.86	7.14	4.57	2.86	3.29	1.71	**4.91**
# Days Observed	3	4	7	6	7	6	5	**38**
	FIRST OBSERVED: April 26- 8		LAST OBSERVED: June 10- 2			PEAK DATE: May 5- 39		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.86			3.57	0.71	0.43	0.57	0.29	0.14	0.14	1.33	**0.64**
# Days Observed		2			2	3	1	3	1	1	1	1	**15**
	FIRST OBSERVED: July 20- 2			LAST OBSERVED: September 29- 4				PEAK DATE: August 14- 17					

Blue-winged Teal (*Anas discors*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			1.00	7.86	0.71	0.14	0.14	**1.47**
# Days Observed			2	4	3	1	1	**11**
	FIRST OBSERVED: May 11- 4		LAST OBSERVED: June 8- 1			PEAK DATE: May 17- 33		

Northern Shoveler (*Anas clypeata*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			1.29	10.14		0.14		**1.72**
# Days Observed			2	3		1		**6**
	FIRST OBSERVED: May 9- 5		LAST OBSERVED: May 28- 1			PEAK DATE: May 18- 47		

Northern Pintail (*Anas acuta*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.60	1.29						**0.36**
# Days Observed	1	1						**2**
	FIRST OBSERVED: April 29- 8		LAST OBSERVED: May 4- 9			PEAK DATE: May 4- 9		

American Green-winged Teal (*Anas crecca carolinensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.71	2.43	0.29	1.71		**0.77**
# Days Observed			1	5	1	3		**10**
	FIRST OBSERVED: May 12- 5		LAST OBSERVED: June 3- 2			PEAK DATE: June 2- 8		

Ring-necked Duck (*Aythya collaris*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.86				**0.13**
# Days Observed				1				**1**
	FIRST OBSERVED: May 18- 6		LAST OBSERVED: May 18- 6			PEAK DATE: May 18- 6		

Greater Scaup (*Aythya marila*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.86				**0.13**
# Days Observed				1				**1**
	FIRST OBSERVED: May 16- 6		LAST OBSERVED: May 16- 6			PEAK DATE: May 16- 6		

Note: flocks of scaup flying at a distance are recorded as unidentified scaup

Lesser Scaup (*Aythya affinis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.86				**0.13**
# Days Observed				1				**1**
	FIRST OBSERVED: May 18- 6		LAST OBSERVED: May 18- 6			PEAK DATE: May 18- 6		

Note: flocks of scaup flying at a distance are recorded as unidentified scaup

Surf Scoter (*Melanitta perspicillata*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				22.14	21.14	2.86		**6.87**
# Days Observed				2	5	3		**10**
	FIRST OBSERVED: May 18- 130		LAST OBSERVED: June 1- 6			PEAK DATE: May 18- 130		

White-winged Scoter (*Melanitta fusca*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				4.57	3.29			**1.17**
# Days Observed				3	4			**7**
	FIRST OBSERVED: May 17- 2		LAST OBSERVED: May 25- 5			PEAK DATE: May 18- 20		

Long-tailed Duck (*Clangula hyemalis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				12.86	20.86	24.43		**8.66**
# Days Observed				5	4	5		**14**
	FIRST OBSERVED: May 16- 6		LAST OBSERVED: June 1- 10			PEAK DATE: May 24- 56		

Bufflehead (*Bucephala albeola*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.43	1.14	0.29	3.14		**0.74**
# Days Observed			2	4	2	5		**13**
	FIRST OBSERVED: May 9- 2		LAST OBSERVED: June 3- 3			PEAK DATE: June 1- 14		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29									1.29	4.71	15.00	**1.11**
# Days Observed	1									1	5	3	**10**
	FIRST OBSERVED: July 14- 2				LAST OBSERVED: September 29- 12				PEAK DATE: September 27- 20				

Common Goldeneye (*Bucephala clangula*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.00	0.71	4.29	24.29	13.00	15.00	4.29	**9.28**
# Days Observed	4	3	7	7	7	7	5	**40**
	FIRST OBSERVED: April 26- 2		LAST OBSERVED: June 10- 2			PEAK DATE: May 18- 86		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.86	0.29	0.14	0.29	0.43		0.71			0.43	2.86	3.67	**0.66**
# Days Observed	2	2	1	2	2		1			1	6	2	**19**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 28- 2				PEAK DATE: September 27- 9					

Common Merganser (*Mergus merganser*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.60		10.86	12.86	11.57	7.14	9.14	**7.74**
# Days Observed	1		7	6	7	7	4	**32**
	FIRST OBSERVED: April 26- 3		LAST OBSERVED: June 9- 50			PEAK DATE: June 9- 50		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	2.29	3.00	6.43	0.71	2.00	2.86	2.29	1.43	0.71	2.71	0.29	0.67	**2.19**
# Days Observed	5	1	3	2	3	4	3	2	2	5	1	1	**32**
	FIRST OBSERVED: July 12- 3			LAST OBSERVED: September 27- 2				PEAK DATE: August 1- 25					

Red-breasted Merganser (*Mergus serrator*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			1.14	8.14	5.86	5.57	10.00	**4.57**
# Days Observed			3	6	7	6	7	**29**
	FIRST OBSERVED: May 8- 4		LAST OBSERVED: June 10- 2			PEAK DATE: June 9- 26		

Ruffed Grouse (*Bonasa umbellus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.71	1.14	1.14	0.71	0.57	1.00	**0.79**
# Days Observed		4	7	7	4	4	6	**32**
	FIRST OBSERVED: May 2- 2		LAST OBSERVED: June 9- 2			PEAK DATE: 5 days- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.43	0.43	0.29	0.43				0.29	0.43	0.14	0.57	0.33	**0.28**
# Days Observed	1	2	2	2				1	2	1	4	1	**16**
	FIRST OBSERVED: July 15- 3			LAST OBSERVED: September 28- 1				PEAK DATE: July 15- 3					

Common Loon (*Gavia immer*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.57	0.57	2.29	2.71	9.00	1.86	**2.53**
# Days Observed		3	2	6	6	7	6	**30**
	FIRST OBSERVED: May 2- 1		LAST OBSERVED: June 9- 4			PEAK DATE: May 23- 30		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.14	2.00	1.43	2.43	2.00	2.00	6.29	2.29	0.71	0.71	0.29		**1.86**
# Days Observed	4	7	5	7	7	5	5	5	5	3	2		**55**
	FIRST OBSERVED: July 13- 2			LAST OBSERVED: September 23- 1				PEAK DATE: August 24- 33					

Red-Necked Grebe (*Podiceps grisegena*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					2.14	3.43	1.29	**1.02**
# Days Observed					6	7	5	**18**
	FIRST OBSERVED: May 21- 2		LAST OBSERVED: June 9- 1			PEAK DATE: 7 Dates- 4		

Red-Necked Grebe (*Podiceps grisegena*)

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.43		0.29	0.14	0.71	0.71	6.71	2.86	1.57	0.57		0.33	**1.24**
# Days Observed	2		1	1	4	3	7	6	6	3		1	**34**
	FIRST OBSERVED: July 17- 2				LAST OBSERVED: September 29- 1				PEAK DATE: August 23- 11				

Western Grebe (*Aechmophorus occidentalis*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						0.57	0.29	**0.13**
# Days Observed						3	1	**4**
	FIRST OBSERVED: May 29-1			LAST OBSERVED: June 7-2			PEAK DATE: June 7- 2	

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							0.57	0.29	0.14	0.29	0.29		**0.14**
# Days Observed							4	2	1	2	1		**10**
	FIRST OBSERVED: August 23- 1				LAST OBSERVED: September 20- 2				PEAK DATE: September 20- 2				

Double-crested Cormorant (*Phalacrocorax auritus*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14			0.57		**0.11**
# Days Observed			1			1		**2**
	FIRST OBSERVED: May 11-1			LAST OBSERVED: May 28-4			PEAK DATE: May 28-4	

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								0.71					**0.06**
# Days Observed								1					**1**
	FIRST OBSERVED: August 5- 1				LAST OBSERVED: August 5- 1				PEAK DATE: August 5- 1				

American White Pelican (*Pelecanus erythrorhynchos*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				1.43	0.43	0.29	0.43	**0.38**
# Days Observed				1	1	2	1	**5**
	FIRST OBSERVED: May 17- 10			LAST OBSERVED: June 5- 3			PEAK DATE: June 7- 2	

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	1.57	0.29	0.14		1.00	1.71	0.14	0.43	0.29	0.71		**0.58**
# Days Observed	1	4	2	1		2	3	1	1	1	3		**19**
	FIRST OBSERVED: July 14- 2				LAST OBSERVED: September 22- 3				PEAK DATE: August 19 & 24- 6				

Great Blue Heron (*Ardea herodias*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14						**0.02**
# Days Observed		1						**1**
	FIRST OBSERVED: May 2- 1			LAST OBSERVED: May 2- 1			PEAK DATE: May 2- 1	

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.14		0.14							**0.03**
# Days Observed				1		1							**2**
	FIRST OBSERVED: August 5 -1				LAST OBSERVED: August 19 -1				PEAK DATE: August 5 & 19- 1				

Osprey (*Pandion haliaetus*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	0.14			0.14		**0.09**
# Days Observed		2	1			1		**4**
	FIRST OBSERVED: May 4- 1			LAST OBSERVED: June 2- 1			PEAK DATE: All dates-1	

Osprey (*Pandion haliaetus*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14	0.14					0.14	0.29				**0.06**
# Days Observed		1	1					1	2				**5**
	FIRST OBSERVED: July 22- 1				LAST OBSERVED: September 12- 1				PEAK DATE: All dates-1				

Bald Eagle (*Haliaeetus leucocephalus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.20	1.29	1.43	2.14	1.71	1.43	0.86	**1.45**
# Days Observed	5	6	7	7	7	7	6	**45**
	FIRST OBSERVED: April 25- 2			LAST OBSERVED: June 10- 1			PEAK DATE: May 22- 5	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.71	1.29	1.29	1.43	1.14	1.86	2.29	2.29	1.86	1.14	3.29	1.00	**1.75**
# Days Observed	7	6	7	7	7	7	7	7	7	5	7	3	**77**
	FIRST OBSERVED: July 12- 2				LAST OBSERVED: September 29- 1				PEAK DATE: September 24- 5				

Northern Harrier (*Circus cyaneus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	3.00	5.71	2.00	1.00	0.14			**1.64**
# Days Observed	4	5	6	3	1			**19**
	FIRST OBSERVED: April 25- 8			LAST OBSERVED: May 21- 1			PEAK DATE: May 5- 18	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14		0.14	1.00			0.29	1.14	1.29	1.29	0.67	**0.49**
# Days Observed		1		1	4			1	5	5	3	1	**21**
	FIRST OBSERVED: July 25- 1				LAST OBSERVED: September 27- 2				PEAK DATE: Aug 9, Sept 14 & 20- 4				

Sharp-shinned Hawk (*Accipiter striatus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.60	0.29	0.43	0.29	0.29	0.29		**0.30**
# Days Observed	3	2	2	2	2	2		**13**
# Processed			2	1	1	1		**5**
	FIRST OBSERVED: April 25- 1			LAST OBSERVED: June 2- 1			PEAK DATE: All dates- 1	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14	0.14	0.43	0.29	0.71	2.57	6.71	7.71	4.57	2.14	1.14	1.67	**2.39**
# Days Observed	1	1	2	2	3	6	7	7	6	6	5	3	**49**
# Processed	0-1-0				2	2	4	10	7	3	1	1	**30-1-0**
	FIRST OBSERVED: July 13- 1				LAST OBSERVED: September 29- 1				PEAK DATE: September 1- 13				

Cooper's Hawk (*Accipiter cooperii*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										0.14			**0.01**
# Days Observed										1			**1**
# Processed										1			**1**
	FIRST OBSERVED: September 13- 1				LAST OBSERVED: September 13- 1				PEAK DATE: September 13- 1				

Note: Only individual encountered was captured in the nets, only the third banding record at the LSLBO.

Northern Goshawk (*Accipiter gentilis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	0.14	0.14	0.14			**0.11**
# Days Observed		2	1	1	1			**5**
	FIRST OBSERVED: May 1- 1			LAST OBSERVED: May 22- 1			PEAK DATE: All dates- 1	

Northern Goshawk (*Accipiter gentilis*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day									0.14				**0.01**
# Days Observed									1				**1**
	FIRST OBSERVED: September 6- 1				LAST OBSERVED: September 6- 1				PEAK DATE: September 6- 1				

Red-tailed Hawk (*Buteo jamaicensis*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	0.43					**0.09**
# Days Observed		1	2					**3**
	FIRST OBSERVED: May 6- 1			LAST OBSERVED: May 9- 1			PEAK DATE: May 2- 2	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										0.29			**0.03**
# Days Observed										1			**1**
	FIRST OBSERVED: September 16- 2				LAST OBSERVED: September 16- 2				PEAK DATE: September 16- 2				

Rough-legged Hawk (*Buteo lagopus*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.00	0.14						**0.13**
# Days Observed	2	1						**3**
	FIRST OBSERVED: April 27- 2			LAST OBSERVED: May 4- 1			PEAK DATE: April 28- 3	

American Coot (*Fulica americana*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 19- 1			LAST OBSERVED: May 19- 1			PEAK DATE: May 19- 1	

Note: Although common at local ponds, only the sixth recorded encounter at the migration station.

Sandhill Crane (*Grus canadensis*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	5.80	166.43	47.43	1.86	0.14			**32.77**
# Days Observed	1	5	3	3	1			**13**
	FIRST OBSERVED: April 28- 29			LAST OBSERVED: May 22- 1			PEAK DATE: May 6- 1135	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								3.57			8.14		**1.03**
# Days Observed								1			1		**2**
	FIRST OBSERVED: September 3- 25				LAST OBSERVED: September 21- 57				PEAK DATE: September 21- 57				

Killdeer (*Charadrius vociferous*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Mean # Birds/Day	0.20	0.43	0.57	0.14	0.14			**0.21**
# Days Observed	1	3	4	1	1			**10**
	FIRST OBSERVED: April 29- 1			LAST OBSERVED: May 22- 1			PEAK DATE: All dates- 1	

Spotted Sandpiper (*Actitis macularius*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	1.29	5.71	2.57	2.29	2.00	**2.09**
# Days Observed		1	3	7	7	7	6	**31**
	FIRST OBSERVED: May 5- 1			LAST OBSERVED: June 9- 1			PEAK DATE: May 17- 10	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.43	1.00	1.14	1.57	5.00	1.14	3.14	1.43	0.71				**1.45**
# Days Observed	5	5	6	6	7	4	6	4	2				**45**
	FIRST OBSERVED: July 13- 3				LAST OBSERVED: September 12- 2				PEAK DATE: August 12- 26				

Greater Yellowlegs (*Tringa melanoleuca*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20	2.00	0.29	3.57				**0.89**
# Days Observed	1	2	2	3				**8**
	FIRST OBSERVED: April 29- 1		LAST OBSERVED: May 19- 1			PEAK DATE: May 14- 22		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			0.14		0.14	0.29			0.14				**0.06**
# Days Observed			1		1	1			1				**4**
	FIRST OBSERVED: July 31- 1			LAST OBSERVED: September 6- 1				PEAK DATE: August 20- 2					

Note: a number of yellowlegs are not positively identified and are recorded as unidentified yellowlegs.

Lesser Yellowlegs (*Tringa flavipes*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14	0.57				**0.11**
# Days Observed			1	3				**4**
	FIRST OBSERVED: May 9- 1		LAST OBSERVED: May 17- 2			PEAK DATE: May 17- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							0.43						**0.04**
# Days Observed							1						**1**
	FIRST OBSERVED: August 23- 3			LAST OBSERVED: August 23- 3				PEAK DATE: August 23- 3					

Note: a number of yellowlegs are not positively identified and are recorded as unidentified yellowlegs.

Baird's Sandpiper (*Calidris bairdii*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 17- 1			PEAK DATE: May 17- 1		

Least Sandpiper (*Calidris minutilla*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 17- 1			PEAK DATE: May 17- 1		

Semipalmated Sandpiper (*Calidris pusilla*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 17- 1			PEAK DATE: May 17- 1		

Short-billed Dowitcher (*Limnodromus griseus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				16.43				**2.45**
# Days Observed				2				**2**
	FIRST OBSERVED: May 16- 105		LAST OBSERVED: May 17- 10			PEAK DATE: May 16- 105		

Long-billed Dowitcher (*Limnodromus scolopaceus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				16.14				**2.40**
# Days Observed				2				**2**
	FIRST OBSERVED: May 16- 53		LAST OBSERVED: May 17- 60			PEAK DATE: May 17- 60		

Common Snipe (*Gallinago gallinago*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.43	0.14	0.43				**0.15**
# Days Observed		3	1	3				**7**
	FIRST OBSERVED: May 4- 1		LAST OBSERVED: May 16- 1		PEAK DATE: All dates- 1			

Bonaparte's Gull (*Chroicocephalus philadelphia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.71	3.57	0.14				**0.66**
# Days Observed		2	3	1				**6**
	FIRST OBSERVED: May 4- 1		LAST OBSERVED: May 16- 1		PEAK DATE: May 8- 22			

Franklin's Gull (*Leucophaeus pipixcan*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		63.43	44.43	47.43	21.57	10.71		**27.94**
# Days Observed		3	7	6	4	2		**22**
	FIRST OBSERVED: May 4- 58		LAST OBSERVED: May 30- 45		PEAK DATE: May 5- 225			

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	24.29	4.00	24.86			1.86	14.29	16.00					**7.46**
# Days Observed	4	3	3			1	1	2					**14**
	FIRST OBSERVED: July 12- 5				LAST OBSERVED: September 4- 62				PEAK DATE: July 27- 170				

Mew Gull (*Larus canus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20	0.57	1.14	1.71				**0.53**
# Days Observed	1	3	4	3				**11**
	FIRST OBSERVED: April 27- 1		LAST OBSERVED: May 18- 1		PEAK DATE: May 14- 10			

Ring-billed Gull (*Larus delawarensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.20	1.14	2.86	1.14	1.29	0.29	0.43	**1.19**
# Days Observed	3	3	3	2	2	1	2	**16**
	FIRST OBSERVED: April 26- 2		LAST OBSERVED: June 8- 1		PEAK DATE: May 7- 12			

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	12.29	0.71	0.71	0.14		0.29	0.71		0.57	0.43			**1.39**
# Days Observed	5	1	1	1		1	2		4	1			**16**
	FIRST OBSERVED: July 12- 32				LAST OBSERVED: September 18- 3				PEAK DATE: September 18- 3				

Note: a number of gulls are recorded as unidentified, particularly the juveniles in the fall.

California Gull (*Larus californicus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.57				**0.09**
# Days Observed				1				**1**
	FIRST OBSERVED: May 18- 4		LAST OBSERVED: May 18- 4		PEAK DATE: May 18- 4			

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day						0.14							**0.01**
# Days Observed						1							**1**
	FIRST OBSERVED: August 19- 1				LAST OBSERVED: August 19- 1				PEAK DATE: August 19- 1				

Herring Gull (*Larus argentatus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.71	0.86	0.86	0.14			**0.38**
# Days Observed		2	4	2	1			**9**
	FIRST OBSERVED: May 3- 2		LAST OBSERVED: May 24- 1			PEAK DATE: May 14- 4		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.43			0.14		0.14	0.29		0.14			**0.10**
# Days Observed		1			1		1	1		1			**5**
	FIRST OBSERVED: July 23- 3			LAST OBSERVED: September 18- 1				PEAK DATE: July 23- 3					

Black Tern (*Chlidonias niger*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						0.14		**0.02**
# Days Observed						1		**1**
	FIRST OBSERVED: June 1- 1		LAST OBSERVED: June 1- 1			PEAK DATE: June 1- 1		

Note: black terms are rarely encountered during the migration monitoring

Common Tern (*Sterna hirundo*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14	0.86	1.57		**0.38**
# Days Observed				1	2	4		**7**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 31- 1			PEAK DATE: May 29- 6		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.14	1.43	1.57	2.86	2.29	1.71	3.29	2.43	0.29				**1.49**
# Days Observed	5	6	6	5	6	4	6	3	1				**42**
	FIRST OBSERVED: July 13- 2			LAST OBSERVED: September 6- 2				PEAK DATE: August 2- 13					

Forster's Tern (*Sterna forsteri*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				1.00	0.29			**0.19**
# Days Observed				2	1			**3**
	FIRST OBSERVED: May 16- 4		LAST OBSERVED: May 22- 2			PEAK DATE: May 16- 4		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14	0.29											**0.04**
# Days Observed	1	1											**2**
	FIRST OBSERVED: July 15- 1			LAST OBSERVED: July 25- 2				PEAK DATE: July 25- 2					

Eurasian Collared-Dove (*Streptopelia decaocto*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 19- 1		LAST OBSERVED: May 19- 1			PEAK DATE: May 19- 1		

Note: the first record of the species at the LSLBO, 251 species to be recorded at the LSLBO during migration monitoring.

Mourning Dove (*Zenaida macroura*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14		0.14	0.14			**0.06**
# Days Observed		1		1	1			**3**
	FIRST OBSERVED: May 6- 1		LAST OBSERVED: May 23- 1			PEAK DATE: May 6, 16, 23- 1		

Barred Owl (*Strix varia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14					**0.02**
# Days Observed			1					**1**
	FIRST OBSERVED: May 12- 1		LAST OBSERVED: May 12- 1			PEAK DATE: May 12- 1		

Common Nighthawk (*Chordeiles minor*)

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							0.14						**0.01**
# Days Observed							1						**1**
	FIRST OBSERVED: August 23- 1			LAST OBSERVED: August 23- 1				PEAK DATE: August 23- 1					

Note: usually only one individual encountered each year. This one was foraging in a flock of Franklin Gulls.

Ruby-throated Hummingbird (*Archilochus colubris*)

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.43									**0.04**
# Days Observed				2									**2**
	FIRST OBSERVED: August 2- 1			LAST OBSERVED: August 6- 2				PEAK DATE: August 6- 2					

Note: Two were captured in mist-nets. They were released immediately and safely unbanded.

Rufous Hummingbird (*Selasphorus rufus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 18- 1		LAST OBSERVED: May 18- 1			PEAK DATE: May 18- 1		

Note: the third individual recorded at the LSLBO, the last record occurred on May 26, 1998.

Belted Kingfisher (*Megaceryle alcyon*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.29	0.86	0.57	1.14	0.57	**0.51**
# Days Observed			2	6	4	6	4	**22**
	FIRST OBSERVED: May 9- 1		LAST OBSERVED June 9- 1:			PEAK DATE: May 30- 2		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.14	0.43	0.29	0.57	0.29	1.86	1.14	0.86	0.29	0.43	0.67	**0.60**
# Days Observed	2	1	3	2	3	2	7	5	6	2	3	2	**38**
# Processed	1												**1**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 28- 1				PEAK DATE: August 25- 3					

Note: First banding record for this species at the LSLBO and 104th species to be banded at the station.

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			3.00	1.71	0.86	1.43	0.57	**1.13**
# Days Observed			5	6	3	7	4	**25**
# Processed			1	1	1	1-0-1	0-0-1	**4-0-2**
	FIRST OBSERVED: May 9- 6		LAST OBSERVED: June 9- 1			PEAK DATE: May 11- 7		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.14	0.43	0.71	0.14		0.43			0.14			**0.20**
# Days Observed	2	1	3	4	1		2			1			**14**
# Processed	0-0-2		2-0-1	0-0-2			0-0-2			1			**3-0-7**
	FIRST OBSERVED: July 17- 1			LAST OBSERVED: September 14- 1				PEAK DATE: August 2&28- 2					

Downy Woodpecker (*Picoides pubescens*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14					0.14	**0.04**
# Days Observed		1					1	**2**
# Processed							1	**1**
	FIRST OBSERVED: May 5- 1		LAST OBSERVED: June 9- 1			PEAK DATE: May 5 & June 9- 1		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.29	0.14	0.29	0.57	0.14	0.57			0.14	0.43	0.67	**0.25**
# Days Observed		1	1	2	4	1	4			1	3	1	**18**
# Processed		1										1	**2**
	FIRST OBSERVED: July 23- 2			LAST OBSERVED: September 27- 2				PEAK DATE: July 23 & September 27- 2					

Hairy Woodpecker (*Picoides villosus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	0.57	0.29	0.43	0.43		**0.28**
# Days Observed		1	4	2	3	3		**13**
	FIRST OBSERVED: April 30- 1		LAST OBSERVED: June 3- 1			PEAK DATE: All dates- 1		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.86	1.86	1.29	1.29	0.43	0.43	0.29	0.43	0.29	0.57	0.67	**0.73**
# Days Observed	2	5	6	4	6	3	3	2	3	2	4	2	**42**
# Processed	1	1-0-3	2-1-1	2	1							1	**8-1-4**
	FIRST OBSERVED: July 17- 1			LAST OBSERVED: September 28- 1				PEAK DATE: July 26- 4					

Note: A record number were banded during fall migration.

Northern Flicker (*Colaptes auratus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			7	7	6	6		**26**
# Days Observed			25.43	2.71	0.86	0.86		**4.45**
	FIRST OBSERVED: May 7- 1		LAST OBSERVED: July 3- 1			PEAK DATE: May 9- 100		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14		0.14						0.57	0.14	0.29		**0.11**
# Days Observed	1		1						4	1	2		**9**
# Processed									1		1		**2**
	FIRST OBSERVED: July 17- 1			LAST OBSERVED: September 24- 1				PEAK DATE: All dates- 1					

Note: All northern flickers encountered were yellow-shafted flickers.

Pileated Woodpecker (*Dryocopus pileatus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14					**0.02**
# Days Observed			1					**1**
	FIRST OBSERVED: May 11- 1		LAST OBSERVED: May 11- 1			PEAK DATE: May 11- 1		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14		0.29	0.14		0.29	0.29	0.29	0.14	0.14		**0.15**
# Days Observed		1		2	1		2	2	2	1	1		**12**
# Processed									1				**1**
	FIRST OBSERVED: July 25- 1			LAST OBSERVED: September 21- 1				PEAK DATE: All dates- 1					

Note: the fourth pileated woodpecker to be banded at the LSLBO.

American Kestrel (*Falco sparverius*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.14					0.29		0.29		**0.06**
# Days Observed				1					2		2		**5**
	FIRST OBSERVED: August 8- 1			LAST OBSERVED: September 24- 1				PEAK DATE: All dates- 1					

Merlin (*Falco columbarius*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.40	0.86	0.29	0.29	0.57		0.29	**0.49**
# Days Observed	4	4	2	2	4		1	**17**
	FIRST OBSERVED: April 26- 1		LAST OBSERVED: June 9- 2			PEAK DATE: April 27- 3		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.29	0.14	0.29	0.14	0.71	0.43	0.71	0.43				**0.30**
# Days Observed	2	2	1	2	1	5	2	2	3				**20**
	FIRST OBSERVED: July 13- 1			LAST OBSERVED: September 12- 1				PEAK DATE: September 3- 4					

Peregrine Falcon (*Falco peregrinus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		1.14	0.29			0.14		**0.23**
# Days Observed		3	2			1		**6**
	FIRST OBSERVED: May 3- 1		LAST OBSERVED: June 1- 1			PEAK DATE: May 5- 6		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day					0.14			0.29	0.14				**0.05**
# Days Observed					1			1	1				**3**
	FIRST OBSERVED: August 12- 1			LAST OBSERVED: September 8- 1				PEAK DATE: September 2- 2					

Note: One or two individuals are observed each year, but 6 in one day is a very high occurrence for the LSLBO.

Olive-sided Flycatcher (*Contopus cooperi*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14					**0.02**
# Days Observed			1					**1**
	FIRST OBSERVED: May 12- 1		LAST OBSERVED: May 12- 1			PEAK DATE: May 12- 1		

Note: Olive-sided flycatchers are listed as a threatened species in Canada, they are rarely encountered at the LSLBO.

Western Wood-pewee (*Contopus sordidulus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14	0.14	0.14	0.14	0.14	**0.11**
# Days Observed			1	1	1	1	1	**5**
	FIRST OBSERVED: May 13- 1		LAST OBSERVED: June 9- 1			PEAK DATE: All dates- 1		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14											**0.01**
# Days Observed		1											**1**
	FIRST OBSERVED: July 23- 1			LAST OBSERVED: July 23- 1				PEAK DATE: July 23- 1					

Alder Flycatcher (*Empidonax alnorum*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						0.14	2.14	**0.34**
# Days Observed						1	5	**6**
# Processed						1	6	**7**
	FIRST OBSERVED: June 3- 1		LAST OBSERVED: June 9- 4			PEAK DATE: June 4&9- 4		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.00	1.43	1.29	3.14	2.86	1.29	0.29	0.43		0.14			**1.04**
# Days Observed	6	6	4	7	7	3	1	3		1			**38**
# Processed	1	3	1	4	13	7	2	3		1			**35**
	FIRST OBSERVED: July 13- 1			LAST OBSERVED: September 14- 1				PEAK DATE: August 7- 12					

Note: Late spring migrant, one of the last species to arrive in the spring.

Least Flycatcher (*Empidonax minimus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	0.14	8.00	2.86	2.57	1.14	**2.21**
# Days Observed		1	1	5	7	6	4	**24**
# Processed				10	5	4	2	**21**
	FIRST OBSERVED: May 5- 1		LAST OBSERVED: June 9- 1			PEAK DATE: May 20- 29		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.57	0.86	1.14	2.29	3.00	0.71	1.29	0.14	0.29	0.43			**0.94**
# Days Observed	3	4	4	7	6	4	5	1	1	1			**36**
# Processed	3	2	3	4	6	2	2						**22**
	FIRST OBSERVED: July 13- 1			LAST OBSERVED: September 16- 3				PEAK DATE: August 11- 9					

Eastern Phoebe (*Sayornis phoebe*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	3.14	1.57	0.29		0.57	**0.85**
# Days Observed		1	6	7	1		2	**17**
# Processed			1	1				**2**
	FIRST OBSERVED: May 5- 1		LAST OBSERVED: June 8- 1			PEAK DATE: May 9- 8		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.14	0.14			0.29	0.29				**0.08**
# Days Observed				1	1			2	1				**5**
	FIRST OBSERVED: August 4- 1			LAST OBSERVED: September 8- 2				PEAK DATE: September 8- 2					

Say's Phoebe (*Sayornis saya*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.57				**0.09**
# Days Observed				3				**3**
	FIRST OBSERVED: May 15- 1		LAST OBSERVED: May 19- 2			PEAK DATE: May 19- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day						0.14	0.43	0.43	0.14				**0.10**
# Days Observed						1	3	1	1				**6**
	FIRST OBSERVED: August 18- 1			LAST OBSERVED: September 7- 1				PEAK DATE: September 2- 3					

Eastern Kingbird (*Tyrannus tyrannus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				1.00	0.14	0.14		**0.19**
# Days Observed				2	1	1		**4**
	FIRST OBSERVED: May 14- 6		LAST OBSERVED: May 31- 1			PEAK DATE: May 14- 6		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day													
# Days Observed													
	FIRST OBSERVED: August 1- 1			LAST OBSERVED: September 16- 4				PEAK DATE: August 23- 10					

Northern Shrike (*Lanius excubitor*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14						**0.02**
# Days Observed		1						**1**
# Processed		1						**1**
	FIRST OBSERVED: May 1- 1		LAST OBSERVED: May 1- 1			PEAK DATE: May 1- 1		

Note: The second banding record of Northern Shrike for the LSLBO.

Blue-headed Vireo (*Vireo solitaries*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.71	0.29	0.14	0.14	**0.19**
# Days Observed				4	2	1	1	**8**

FIRST OBSERVED: May 17- 1 | LAST OBSERVED: June 4- 1 | PEAK DATE: May 19- 2

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14		1.29	0.14								**0.14**
# Days Observed		1		3	1								**5**
# Processed		1											**1**

FIRST OBSERVED: July 24- 1 | LAST OBSERVED: August 12- 1 | PEAK DATE: August 4- 5

Warbling Vireo (*Vireo gilvus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.29	0.43	0.43	0.29	0.14	**0.23**
# Days Observed			2	3	3	2	1	**11**

FIRST OBSERVED: May 8- 1 | LAST OBSERVED: June 9- 1 | PEAK DATE: All dates- 1

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.29	0.14	0.14	0.14	0.14	1.00						**0.16**
# Days Observed		2	1	1	1	1	4						**10**
# Processed		1	1										**2**

FIRST OBSERVED: July 20- 1 | LAST OBSERVED: August 28- 2 | PEAK DATE: August 26- 3

Philadelphia Vireo (*Vireo philadelphicus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.43	1.14	0.71		**0.34**
# Days Observed				3	6	5		**14**

FIRST OBSERVED: May 16- 1 | LAST OBSERVED: June 3- 1 | PEAK DATE: May 22 & 27- 2

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			0.86		0.14	0.43	0.14	0.29					**0.16**
# Days Observed			3		1	1	1	2					**8**
# Processed			3		1		1	2					**7**

FIRST OBSERVED: July 27- 1 | LAST OBSERVED: September 1- 1 | PEAK DATE: July 29- 4

Red-eyed Vireo (*Vireo olivaceus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14	1.00	3.43	3.00	**1.13**
# Days Observed				1	6	7	7	**21**
# Processed				1			2	**3**

FIRST OBSERVED: May 20- 1 | LAST OBSERVED: June 10- 1 | PEAK DATE: May 31- 5

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	4.14	3.86	4.29	4.86	6.57	1.86	2.43	0.57		0.14			**2.51**
# Days Observed	6	7	7	7	7	4	6	2		1			**47**
# Processed	1-1-0	2-1-0	5	4	5-0-3	1	2			1			**21-2-3**

FIRST OBSERVED: July 13- 4 | LAST OBSERVED: September 16- 1 | PEAK DATE: August 9 & 12- 9

Gray Jay (*Perisoreus canadensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						0.29		**0.04**
# Days Observed						1		**1**

FIRST OBSERVED: June 3- 2 | LAST OBSERVED: June 3- 2 | PEAK DATE: June 3- 2

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								0.14					**0.01**
# Days Observed								1					**1**

FIRST OBSERVED: September 1- 1 | LAST OBSERVED: September 1- 1 | PEAK DATE: September 1- 1

Blue Jay (*Cyanocitta cristata*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20	0.14	0.43	1.00	0.86	0.86		**0.51**
# Days Observed	1	1	3	6	6	5		**22**
	FIRST OBSERVED: April 29- 1		LAST OBSERVED: June 3- 1			PEAK DATE: May 17&29- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.43	1.14	0.43	0.71	0.71	0.43	1.14	1.29	2.14	1.14	0.43	0.67	**0.90**
# Days Observed	2	2	3	5	3	3	6	6	6	5	2	2	**45**
# Processed									2				**2**
	FIRST OBSERVED: July 17- 1			LAST OBSERVED: September 28- 1				PEAK DATE: September 6- 6					

Black-billed Magpie (*Pica hudsonia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		1.29	0.29	0.29	0.29	0.29	0.14	**0.38**
# Days Observed		4	2	2	2	2	1	**13**
	FIRST OBSERVED: May 1- 1		LAST OBSERVED: June 7- 1			PEAK DATE: May 6- 5		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								1.00	1.29	0.43	1.29	0.33	**0.36**
# Days Observed								3	6	3	4	1	**17**
# Processed								1					**1**
	FIRST OBSERVED: August 31- 3			LAST OBSERVED: September 28- 1				PEAK DATE: 3 dates- 3					

Note: only the second black-billed magpie to be banded at the LSLBO, the first occurred on September 16, 1999.

American Crow (*Corvus brachyrhynchos*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	6.00	4.57	5.71	4.14	4.86	3.29	1.86	**4.28**
# Days Observed	5	7	7	7	7	7	7	**47**
	FIRST OBSERVED: April 25- 2		LAST OBSERVED: June 10- 2			PEAK DATE: May 22- 12		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.43	3.14	1.71	0.57	1.00	0.71	1.57	4.00	0.57		2.86		**1.54**
# Days Observed	5	4	6	3	5	3	3	2	3		1		**35**
	FIRST OBSERVED: July 12- 3			LAST OBSERVED: September 21- 20				PEAK DATE: September 4- 27					

Common Raven (*Corvus* corax)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	1.20	1.00	1.71	2.00	0.71	1.00	0.14	**1.11**
# Days Observed	4	5	7	7	3	6	1	**33**
	FIRST OBSERVED: April 26- 1		LAST OBSERVED: June 7- 1			PEAK DATE: April 28- 3		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	7.00	3.71	1.86	1.29	1.00	2.29	3.29	1.29	2.86	2.14	9.00	2.33	**3.21**
# Days Observed	6	6	5	7	5	6	7	4	7	6	7	3	**69**
	FIRST OBSERVED: July 12- 4			LAST OBSERVED: September 29- 3				PEAK DATE: July 17- 31					

Horned Lark (*Eremophila alpestris*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	0.29		5.71			**0.94**
# Days Observed		2	1		2			**5**
	FIRST OBSERVED: May 2- 1		LAST OBSERVED: May 23- 32			PEAK DATE: May 23- 32		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										0.29	0.29		**0.05**
# Days Observed										1	1		**2**
	FIRST OBSERVED: September 16- 2			LAST OBSERVED: September 21-2				PEAK DATE: September 16& 21- 2					

Tree Swallow (*Tachycineta bicolor*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		5.14	5.43	31.14	1.14	1.43	1.86	**6.87**
# Days Observed		2	5	7	5	7	5	**31**
	FIRST OBSERVED: May 4- 1		LAST OBSERVED: June 9- 3			PEAK DATE: May 19- 95		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.71	2.14	43.14	4.86	9.57		0.14						**5.30**
# Days Observed	1	2	3	5	6		1						**18**
	FIRST OBSERVED: July 17- 5			LAST OBSERVED: August 24- 1				PEAK DATE: July 26- 291					

Bank Swallow (*Riparia riparia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				13.14				**1.96**
# Days Observed				3				**3**
	FIRST OBSERVED: May 17- 2		LAST OBSERVED: May 20- 11			PEAK DATE: May 19- 79		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			35.14	3.00	10.29	0.86							**4.31**
# Days Observed			1	3	4	1							**9**
	FIRST OBSERVED: July 26- 246			LAST OBSERVED: August 18- 6				PEAK DATE: July 26- 246					

Cliff Swallow (*Petrochelidon pyrrhonota*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				2.43				**0.36**
# Days Observed				2				**2**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 19- 16			PEAK DATE: May 19- 16		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			1.14	8.57	2.29				0.71				**1.11**
# Days Observed			1	4	1				1				**7**
	FIRST OBSERVED: July 26- 8			LAST OBSERVED: September 7- 5				PEAK DATE: August 3- 43					

Barn Swallow (*Hirundo rustica*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.43						**0.06**
# Days Observed		1						**1**
	FIRST OBSERVED: May 3- 3		LAST OBSERVED: May 3- 3			PEAK DATE: May 3- 3		

Black-capped Chickadee (*Poecile atricapillus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	4.20	3.86	2.86	2.00	2.57	2.29	0.57	**2.55**
# Days Observed	5	7	7	7	7	7	4	**44**
# Processed	3-1-0	3-0-2	1-0-1		0-0-1			**7-1-4**
	FIRST OBSERVED: April 25- 4		LAST OBSERVED: June 9- 1			PEAK DATE: April 27 & May 4- 6		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	4.43	3.71	2.14	3.43	2.86	1.71	3.43	3.14	3.14	3.00	3.71	3.00	**3.15**
# Days Observed	7	7	6	7	7	5	7	6	7	5	7	2	**73**
# Processed	4	3			0-0-1			1	3-0-1	1-2-1	1-1-0	0-0-2	**13-3-5**
	FIRST OBSERVED: July 12- 1			LAST OBSERVED: September 28- 3				PEAK DATE: July 17- 9					

Boreal Chickadee (*Poecile hudsonicus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 14- 1		LAST OBSERVED: May 14- 1			PEAK DATE: May 14- 1		

Boreal Chickadee (*Poecile hudsonicus*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29												**0.03**
# Days Observed	2												**2**
	FIRST OBSERVED: July 14- 1				LAST OBSERVED: July 17- 1				PEAK DATE: July 14 & 17- 1				

Red-breasted Nuthatch (*Sitta canadensis*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.29	0.14	0.14	0.57	0.29	0.71	0.71	0.71	0.29	0.14	0.67	**0.38**
# Days Observed		2	1	1	3	2	3	5	4	2	1	2	**26**
# Processed												1	**1**
	FIRST OBSERVED: July 22- 1				LAST OBSERVED: September 28- 1				PEAK DATE: August 29- 3				

White-breasted Nuthatch (*Sitta carolinensi*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14						**0.02**
# Days Observed		1						**1**
	FIRST OBSERVED: May 3- 1			LAST OBSERVED: May 3- 1			PEAK DATE: May 3- 1	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day						0.14		0.14		0.14			**0.04**
# Days Observed						1		1		1			**3**
	FIRST OBSERVED: August 16- 1				LAST OBSERVED: September 16- 1				PEAK DATE: All dates- 1				

Brown Creeper (*Certhia americana*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14	0.29	0.29			**0.11**
# Days Observed			1	2	2			**5**
	FIRST OBSERVED: May 7- 1			LAST OBSERVED: May 24- 1			PEAK DATE: All dates- 1	

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			0.14	0.29			0.29						**0.06**
# Days Observed			1	2			2						**5**
# Processed				1									**1**
	FIRST OBSERVED: July 29- 1				LAST OBSERVED: August 28- 1				PEAK DATE: All dates- 1				

House Wren (*Troglodytes aedon*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day							0.14	**0.02**
# Days Observed							1	**1**
# Processed							1	**1**
	FIRST OBSERVED: June 4- 1			LAST OBSERVED: June 4- 1			PEAK DATE: June 4- 1	

Winter Wren (*Troglodytes hiemalis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.57	1.00	0.29	0.14		**0.30**
# Days Observed			3	6	2	1		**12**
	FIRST OBSERVED: May 10- 1			LAST OBSERVED: May 30- 1			PEAK DATE: May 12 & 16- 2	

Golden-crowned Kinglet (*Regulus satrapa*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										0.43	3.29	2.33	**0.41**
# Days Observed										2	7	2	**11**
# Processed											1		**1**
	FIRST OBSERVED: September 16- 2				LAST OBSERVED: September 28- 3				PEAK DATE: September 20- 6				

Ruby-crowned Kinglet (*Regulus calendula*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.80	1.14	2.43	1.29	0.14			**0.83**
# Days Observed	2	4	7	5	1			**19**
# Processed		2		4				**6**
	FIRST OBSERVED: April 26- 1		LAST OBSERVED: May 21- 1			PEAK DATE: May 9- 6		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.43	0.29			0.14	1.00	1.00	2.14	1.29	1.71	2.00	**0.78**
# Days Observed		2	1			1	3	4	6	4	4	1	**26**
# Processed		2						1	1	2	1		**7**
	FIRST OBSERVED: July 21- 1			LAST OBSERVED: September 27- 6				PEAK DATE: September 21- 9					

Gray-cheeked Thrush (*Catharus minimus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.71	0.14			**0.13**
# Days Observed				3	1			**4**
# Processed				5	1			**6**
	FIRST OBSERVED: May 16- 1		LAST OBSERVED: May 25- 1			PEAK DATE: May17&20- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day										0.14			**0.01**
# Days Observed										1			**1**
# Processed										1			**1**
	FIRST OBSERVED: September 13- 1			LAST OBSERVED: September 13- 1				PEAK DATE: September 13- 1					

Swainson's Thrush (*Catharus ustulatus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.29	4.00	4.29	4.29	1.29	**2.11**
# Days Observed			1	5	7	7	6	**26**
# Processed			2	16	15	17	1-2-0	**51-2-0**
	FIRST OBSERVED: May 12- 2		LAST OBSERVED: June 10- 1			PEAK DATE: May 18, 26, 28- 9		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	2.29	3.14	4.43	11.71	17.86	9.29	4.43	1.29	1.29	0.43	0.14		**4.93**
# Days Observed	5	7	6	7	7	7	7	5	6	2	1		**60**
# Processed	9	15	23-1-4	43-0-8	71-0-9	43-0-6	10	9	8	2	1		**234-1-27**
	FIRST OBSERVED: July 13- 3			LAST OBSERVED: September 23- 1				PEAK DATE: August 14- 24					

Note: Achieved the second highest fall banding total.

Hermit Thrush (*Catharus guttatus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	4.29	2.29	0.57	1.14	0.43	**1.34**
# Days Observed		2	6	7	3	6	3	**27**
# Processed		1	8	7	2	1		**19**
	FIRST OBSERVED: May 2- 1		LAST OBSERVED: June 10- 1			PEAK DATE: May 13- 10		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14		0.43	0.29	0.29		0.57	0.14	0.29	0.57	0.29	0.33	**0.28**
# Days Observed	1		3	2	2		3	1	2	3	2	1	**20**
# Processed	1		3	2	1-0-1		4	1	2	3	2		**19-0-1**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 27- 1				PEAK DATE: August 28 & September 16- 2					

American Robin (*Turdus migratoriu)*

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	12.60	857.14	52.57	13.00	2.00	1.29	1.14	**139.43**
# Days Observed	4	7	7	7	7	7	6	**45**
# Processed		1	3	1				**5**
	FIRST OBSERVED: April 26- 14		LAST OBSERVED: June 9- 1			PEAK DATE: May 4- 2140		

American Robin (*Turdus migratoriu)*

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.71	1.14	1.43	1.14	1.71	0.57	1.86	0.43	1.43	1.29		0.67	**1.05**
# Days Observed	5	5	6	5	7	2	7	2	5	3		2	**49**
# Processed		1	1		1				1				**4**
	FIRST OBSERVED: July 12- 1				LAST OBSERVED: September 29- 1				PEAK DATE: 3 dates- 6				

Note: May 4, was the third highest single day American Robin count at the LSLBO, top day 2334 on April 29, 2012

European Starling (*Sturnus vulgaris*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	4.00	1.43	0.14	4.29	0.43			**1.36**
# Days Observed	3	1	1	4	1			**10**
	FIRST OBSERVED: April 26- 14		LAST OBSERVED: May 27- 3			PEAK DATE: May 17- 14		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day											0.29		**0.03**
# Days Observed											1		**1**
	FIRST OBSERVED: September 20- 2				LAST OBSERVED: September 20- 2				PEAK DATE: September 20- 2				

Note: European starlings are becoming more frequently encountered over the past 5 years.

American Pipit (*Anthus rubescens*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	17.80	8.14	1.00	6.00	1.29			**4.34**
# Days Observed	4	4	1	5	4			**18**
	FIRST OBSERVED: April 25- 2		LAST OBSERVED: May 26- 1			PEAK DATE: April 26- 56		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							1.29	3.14	10.57	14.43	10.00	0.67	**3.48**
# Days Observed							3	7	7	5	5	2	**29**
	FIRST OBSERVED: August 23- 1				LAST OBSERVED: September 29- 1				PEAK DATE: September 16- 56				

Cedar Waxwing (*Bombycilla cedrorum*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					0.14	3.14	3.57	**1.02**
# Days Observed					1	6	4	**11**
	FIRST OBSERVED: May 25- 1		LAST OBSERVED: June 9- 2			PEAK DATE: June 6- 11		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	4.14	5.71	5.86	7.71	13.57	12.86	23.57	7.57	7.29			2.00	**7.80**
# Days Observed	6	7	7	7	7	7	7	6	5			1	**60**
# Processed	4		1										**5**
	FIRST OBSERVED: July 13- 6				LAST OBSERVED: September 28- 6				PEAK DATE: August 23- 52				

Lapland Longspur (*Calcarius lapponicus*)

	APRIL	MAY				JUNE		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	4.80	12.00		1.14	0.14			**2.49**
# Days Observed	4	3		5	1			**13**
	FIRST OBSERVED: April 25- 1		LAST OBSERVED: May 22- 1			PEAK DATE: May 5- 79		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								1.29	1.29	1.57	0.57	0.33	**0.43**
# Days Observed								4	2	3	3	1	**13**
	FIRST OBSERVED: September 1- 2				LAST OBSERVED: September 28- 1				PEAK DATE: September 6- 8				

Ovenbird (*Seiurus aurocapilla*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14		2.71	6.86	7.43	5.00	**3.30**
# Days Observed		1		5	7	7	7	**27**
# Processed				5-1-0	18	13-1-1	2-1-1	**38-3-2**
	FIRST OBSERVED: May 5- 1		LAST OBSERVED: June 10- 2			PEAK DATE: May 25, June 3 & 4- 9		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	2.57	2.57	8.57	20.71	15.71	4.57	3.14	0.86	0.43	0.14			**5.19**
# Days Observed	6	7	6	7	7	4	5	4	2	1			**49**
# Processed	4-1-0	15-0-1	41-0-4	113-0-12	83-0-8	17-0-4	18-0-2	6	2	1			**300-1-31**
	FIRST OBSERVED: July 13- 3				LAST OBSERVED: September 13- 1				PEAK DATE: August 6 & 8-36				

Note: achieved a record fall banding total, surpassing the previous total of 222 banding in 2006.

Northern Waterthrush (*Parkesia noveboracensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				1.00	1.14	0.57	0.43	**0.47**
# Days Observed				4	4	3	3	**14**
# Processed					2			**2**
	FIRST OBSERVED: May 14- 1		LAST OBSERVED: June 8- 1			PEAK DATE: May 24- 5		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.57	0.71	0.57		0.29		0.29						**0.21**
# Days Observed	3	2	3		2		2						**12**
# Processed	4	5	4		1		2						**16**
	FIRST OBSERVED: July 14- 2				LAST OBSERVED: August 29- 1				PEAK DATE: July 21- 3				

Black-and-white Warbler (*Mniotilta varia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			1.29	7.86	5.14	4.14	3.14	**3.21**
# Days Observed			3	7	7	7	6	**30**
# Processed			2	18-2-1	10	4-1-2	2	**36-3-3**
	FIRST OBSERVED: May 11- 1		LAST OBSERVED: June 9- 3			PEAK DATE: May 19- 21		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	3.00	18.43	18.14	19.71	7.29	2.71	5.43	1.43	0.29				**6.69**
# Days Observed	6	7	6	7	7	6	7	3	2				**51**
# Processed	8-0-1	42-0-7	29-0-8	25-0-1	9	1	2		1				**117-0-17**
	FIRST OBSERVED: July 13- 4				LAST OBSERVED: September 12- 1				PEAK DATE: August 1- 78				

Note: Achieved a record fall banding total, surpassing the previous total of 89 banded in 2007.

Tennessee Warbler (*Oreothlypis peregrine*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.29	1.00	3.43	2.57	1.71	**1.34**
# Days Observed			1	2	6	7	6	**22**
# Processed					5	2	1	**8**
	FIRST OBSERVED: May 13- 2		LAST OBSERVED: June 9- 1			PEAK DATE: May 26- 9		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	5.29	22.71	22.14	183.71	115.14	10.86	51.71	2.86	0.29	0.14	0.14		**36.31**
# Days Observed	5	6	6	7	7	4	7	3	1	1	1		**48**
# Processed	3	11	16	66	59		7		1	1			**164**
	FIRST OBSERVED: July 12- 1				LAST OBSERVED: September 20- 1				PEAK DATE: August 6- 560				

Note: fall banding totals have begun to recover after several very low years.

Orange-crowned Warbler (*Oreothlypis celata*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.57	4.71	11.14				**2.45**
# Days Observed		2	5	6				**13**
# Processed			4	2				**6**
	FIRST OBSERVED: May 4- 1		LAST OBSERVED: May 20- 1			PEAK DATE: May 17- 35		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								0.29	7.29	8.29	4.14	0.67	**1.78**
# Days Observed								1	5	6	4	1	**17**
# Processed								1	4	11	6		**22**
	FIRST OBSERVED: September 4- 2			LAST OBSERVED: September 28- 2				PEAK DATE: September 20- 16					

Connecticut Warbler (*Oporornis agilis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14				**0.02**
# Days Observed				1				**1**
	FIRST OBSERVED: May 17- 1		LAST OBSERVED: May 17- 1			PEAK DATE: May 17- 1		

Mourning Warbler (*Geothlypis philadelphia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					0.14	0.86	1.29	**0.34**
# Days Observed					1	4	5	**10**
# Processed						1	4	**5**
	FIRST OBSERVED: May 24- 1		LAST OBSERVED: June 8- 1			PEAK DATE: May 30, June 3 & 7- 3		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.14	0.29	1.57	1.57	0.14	0.57	0.29					**0.43**
# Days Observed	2	1	2	4	5	1	3	2					**20**
# Processed	1	1	1	6	8	1	3	2					**23**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 4- 1				PEAK DATE: August 3&14- 5					

Common Yellowthroat (*Geothlypis trichas*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.29			0.14	0.71	2.14	1.43	**0.66**
# Days Observed				1	3	6	7	**17**
# Processed				1	2	5		**8**
	FIRST OBSERVED: May 19- 1		LAST OBSERVED: June 10- 1			PEAK DATE: June 1- 4		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.29	0.29	0.14		0.14		2.00	1.71	0.29				**0.43**
# Days Observed	2	2	1		1		7	5	2				**20**
# Processed					1		3	2					**6**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 10- 1				PEAK DATE: 6 dates- 3					

American Redstart (*Setophaga ruticilla*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				2.43	7.14	13.14	7.29	**4.47**
# Days Observed				5	7	7	7	**26**
# Processed				1	11	11	4	**27**
	FIRST OBSERVED: May 16- 1		LAST OBSERVED: June 10- 5			PEAK DATE: May 31- 23		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	2.57	7.57	9.29	11.71	10.86	1.86	8.29	2.29	1.43	0.86			**4.96**
# Days Observed	6	7	6	7	7	4	7	4	3	3			**54**
# Processed	1-0-3	12-1-1	10-0-4	20-0-1	17-0-1	1	5	1	2				**69-1-10**
	FIRST OBSERVED: July 13- 2			LAST OBSERVED: September 16- 3				PEAK DATE: August 6&15- 21					

Cape May Warbler (*Setophaga tigrina*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						0.14		**0.02**
# Days Observed						1		**1**

FIRST OBSERVED: May 31- 1 | LAST OBSERVED: | PEAK DATE:

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14		0.14	0.43								**0.06**
# Days Observed		1		1	3								**5**
# Processed		1		1	3								**5**

FIRST OBSERVED: July 20- 1 | LAST OBSERVED: August 15- 1 | PEAK DATE: All dates- 1

Magnolia Warbler (*Setophaga magnolia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.29	1.29	0.71	0.29	**0.38**
# Days Observed				2	7	3	2	**14**
# Processed						2		**2**

FIRST OBSERVED: May 17- 1 | LAST OBSERVED: June 8- 1 | PEAK DATE: May 30- 3

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.29	0.14	0.43	1.00	0.14	1.14	0.57	0.14				**0.34**
# Days Observed		2	1	3	3	1	5	3	1				**19**
# Processed				1	2		1	3					**7**

FIRST OBSERVED: July 19- 1 | LAST OBSERVED: September 6- 1 | PEAK DATE: August 12- 4

Bay-breasted Warbler (*Setophaga castanea*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					0.14			**0.02**
# Days Observed					1			**1**

FIRST OBSERVED: May 22- 1 | LAST OBSERVED: May 22- 1 | PEAK DATE: May 22- 1

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			0.14	0.14	0.14	0.29							**0.06**
# Days Observed			1	1	1	1							**4**
# Processed			1		1								**2**

FIRST OBSERVED: August 1- 1 | LAST OBSERVED: August 22- 2 | PEAK DATE: August 22- 2

Yellow Warbler (*Setophaga petechia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14	25.29	4.43	4.86	2.14	**5.49**
# Days Observed			1	6	7	7	6	**27**
# Processed				1	1		3	**5**

FIRST OBSERVED: May 11- 1 | LAST OBSERVED: June 9- 2 | PEAK DATE: May 19- 121

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	7.29	18.71	22.00	13.29	6.71	2.29	10.43	0.86	0.29				**7.16**
# Days Observed	6	7	7	7	7	4	5	2	1				**46**
# Processed	1	20	26-0-1	10-0-1	2	1	1	1					**62-0-2**

FIRST OBSERVED: July 13- 1 | LAST OBSERVED: September 6- 2 | PEAK DATE: August 23- 55

Blackpoll Warbler (*Setophaga striata*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.14				0.14					**0.03**
# Days Observed				1				1					**2**
# Processed				1									**1**

FIRST OBSERVED: August 7- 1 | LAST OBSERVED: August 31- 1 | PEAK DATE: August 7 & August 31- 1

Palm Warbler (*Setophaga palmarum*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				4.29	0.29			**0.68**
# Days Observed				6	2			**8**
# Processed				4				**4**
	FIRST OBSERVED: May 14- 1		LAST OBSERVED: May 24- 1			PEAK DATE: May 17- 11		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.14	0.14	0.14	0.43		0.43	0.29	0.29	0.43	0.43		**0.24**
# Days Observed		1	1	1	2		2	2	1	2	2		**14**
# Processed		1	1										**2**
	FIRST OBSERVED: July 24- 1			LAST OBSERVED: September 21- 1				PEAK DATE: 5 dates- 2					

Note: Palm warblers were identified as Western Palm Warblers *Setophaga palmarum palmarum*

Yellow-rumped Warbler (*Setophaga coronata*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20	62.86	72.14	690.00	13.71	3.86	1.43	**125.72**
# Days Observed	1	5	7	7	7	7	6	**40**
# Processed		6	7	34	17		0-1-0	**64-1-0**
	FIRST OBSERVED: April 26- 1		LAST OBSERVED: June 9- 2			PEAK DATE: May 19- 3022		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	35.00	87.71	162.86	254.43	181.86	41.43	538.57	301.86	437.43	61.57	48.57	57.67	**190.40**
# Days Observed	6	7	6	7	7	6	7	7	7	6	6	3	**75**
# Processed	20-0-7	21-0-1	30-0-1	9	2		43	62	27	7	15-0-1	20	**256-0-10**
	FIRST OBSERVED: July 13- 6			LAST OBSERVED: September 29- 1				PEAK DATE: August 29- 1075					

Note: all yellow-rumped warblers banded were Myrtle warblers *Setophaga coronata coronata*

Black-throated Green Warbler (*Setophaga virens*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.14		0.14		**0.04**
# Days Observed				1		1		**2**
	FIRST OBSERVED: May 20- 1		LAST OBSERVED: May 31- 1			PEAK DATE: May 20 &31- 1		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14					0.14	0.14	0.14					**0.05**
# Days Observed	1					1	1	1					**4**
# Processed	1												**1**
	FIRST OBSERVED: July 18- 1			LAST OBSERVED: September 1- 1				PEAK DATE: All dates- 1					

Canada Warbler (*Cardellina canadensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					1.14	8.57	6.57	**2.43**
# Days Observed					3	7	7	**17**
# Processed						6	9-1-1	**15-1-1**
	FIRST OBSERVED: May 25- 1		LAST OBSERVED: June 10- 2			PEAK DATE: May 31 & June 1- 12		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.14	0.71	3.71	5.71	6.71	1.29	0.86	0.29	0.14				**1.80**
# Days Observed	3	3	5	7	7	4	4	2	1				**36**
# Processed	2	3	7	5	8-0-1			1					**26-0-1**
	FIRST OBSERVED: July 13- 3			LAST OBSERVED: September 11- 1				PEAK DATE: August 14- 18					

Wilson's Warbler (*Cardellina pusilla*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day					0.14	0.29	0.14	**0.09**
# Days Observed					1	2	1	**4**
	FIRST OBSERVED: May 23- 1		LAST OBSERVED: June 6- 1			PEAK DATE: All dates- 1		

Wilson's Warbler (*Cardellina pusilla*)

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day				0.14	0.14		0.14	0.29	0.29				**0.09**
# Days Observed				1	1		1	2	2				**7**
# Processed								1					**1**
	FIRST OBSERVED: August 6- 1				LAST OBSERVED: September 12- 1				PEAK DATE: All dates- 1				

American Tree Sparrow (*Spizella arborea*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	354.60	21.86	2.43					**41.34**
# Days Observed	5	6	4					**15**
# Processed	22	21	4					**47**
	FIRST OBSERVED: April 25- 33		LAST OBSERVED: May 10- 4			PEAK DATE: April 29- 1433		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day											0.14	0.33	**0.03**
# Days Observed											1	1	**2**
# Processed											1		**1**
	FIRST OBSERVED: September 26- 1				LAST OBSERVED: September 28- 1				PEAK DATE: September 26 & 28- 1				

Note: tied with 2001 for the highest spring banding total.

Chipping Sparrow (*Spizella arborea*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			4.57	125.29	4.71	1.71	1.43	**20.51**
# Days Observed			3	7	7	7	7	**31**
# Processed			2	3-1-0	4			**9-1-0**
	FIRST OBSERVED: May 11- 7		LAST OBSERVED: June 10- 1			PEAK DATE: May 19- 769		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.43	0.43	0.14	13.00	1.71	4.86	0.14	0.57				**1.86**
# Days Observed		1	1	1	3	4	5	1	1				**17**
# Processed				1	1		1						**3**
	FIRST OBSERVED: July 22- 3				LAST OBSERVED: September 9- 4				PEAK DATE: August 12- 53				

Clay-colored Sparrow (*Spizella pallida*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.57	2.29	4.43	1.29	0.29	**1.32**
# Days Observed			1	5	6	6	2	**20**
# Processed			1	3	2	1		**7**
	FIRST OBSERVED: May 13- 4		LAST OBSERVED: June 7- 1			PEAK DATE: May 27- 7		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.43	0.29	0.14	3.86	0.14	0.86		0.14				**0.51**
# Days Observed		2	1	1	4	1	4		1				**14**
# Processed		1			1	1	2						**5**
	FIRST OBSERVED: July 21- 2				LAST OBSERVED: September 12- 1				PEAK DATE: August 12- 21				

Vesper Sparrow (*Pooecetes gramineus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.29				**0.04**
# Days Observed				2				**2**
	FIRST OBSERVED: May 14- 1		LAST OBSERVED: May 15- 1			PEAK DATE: May 14 & 15- 1		

Savannah Sparrow (*Passerculus sandwichensis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.57	1.14	0.43	0.14			**0.34**
# Days Observed		2	3	3	1			**9**
# Processed		2						**2**
	FIRST OBSERVED: May 2- 1		LAST OBSERVED: May 26- 1			PEAK DATE: May 11- 5		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							0.14	0.14	0.29	0.43		0.33	**0.10**
# Days Observed							1	1	1	1		1	**5**
# Processed							1	1	1			1	**4**
	FIRST OBSERVED: August 29- 1				LAST OBSERVED: September 27- 1				PEAK DATE: September 16- 3				

Le Conte's Sparrow (*Ammodramus leconteii*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	0.14	0.14	0.14	0.14		**0.13**
# Days Observed		1	1	1	1	1		**5**
	FIRST OBSERVED: May 5- 2		LAST OBSERVED: May 31- 1			PEAK DATE: May 5- 2		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day					0.14								**0.01**
# Days Observed					1								**1**
	FIRST OBSERVED: August 12- 1				LAST OBSERVED: August 12- 1				PEAK DATE: August 12- 1				

Fox Sparrow (*Passerella iliaca*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	1.43					**0.23**
# Days Observed		1	2					**3**
# Processed			3					**3**
	FIRST OBSERVED: May 4- 1		LAST OBSERVED: May 10- 5			PEAK DATE: May 9&10- 5		

Song Sparrow (*Melospiza melodia*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.14	3.29	3.57	3.14	3.14	1.71	**2.23**
# Days Observed		1	6	7	7	7	7	**35**
# Processed			1	2	1			**4**
	FIRST OBSERVED: May 6- 1		LAST OBSERVED: June 10- 1			PEAK DATE: May 9- 7		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	3.00	5.00	3.86	3.86	1.57	0.86			0.14	0.14			**1.61**
# Days Observed	6	7	7	7	7	3			1	1			**39**
# Processed	3-0-1	2-0-3	2	6-0-1	3	1							**17-0-5**
	FIRST OBSERVED: July 13- 3				LAST OBSERVED: September 16- 1				PEAK DATE: August 3- 8				

Note: achieved a new fall banding record, beating the previous record of 14 banded set in 2003 and 2006.

Lincoln's Sparrow (*Melospiza lincolnii*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.57	1.29	2.86	0.71	0.29		**0.85**
# Days Observed		2	4	7	3	1		**17**
# Processed		1	3	9				**13**
	FIRST OBSERVED: May 5- 3		LAST OBSERVED: May 30- 2			PEAK DATE: May 18- 5		

	JULY			AUGUST				SEPTEMBER				OCTOBER	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.43	0.43	0.14	0.14	0.57	0.43	0.14			0.14	0.57		**0.26**
# Days Observed	2	3	1	1	2	2	1			1	2		**15**
# Processed	2	2		1	2	1					2		**10**
	FIRST OBSERVED: July 17- 1				LAST OBSERVED: September 21- 3				PEAK DATE: September 21- 3				

Swamp Sparrow (*Melospiza georgiana*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			0.14					**0.02**
# Days Observed			1					**1**
	FIRST OBSERVED: May 9- 1		LAST OBSERVED: May 9- 1			PEAK DATE: May 9- 1		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day		0.43	0.14		0.29	0.14	0.14						**0.10**
# Days Observed		3	1		2	1	1						**8**
# Processed		3	1		2	1							**7**
	FIRST OBSERVED: July 21- 1			LAST OBSERVED: August 23- 1				PEAK DATE: All dates- 1					

White-throated Sparrow (*Zonotrichia albicollis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			7.43	10.71	12.43	8.57	4.29	**6.47**
# Days Observed			5	7	7	7	6	**32**
# Processed			9	19-1-4	23-1-5	4-0-3	1	**56-2-12**
	FIRST OBSERVED: May 9- 6		LAST OBSERVED: June 9- 4			PEAK DATE: May 13- 19		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	4.43	4.00	2.14	2.71	0.43	1.71	3.29	3.14	1.29	0.57	0.43		**2.11**
# Days Observed	6	7	6	6	3	3	7	6	5	2	2		**53**
# Processed	3-0-2	3-0-3	5-0-2	3-0-1	0-0-1	6	4			1	1		**26-0-9**
	FIRST OBSERVED: July 13- 3			LAST OBSERVED: September 23- 2				PEAK DATE: 3 dates- 7					

White-crowned Sparrow (*Zonotrichia leucophrys*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20	0.43	1.43	1.86				**0.57**
# Days Observed	1	2	3	5				**11**
# Processed	1			3				**4**
	FIRST OBSERVED: April 26- 1		LAST OBSERVED: May 19- 1			PEAK DATE: May 16- 8		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day								0.14	1.86	0.71			**0.24**
# Days Observed								1	4	2			**7**
# Processed								1	5	2			**8**
	FIRST OBSERVED: September 3- 1			LAST OBSERVED: September 14- 2				PEAK DATE: September 10- 7					

Note: banded white-crowned sparrows were identified as the Gambel's subspecies *Zonotrichia leucophrys gambelii*

Slate-coloured Junco (*Junco hyemalis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	164.60	80.43	33.43	0.57				**34.55**
# Days Observed	5	7	6	2				**20**
# Processed	4	121	83	0	0	0	0	208
	FIRST OBSERVED: April 25- 1		LAST OBSERVED: May 17- 3			PEAK DATE: April 29- 772		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14						0.14			0.14	1.00	0.33	**0.14**
# Days Observed	1						1			1	4	1	**8**
# Processed	1						1				3		**5**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 27- 1				PEAK DATE: September 22- 4					

Oregon Junco

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29	0.14					**0.06**
# Days Observed		1	1					**2**
# Processed		2	1					**3**
	FIRST OBSERVED: May 4- 2		LAST OBSERVED: May 7- 1			PEAK DATE: May 4- 2		

Note: First confirmed sighting since 2002.

Western Tanager (*Piranga ludoviciana*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			5.29	1.29	0.43	1.00	0.43	**1.26**
# Days Observed			7	7	2	7	3	**26**
# Processed			3					**3**
	FIRST OBSERVED: May 7- 1		LAST OBSERVED: June 7- 1			PEAK DATE: May 9- 21		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.43	2.57	7.00	6.14	11.57	1.71	1.00	0.86					**2.74**
# Days Observed	3	5	7	7	7	4	2	5					**40**
# Processed		3	2	1	4	1		1					**12**
	FIRST OBSERVED: July 14- 1			LAST OBSERVED: September 3- 1				PEAK DATE: August 12- 21					

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				5.86	5.29	1.43	0.29	**1.91**
# Days Observed				6	7	6	2	**21**
# Processed				1	1			**2**
	FIRST OBSERVED: May 14- 1		LAST OBSERVED: June 6- 1			PEAK DATE: May 19- 21		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14	1.29	3.00	5.43	6.14	2.00	1.43						**1.70**
# Days Observed	1	4	5	7	7	4	5						**33**
# Processed		1	2	4	6	1	2						**16**
	FIRST OBSERVED: July 18- 1			LAST OBSERVED: August 29- 3				PEAK DATE: August 12- 16					

Red-winged Blackbird (*Agelaius phoeniceus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.71	4.57	40.29	3.71	0.86	0.14	**7.49**
# Days Observed		2	7	7	5	3	1	**25**
	FIRST OBSERVED: May 4-2		LAST OBSERVED: June 4- 1			PEAK DATE: May 16- 150		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			0.14	1.14	1.57								**0.25**
# Days Observed			1	2	4								**7**
	FIRST OBSERVED: July 26- 1			LAST OBSERVED: August 14- 4				PEAK DATE: August 14- 4					

Note: a large number of blackbirds are recorded as unidentified, their migration patterns make positive id difficult.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus)*

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		0.29		0.86			0.14	**0.19**
# Days Observed		1		2			1	**4**
	FIRST OBSERVED: May 5- 2		LAST OBSERVED: June 4- 1			PEAK DATE: May 14- 4		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			1.00				0.29						**0.11**
# Days Observed			1				1						**2**
	FIRST OBSERVED: July 31- 7			LAST OBSERVED: August 23- 1				PEAK DATE: July 31- 7					

Common Grackle (*Quiscalus quiscula*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		4.86	2.71	5.86	0.29	1.00	0.14	**2.21**
# Days Observed		3	5	5	1	3	1	**18**
	FIRST OBSERVED: May 4- 2		LAST OBSERVED: June 5- 1			PEAK DATE: May 5- 31		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day			2.00		1.29	0.14	1.29		1.29	0.14			**0.54**
# Days Observed			3		2	1	2		4	1			**13**
	FIRST OBSERVED: July 29- 6			LAST OBSERVED: September 16- 1				PEAK DATE: August 15- 7					

Brown-headed Cowbird (*Molothrus ater*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day			1.00	13.14	1.43	1.29	0.43	**2.57**
# Days Observed			3	7	6	6	3	**25**
	FIRST OBSERVED: May 9- 3		LAST OBSERVED: June 9- 1			PEAK DATE: May 16- 43		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14		0.14	0.14			0.14						**0.05**
# Days Observed	1		1	1			1						**4**
# Processed	1												**1**
	FIRST OBSERVED: July 16- 1			LAST OBSERVED: August 23-1				PEAK DATE: All dates- 1					

Baltimore Oriole (*Icterus galbula*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day				0.29	0.14			**0.06**
# Days Observed				1	1			**2**
	FIRST OBSERVED: May 19- 2		LAST OBSERVED: May 23- 1			PEAK DATE: May 19- 2		

Pine Grosbeak (*Pinicola enucleator*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	0.20							**0.02**
# Days Observed	1							**1**
	FIRST OBSERVED: April 28- 1		LAST OBSERVED: April 28- 1			PEAK DATE: April 28- 1		

Note: Although a common winter resident, only the second record during monitoring, first occurred in May 1997.

Purple Finch (*Haemorhous purpureus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day		1.29	4.00	3.14	0.43	0.14	0.14	**1.36**
# Days Observed		2	6	5	3	1	1	**18**
	FIRST OBSERVED: May 2- 1		LAST OBSERVED: June 6- 1			PEAK DATE: May 17- 11		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.14	1.43	2.57	5.57	6.14	3.43	3.43	0.43	0.14				**2.04**
# Days Observed	1	4	3	7	7	4	3	3	1				**33**
# Processed			1	1	3								**5**
	FIRST OBSERVED: July 18- 1			LAST OBSERVED: September 6- 1				PEAK DATE: August 15- 14					

Common Redpoll (*Acanthis flammea*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	600.80	330.57	17.57	1.14				**115.94**
# Days Observed	5	7	4	2				**18**
	FIRST OBSERVED: April 25- 51		LAST OBSERVED: May 15- 4			PEAK DATE: May 5- 1532		

Pine Siskin (*Spinus pinus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	17.20	4.00	2.86	14.43	4.29	7.86	2.00	**7.11**
# Days Observed	2	2	3	6	7	7	5	**32**
	FIRST OBSERVED: April 27- 84		LAST OBSERVED: June 9- 3			PEAK DATE: April 27- 84		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	1.43	7.14	3.71	7.14	3.71	10.00	1.86	1.14	0.71	6.43	6.71	1.33	**4.43**
# Days Observed	4	5	5	7	7	4	4	3	2	4	3	1	**49**
	FIRST OBSERVED: July 13- 2			LAST OBSERVED: September 28- 4				PEAK DATE: August 17- 55					

American Goldfinch (*Spinus tristis*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day						1.14	0.14	**0.19**
# Days Observed						5	1	**6**
	FIRST OBSERVED: May 28- 1		LAST OBSERVED: June 7- 1			PEAK DATE: May 29 & 30, June 2- 2		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day							0.29						**0.03**
# Days Observed							1						**1**
	FIRST OBSERVED: August 28- 2			LAST OBSERVED: August 28- 2				PEAK DATE: August 28- 2					

Evening Grosbeak (*Coccothraustes vespertinus*)

	APRIL	MAY					JUNE	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	**Total**
Mean # Birds/Day	12.60	4.00	5.43	3.57	1.57	0.29		**3.55**
# Days Observed	2	7	7	7	4	1		**28**
	FIRST OBSERVED: April 27- 21		LAST OBSERVED: June 3- 2			PEAK DATE: April 29- 42		

	JULY			AUGUST				SEPTEMBER					OCTOBER
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	**Total**
Mean # Birds/Day	0.57	4.14	3.57	4.14	7.43	2.29	2.14	2.00	1.14	0.71		2.67	**2.56**
# Days Observed	3	2	3	6	6	4	4	6	4	3		1	**42**
	FIRST OBSERVED: July 14- 2			LAST OBSERVED: September 28- 8				PEAK DATE: July 25- 27					

Appendix II. Annual Banding Totals

Species	2013 Spring Migration	2013 MAPS	2013 Fall Migration	2013 Projects	2013 Total		Grand Total 1993-2013
"Audubon's" Warbler							2
Alder Flycatcher	7		35		42		1789
American Goldfinch							1
American Kestrel							2
American Magpie			1				2
American Pipit							18
American Redstart	27	10	69		106		6817
American Robin	5	1	4		10		368
American Tree Sparrow	47		1		48		556
Baltimore Oriole							5
Bay-breasted Warbler			2		2		112
Barred Owl							4
Belted Kingfisher			1		1		1
Black-and-White Warbler	36	2	117		155		1751
Blackburnian Warbler							2
Black-capped Chickadee	7		13		20		864
Blackpoll Warbler			1		1		322
Black-throated Green Warbler			1		1		120
Blue Jay			2		2		57
Blue-headed Vireo		1	1		2		77
Boreal Chickadee		1			1		26
Brown Creeper		1	1		2		54
Brown -headed Cowbird			1		1		6
Canada Warbler	15	16	26	13	70		2728
Cape May Warbler			5		5		141
Cedar Waxwing			5		5		145
Chestnut-sided Warbler							21
Chipping Sparrow	9		3		12		1925
Clay-colored Sparrow	7	1	5		13		862
Common Grackle							4
Common Yellowthroat	8		6		14		627
Connecticut Warbler							24
Cooper's Hawk			1		1		3
Downy Woodpecker	1		2		3		63
Eastern Kingbird							1
Eastern Phoebe	2				2		133
Evening Grosbeak							1
Fox Sparrow	3				3		77
Golden-crowned Kinglet			1		1		77
Gray Catbird							6
Gray Jay							3

Species	2013 Spring Migration	2013 MAPS	2013 Fall Migration	2013 Projects	2013 Total		Grand Total 1993-2013
Gray-cheeked Thrush	6		1		7		165
Hairy Woodpecker			8		8		34
Harris's Sparrow							6
Hermit Thrush	19	2	19		40		515
Hoary Redpoll							1
House Wren	1	1			2		28
Lapland Longspur							5
Lazuli Bunting							1
Le Conte's Sparrow							6
Least Flycatcher	21	1	22		44		2049
Lincoln's Sparrow	13	3	10		26		794
Long-eared Owl							1
MacGillivray's Warbler							2
Magnolia Warbler	2	4	7		13		911
Marsh Wren							3
Mourning Warbler	5	5	23		33		1024
Nashville Warbler							4
Northern Flicker			2		2		29
Northern Goshawk							1
Northern Mockingbird							1
Northern Pygmy-Owl							2
Northern Saw-whet Owl				45	45		1012
Northern Shrike	1				1		2
Northern Waterthrush	2		16		18		693
Orange-crowned Warbler	6		22		28		1160
“Oregon” Junco	3				3		14
Olive-sided Flycatcher							2
Ovenbird	38	25	300	26	389		3373
Western Palm Warbler	4		2		6		238
Philadelphia Vireo			7		7		175
Pileated Woodpecker			1		1		4
Pine Siskin							164
Purple Finch			5		5		80
Red-breasted Nuthatch			1		1		122
Red-eyed Vireo	3	1	21		25		688
Red-winged Blackbird							6
Rose-breasted Grosbeak	2	1	16		19		311
Ruby-crowned Kinglet	6		7		13		367
Savannah Sparrow	2		4		6		178
Sharp-shinned Hawk	5		30		35		481
Slate-colored Junco	208		5		213		1612
Song Sparrow	4	1	17		22		281
Swainson's Thrush	51	6	234		291		4984
Swamp Sparrow			7		7		178
Tennessee Warbler	8	2	164		174		4912
Three-toed Woodpecker							1

Species	2013 Spring Migration	2013 MAPS	2013 Fall Migration	2013 Projects	2013 Total		Grand Total 1993-2013
Townsend's Solitaire							1
Varied Thrush							6
Veery							7
Vesper Sparrow							3
Warbling Vireo			2		2		61
Western Tanager	3		12		15		165
Western Wood-Pewee							22
White-breasted Nuthatch							10
Gambel's White-crowned Sparrow	4		8		12		438
White-throated Sparrow	56	19	26		101		2558
White-winged Crossbill							1
Wilson's Warbler			1		1		495
Winter Wren		1			1		48
Yellow Warbler	5	2	62		69		3368
Yellow-bellied Flycatcher							73
Yellow-bellied Sapsucker	4	4	3		11		160
Yellow-rumped Warbler	64	19	256		339		9743
Total number of birds banded	**720**	**130**	**1625**	**84**	**2559**		**63576**
Total number of species banded	**41**	**25**	**58**	**3**	**66**		**104**