Lesser Slave Lake Bird Observatory

2005 Annual Report

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2005 Executive Summary

The Lesser Slave Lake Bird Observatory (LSLBO) conducted its migration monitoring programs for the 12th consecutive year in 2005. Spring monitoring ran from April 25th to June 10th for 43 days of coverage. Weather conditions allowed for excellent monitoring coverage (including 85.3 % of the total possible net hours), but this year had the lowest spring banding total since 1996; with 625 birds banded at a capture rate of 23.4 birds/100 net hours. Fall migration monitoring lasted 75 days, from July 12th to September 29th. The capture rate was 39.2 birds/100 net hours with 1907 birds banded, up from 1393 banded in 2004. Daily banding totals surpassed 100 birds on three occasions during the fall. The majority of the birds were banded during the first half of the fall, but passage of migrants remained steady throughout the entire fall migration period. Observations throughout both the spring and fall migrations accounted for 137 species. One new species was added to the LSLBO's checklist: a Rock Wren was spotted on May 15th, bringing the species total to 243 at the Observatory.

The Monitoring Avian Productivity and Survivorship (MAPS) program was continued in 2005 with all four stations operating. MAPS coverage extended from June 11th to August 3rd with two of the four stations receiving full coverage. A total of 311 birds were banded and 123 recaptured, the second highest MAPS banding total at the LSLBO. The first Hermit Thrush was banded at the ROAD MAPS site. Breeding status was determined for 57 species.

A total of 381 recapture records occurred from the 2005 migration monitoring and MAPS banding programs. Many of these birds were originally banded in the 2005 season, but 97 were banded previous to 2005; 59 were originally banded in 2004 and 38 before 2004. An Alder Flycatcher and Canada Warbler were originally banded in 2000, making them both at least six years old. Another Alder Flycatcher, originally banded in 1996, was recaptured late in July, making it at least ten years old. This same Alder Flycatcher made a longevity record when it was last captured at the LSLBO in 2002, it was at least seven years old.

The Canada Warbler Project continued in 2005; however, poor weather through June limited the amount of time spent working on the project. In total, 17 adults were colour banded and territories mapped for eight breeding pairs. Nest searches uncovered only one nest, with the young being only a few hours old. Daily growth rates were measured until the young fledged the nest at eight days old.

The fall migration monitoring of Northern Saw-whet Owls was also continued in 2005. Following the protocol developed in 2004, monitoring occurred from August 21st to October 24th. 134 Northern Saw-whet Owls were banded in 41 nights of monitoring. No other species of owls were captured in the nets, but a pair of Barred Owls was heard on two nights in the vicinity of the owl nets.

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1.0 Spring Migration Monitoring Summary

Spring migration monitoring began April 25th and ran until June 10th for a total of 43 days. Hourly visual migration counts and a census were conducted on all monitoring days. Favourable weather conditions allowed for 85.3% of the total possible net coverage (3084.33 of a possible 3612 net hours). Despite the excellent net coverage, banding was quite slow. A total of 723 birds were captured with 625 banded (Appendix I), 87 recaptured, and 11 unbanded – the lowest spring banding total since 1996.

Capture rates for the spring were the lowest on LSLBO records with only 23.4 birds captured per 100 net hours. Thirty-eight species and forms were represented by birds captured in the nets, the lowest spring species diversity banded since the Observatory began operation

Weather throughout the spring was surprisingly warm: morning temperatures were below freezing only during the first week of May. Significant amounts of rain fell during the middle of May. Rain hampered banding attempts on only a few days, as the heavier rain occurred later in the day. Resulting runoff flooded the two netlanes situated along the shoreline - nets 6 and 11. Both were out of commission for two days until they dried up enough to be safely used. Unfortunately, nets 6 and 11 are the most productive at the LSLBO and the days they were inoperable coincided with days of heavy songbird passage, effectively lowering the capture totals for the spring.

Movement of migrant songbirds began early in May, remained steady throughout the month, and tapered off early in June. The heaviest days of observed passage occurred on May 9th, 18th and 19th. Banding totals peaked on May 18th with 105 birds banded. May 21st had the second highest banding total with 64 birds banded, followed by May 24th with 45 birds. Banding totals surpassed 20 birds only on four other days during the spring.

One new species was added to the LSLBO's sight records. A Rock Wren was spotted at the Observatory on May 15th, bringing the LSLBO's species total to 243. The other notable sighting was an Upland Sandpiper on May 17th. Observations of this species are uncommon at the Observatory. There were no new species banded this spring.

Warm temperatures early in the spring caused the leaves on the trees and shrubs to bud and the ice to disappear from the lake earlier than in previous years. These early springtime conditions may have caused the migrants to arrive earlier to their breeding grounds. The first spring sightings of migrants were quite variable as compared to 2004 (Appendix II). Some extremes occurred, for example, the first Canada Warbler was observed about ten days earlier than in 2004, while the sighting of the first Yellow Warbler was five days later than 2004. The first Orange-crowned Warblers, however, were seen on the same day as 2004.

2.0 Spring Monthly Summaries

2.1 April

Spring migration monitoring began April 25th, a clear and mild day with temperatures above the freezing point. The morning was dedicated to setting up the banding lab and migration nets for the season. Normal counts were conducted and a Long-eared Owl passed overhead during the very first visual migration count of 2005. It was a great way to begin the season.

Eastern Phoebes, Winter Wrens, Ruby-crowned Kinglets, Hermit Thrushes, American Robins, Yellow-rumped Warblers, and Song Sparrows were some of the early migrant species that had already arrived and were actively singing as the migration station was being set up. These species, however, were represented by only a few individuals. Only 10 birds were banded by the end of April and daily totals of all songbird species remained low. Passage was limited to Northern Harriers, Yellow-shafted Flickers, Sharp-shinned Hawks, and various blackbird species.

Ice on the lake was solid up to the shoreline when the lab opened. Warm afternoon temperatures and heavy easterly afternoon winds quickly pushed the ice away from the shoreline and there was no ice visible on the lake from the banding station by the 27th. The quick disappearance of the ice caused waterfowl to disperse faster instead of congregating on small patches of open water that form when ice slowly melts on the lake. This effectively reduced the number of waterfowl counted and some species were not observed. Mallards, Common Goldeneyes, and Common Mergansers were the first waterfowl species to be spotted. By the end of April they were joined by American Green-winged Teals, Gadwalls, American Wigeons, Red-breasted Mergansers, and Red-necked Grebes. Shorebird activity was limited to a single Killdeer and a few Greater Yellowlegs.

By the end of April the leaves on many shrubs and trees were beginning to bud. Relatively warm morning temperatures, no ice on the lake, and leaves emerging were the signs of an early spring.

2.2 May

Songbird activity increased slowly as the first week of May progressed. New species of songbirds were spotted on a daily basis including Orange-crowned Warblers, White-crowned Sparrows, Evening Grosbeaks, Eastern Kingbirds, Say's Phoebes, Savannah Sparrows, Trees Swallows, Swainson's Thrush, Lincoln's Sparrows, and Pine Siskins.

Observed passage of many species increased dramatically by the end of the week. The most evident increase was the passage of Yellow-rumped Warblers. Daily counts totaled over 100 individuals as they passed over constantly throughout the monitoring period where only 10 were counted at the beginning of the week.

Despite the growing number of songbirds in the area, banding remained slow with only 22 birds banded throughout the week. Numbers and diversity of waterfowl and other

wetland species also increased during the week. The morning calls of Common Loons were finally heard on May 2nd. The newly arrived Loons were joined by Long-tailed Ducks, Surf Scoters, Bufflehead, Eared Grebes, Franklin's Gulls, two Great-blue Herons, and a Belted Kingfisher. Flocks of Greater White-fronted Geese began to pass through on May 2nd. The following day multiple flocks of Greater White-fronted Geese passed over and 1966 were counted, the season high for 2005. Passage of the geese remained strong throughout the week with another 400 counted on May 5th. Long-tailed Duck counts peaked at 144 individuals on May 3rd and that same day saw small flocks of Sandhill Cranes begin to pass over the observatory. However, the flocks were small, consisting of about 30 individuals.

Some of the heaviest songbird passage of the spring welcomed the second week of May. Counts of Yellow-rumped Warblers remained high early in the week, reaching the spring peak of 362 on May 9th. The season high of Tree Swallows (208 counted) and Blackbirds (208 counted) also occurred on May 9th. The rush of migrants during the early part of the week included a number of new species: Yellow-bellied Sapsuckers, Chipping Sparrows, Palm Warblers, Northern Waterthrush, and Brown-headed Cowbirds.

The pace of songbird migration slowed down noticeably by the end of that week. Yellow-rumped Warblers still had a steady passage, but in much smaller numbers than earlier in the week. Chipping Sparrows passage began to grow, but still not into the numbers seen in previous years. New songbird species continued to pour in during the latter part of the week, including: Least Flycatchers, Blue-headed Vireos, Black-throated Green Warblers, Black-and-white Warblers, Ovenbirds, Rose-breasted Grosbeaks and White-throated Sparrows. While 92 birds were banded during the week, the total was low relative to the sharp increase of songbirds passing through the area. White-winged Scoters, American White Pelicans, Spotted Sandpipers and Osprey arrived to the lake during the week. On May 13th, 132 Surf Scoters were counted, many just barely visible from the shoreline.

The third week in May was a great week for songbirds. Western Tanagers, Yellow Warblers, Gray-cheeked Thrush, American Pipits and Lapland Longspurs arrived early in the week. May 17th brought overcast skies and the first rain day of the season which coincided with a major movement of birds as they used the wet weather as an opportunity migrate. The first Tennessee Warblers, American Redstarts, Common Yellowthroats, and Clay-coloured Sparrows were spotted along with a great diversity of other species. Migration continued on May 18th, and the rain let up allowing the nets to be set (except nets 6 and 11, which were flooded) and 105 birds were banded. The first Blackpoll Warblers were captured and 41 Yellow-rumped Warblers were banded – the top species for the day.

The rain resumed on the 19th, bringing even more new species, including LeConte's Sparrows, Red-eyed Vireos and Cedar Waxwings. Chipping Sparrows reached their season high (410 counted) as did Yellow Warblers (61) on the 19th. A total of 194 birds were banded during the four days the nets were operating this week. The first record of a Rock Wren at the Observatory occurred May15th. The bird was spotted briefly along the shoreline. A birder, who has spent sometime working in Southern Alberta, positively

identified its call. An Upland Sandpiper was seen on the 17th during the daily census and excited the observers that day as such sightings are uncommon in the area.

The first sightings of Canada Warblers, Wilson's Warblers, Western-wood Peewees and Magnolia Warblers occurred during the fourth week of May. General passage of migrants slowed down during the week. Even Chipping Sparrow movement, which started strong, tapered off considerably by the end of the week. Banding mirrored songbird movement, with high banding totals at the beginning of the week, becoming very low as movement practically stopped late in the week. Only 128 birds were banded throughout the week.

Many species began singing in the same locations everyday, signaling that breeding territories were being set up and spring migration was slowly ending. Waterfowl sightings remained steady; the same groups of Common Goldeneyes, Mallards and American Wigeons were counted daily as they floated past the lab, as was the same group of Spotted Sandpipers.

The remaining days of May were met with warm and sunny days. Passage of songbirds was at a virtual standstill, with only a few individuals counted on visual migration count. The first Warbling Vireos, Alder Flycatchers, and Mourning Warblers arrived to the Observatory, bringing the last few of the late migrant species to the area. Visitor rates began to increase as the summer months approached. Banding was at a slower pace, with 65 birds banded during the week, allowing visitors to enjoy the birds in breeding plumage as well as the nice weather.

2.3 June

Philadelphia Vireos, Baltimore Orioles, and Yellow-bellied Flycatchers arrived to the banding lab during the first week of June. The first Gray Jay and Red-breasted Nuthatch of 2005. These two species are winter residences of the area and it was surprising it took this long for the first observations at the lab. Much of the week was busy preparing for the Songbird Festival, which was held June 4th. Overcast skies threatened to dump rain on the event, but the rain held off and the visitors had the opportunity to watch the banding.

Counts were limited mostly to birds singing on their territories, as passage was non-existent. Waterfowl numbers were reduced to only a few individuals of Common Goldeneyes as many dispersed to more suitable breeding locations. Feeding groups of Common Mergansers began to pass by the banding lab; these groups usually contained about 40 individuals.

The final days of migration monitoring allowed for the opportunity to account for the last few migrants. 34 birds were banded during this stretch. A House Wren was the only new species recorded during the final days of spring migration monitoring. Signs that the breeding season had begun became very apparent when many of the birds captured were in breeding condition. It was especially apparent when a female Mallard was seen leading a group of ten ducklings on the 6th.

3.0 Fall Migration Monitoring Summary

The LSLBO monitored fall migration for 75 days, from July 12 to September 29th, with daily census and hourly visual migration counts on all days. Weather generally cooperated and allowed for an impressive 85.6% of the total possible netting hours (5398.38 out of a possible 6300 net hours). However, like the spring, few birds were captured relative to the amount of time the nets were active. A total of 2114 birds were captured during the fall, the second lowest capture total since 1997. Of this number, 1907 birds were banded (Appendix I), 171 birds were recaptured, and 36 were released or escaped unbanded. Captured birds represented 58 different species and forms. The capture rate was 39.2 birds per 100 net hours, which is the second lowest since 2000.

Banding during the first half of the fall was extremely busy with 1593 birds banded from July 12th to August 16th. Banding totals exceed 100 birds on three days: July 26 (122 birds), August 4 (115 birds) and August 15 (112 birds). Additional good banding totals occurred throughout the first half of fall: one day with 91 birds; 2 days with over 80; 2 days with 70; 5 days with 60; and one day with over 50.

Banding slowed down considerably through the latter half of the fall with 314 birds banded from August 19th to September 29th. The top day was September 11th with 42 bandings and only two other days had over 20 birds banded.

Weather conditions remained decent for most of the migration period. July and August temperatures remained moderately warm with the occasional period of rain. It was not a blistering hot summer. There was a significant shift in weather for September. Strong northwesterly winds persisted for the majority of the month. Calm days were usually accompanied by overcast skies and precipitation.

Songbird passage throughout the fall was mixed with days of heavy and slow passage occurring in waves lasting a few days, normal movement for songbirds. The waves of passage occurred throughout the entire migration period. Movement was not necessarily linked with banding totals. On many occasions hundreds of songbirds, such as Yellow-rumped Warblers and Tennessee Warblers were counted, but very few were captured; they were flying too high for the mistnets. No new species were recorded to either the banding list or the sight records list. A Varied Thrush and Brown Headed Cowbird were banded this fall, only the second banding recorded for both species. A Parasitic Jaeger was also spotted on September 8th far out on the lake harassing the Gulls and Terns.

Final sightings seemed to be early for many species when compared to 2004 (Appendix II). The most noticeable was the passage dates of species with more northerly breeding ranges, like the American Tree Sparrow: it arrived a full two weeks early.

4.0 Fall Migration Monthly Summaries

4.1 July

The LSLBO began fall migration monitoring on July 12th with a sunny and calm summer day. The rest of the week was intermixed with windy, wet, and sunny days. Observed movement was sparse during the first week of monitoring with a few Yellow-rumped Warblers and other small songbirds. It may have been too early for many birds to begin migration, but there was plenty of activity in the forest: 156 birds were banded during the week. The majority of the birds were Swainson's Thrush, Tennessee Warblers, Yellow Warblers, Yellow-rumped Warblers, American Redstarts, and White-throated Sparrows. The first Rose-breasted Grosbeak of the year was banded on the 13th, the first Black-throated Green Warbler on the 19th, and the first Winter Wren and first Swamp Sparrow on the 20th.

Many of the captured birds were juveniles, which was to be expected this time of year because many young have already fledged from their nests. Activity on the lake remained quiet, limited to Common Loons, American White Pelicans, and Common Goldeneyes. Franklin's Gulls began to congregate later in the week in groups ranging from 30 to over 100 birds. Feeding groups of about 30 Common Mergansers kept swimming past the Observatory.

Banding during the fourth week of July was among the busiest of the fall. There were birds everywhere. In six days, 383 birds were banded (banding attempts on the 23rd were stopped because of rain). Tennessee Warblers, Yellow Warblers, Yellow-rumped Warblers, American Redstarts, Ovenbirds, Canada Warblers were all banded in high numbers. Clay-coloured Sparrows, Chipping Sparrows, Lincoln's Sparrows, and White-throated Sparrows were also recorded high numbers but not found in concentrations as some of the warbler species.

Diversity also remained high during the week with an average of 35 songbird species observed. July 26th had the highest banding total of the fall with 122 birds and included 21 species, 12 of which were warblers. Three Chestnut-sided Warblers (one adult female and two juveniles) were banded on the 25th. The first Bay-breasted Warbler of the year and the first Blackpoll Warbler of the fall were both banded on the 26th. The only Yellow-bellied Flycatcher of the fall was banded on the 27th. A juvenile Brown-headed Cowbird was banded on the 24th and became only the second fall banding record for the LSLBO. Yellow Warblers reached their peak (71) on the 25th. Movement of birds was limited within the trees until the 27th, when visual migration became noticeable with passage of Yellow-rumped Warblers, Tennessee Warblers, Yellow Warblers, Rose-breasted Grosbeaks and blackbirds.

Banding remained busy during the last few days of July with another 199 birds banded in four days. Species diversity remained the same as the previous week with no unusual or first sightings of the fall during these few days. General passage slowed down somewhat compared to the previous week, but there was still constant movement of warbler and

sparrow species passing over the banding lab. The last Eastern Phoebe was seen at the banding lab on the 29th.

4.2 August

August began with fair weather. Strong winds reduced the banding effort and limited the effectiveness of observations. The majority of species present were only observed in low numbers. The exception was the Franklin's Gulls. On August 2nd, 1731 were counted in two hours. The wind died down mid-week and songbird movement peaked again on the 4th with 115 birds banded on that day. Swainson's Thrush, Tennessee Warblers, Yellow Warblers, Yellow-rumped Warblers, American Redstarts, Black-and-white Warblers, Ovenbirds, Northern Waterthrush, Canada Warblers, Western Tanagers and Rose-breasted Grosbeaks all made another rush at migration.. Similar movement continued for the following few days finally slowing down on the 7th when an adverse weather system returned to the area. By the end of the week, 290 were banded. The number of recaptured birds was low indicating the majority of songbirds were on the move and very few were remaining in the area. The only Ruby-throated Hummingbird of the year was captured in the nets on the 2nd, the first Blue-headed Vireo of the year was banded on the 4th, and the first Wilson's Warbler of the fall was banded on the 6th. Mallards and Common Goldeneyes increased their numbers by a few individuals, but there was still very little activity on the lake.

Fall migration maintained its fast pace during the second week of August. Banding totals remained steady between 50 and 70 birds banded each day for a total of 339 birds banded for the week, and visual migration remained steady. The first Warbling Vireos and Purple Finches of the year were banded on the 8th. The first Connecticut Warbler of the year was banded on the 13th, and the first Cape-may Warbler of the year was banded on the 14th. Swainson's Thrush, Tennessee Warblers, Yellow-rumped Warblers, American Redstarts, Ovenbirds, and Canada Warblers were still the top species observed this week. Numbers of Yellow Warblers seen each day steadily decreased, with their heaviest movement seemingly near its end. The first gaggle of Canada Geese goslings was seen on the 10th as parent geese led five small goslings along the lakeshore.

The third week of August started off with a bang in terms of banding: 112 birds were banded on the 15th. Wood-warblers were still prominent with 13 of the 21 species banded. Tennessee Warblers, American Redstarts, Ovenbirds, and Swainson's Thrush were the top species banded during the day. The 16th seemed to be a slower day until a flock of Tennessee Warblers hit the nets late in the morning. Over 50 birds were found in just one net contributing greatly to the 88 birds banded that day.

The 16th turned out to be the last heavy banding day of the fall. The total for the week was 263 even though things slowed down for the remainder of the week with fewer than 20 birds banded a day. Even though banding was slow, birds were moving. Hundreds of Tennessee Warblers (138 their peak day) and Yellow-rumped Warblers (349, almost their peak day) and 129 blackbirds were some of the heavy movers on the 19th.

This movement continued for the next few days. Another 438 Myrtles were counted on the 21st. All the birds counted during the last few days of the week were all in migration; flying too high for the nets and not stopping for a rest. A few species made their last appearances at the lab this week: Eastern Kingbirds on the 21st, Warbling Vireos on the 15th, Black-throated Green Warblers on the 15th, and the last Song Sparrow was seen on the 19th.

The last portion of August began with very little movement. This changed dramatically on the 25th, 26th and 27th, when Yellow-rumped Warblers continued their strong movement, with 200 to 400 counted each day. Many other songbirds were with them but were moving too high and too fast to be positively identified. The majority of the birds were moving well above the range of the nets and only 85 birds were banded by the end of the month.

The end of August brought the first sightings of some of the late migrant species: the first Dark-eyed Junco on the 22nd (which seemed early for the species, but was only 4 days earlier than in 2004), American Pipit on the 24th, White-crowned Sparrow on the 28th (about 6 days earlier than 2004), and Golden-crowned Kinglet on the 31st. Along with the new sightings of some species came the final sightings of others: Bay-breasted Warbler (23rd), Black-and-white Warbler (26th), Yellow Warbler (27th), Western Tanager (27th), Rose-breasted Grosbeak (27th), and the beloved Canada Warbler (31st).

4.3 September

The first half of September saw migration slow down considerably. The final push of Yellow-rumped Warblers occurred on the 2nd, when they reached their peak daily total of 490 birds. Yellow-rumped Warblers continued to move throughout September with two more peaks of a hundred birds on the 7th and 11th.The rest of the passage contained only a few individuals.

Banding remained very slow for the first half of the month with 149 birds banded. The top day was the 11th with 42 birds, (compared to 10 birds a day on all other banding attempts). A Varied Thrush was banded on the 7th, only the second banding record for the Observatory.

A Parasitic Jaeger was also spotted far out on the lake on the 7th. Lapland Longspurs were first heard on the 2nd, as well as the only sighting of a Palm Warbler for the fall. The Orange-crowned Warblers arrived at the lab on the 5th. American Tree Sparrows usually arrive at the lab the last week of September. A number were seen on September 10th, and sightings continued throughout the rest of the month. Many species also had their last sightings: Tennessee Warblers (3rd), Alder Flycatchers (7th), and Clay-coloured Sparrows (10th). Blackpoll Warblers, Philadelphia Vireos, Red-eyed Vireos, Ovenbirds, and Northern Waterthrush all made their last appearance at the lab on September 11th.

Heavy winds were present throughout the majority of the last half of September and only 43 birds were banded. Late migrant species and resident winter species were most commonly seen, with Ruby-crowned Kinglets, Hermit Thrush, Yellow-rumped Warblers, White-breasted Nuthatches, Red-breasted Nuthatches, White-throated Sparrows, White-

crowned Sparrows, Black-capped Chickadees, Golden-crowned Kinglets and both Downy and Hairy Woodpeckers. A Boreal Chickadee was banded on the 21st. A very late Cape-may Warbler was seen with a group of chickadees on the 28th. The last of the American Redstarts and Wilson's Warblers were seen on the 16th. The last Least Flycatchers and Swainson's Thrush were seen in the vicinity of the banding lab on the 17th.

5.0 Migration Coverage

The LSLBO strives to maintain consistent migration monitoring coverage that allows comparable migration results from year to year. Changes to the migration monitoring protocol occurred in 2000 and have been followed every year since then. As in previous years, both spring and fall seasons of 2005 received excellent migration coverage.

The total number of days the station was operational during spring migration was slightly lower than in previous years (Table 1). Daily spring migration monitoring began a few days later then in April than usual due to staff commitments on another project. An additional four days were missed during the monitoring season because of staff availability. The census and visual migration counts were conducted every day that the station was operating. Weather conditions also allowed mistnetting to occur every day the station was manned, although on a few occasions the nets were closed early because weather conditions changed unfavourably during operating hours.

Table 1. Summary of effort during spring migration monitoring at LSLBO, 1997 – 2005.

SPRING	1997	1998	1999	2000	2001	2002	2003	2004	2005
Coverage									
First day	30-Apr	04-May	26-Apr	18-Apr	16-Apr	19-Apr	21-Apr	19-Apr	25-Apr
Last day	17-Jun	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun
# of days	37	36	46	57	57	54	50	50	43
Person-days	67	72	N/A	126	130	125	124	120	121
Banding1									
First day	01-May	04-May	29-Apr	20-Apr	16-Apr	20-Apr	21-Apr	20-Apr	25-Apr
Last day	17-Jun	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun
# of days	34	36	42	52	54	45	39	45	43
Av daily net-hrs.	58.6	74.5	69.1	62	72.9	63	48.9	60.5	71.2
Census									
First day	30-Apr	04-May	27-Apr	18-Apr	16-Apr	19-Apr	21-Apr	20-Apr	25-Apr
Last day	14-Jun	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun
# of days	34	32	34	55	57	54	50	49	43
Vis-Migs2									
First day	30-Apr	05-May	27-Apr	18-Apr	16-Apr	19-Apr	21-Apr	20-Apr	25-Apr
Last day	14-Jun	21-May	25-May	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun
# of days	33	8	16	57	57	54	50	49	43
Av daily Vis-migs	4.5	3.8	N/A	8.2	7.8	8.4	8	8.2	8

1- Protocol changes in 2000 included increasing the six-hour standard banding period to seven hours

2- Starting in fall 1999 Vis-Migs were reduced from 10 minutes to five minutes

Migration was monitored for 75 days during the fall, which was relatively consistent with previous years (Table 2). Five days were missed during the fall season because personnel were unable to operate the station. Census and visual migration counts were conducted everyday the station was manned. Poor weather completely hampered mistnetting efforts only on four days during the season. Overall weather conditions were ideal for banding throughout the season and the fall received excellent mistnetting coverage.

Table 2. Summary of effort during fall migration monitoring at LSLBO, 1997 - 2005.

FALL	1997	1998	1999	2000	2001	2002	2003	2004	2005
Coverage									
First day	05-Aug	14-Jul	10-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul
Last day	26-Sep	24-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep
# of days	35	66	78	91	69	84	77	78	75
Person-days	45	126	N/A	207	192	173	158	164	170
Banding1									
First day	06-Aug	14-Jul	10-Jul	07-Jul	14-Jul	14-Jul	12-Jul	12-Jul	12-Jul
Last day	26-Sep	24-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep
Number of days	33	62	76	89	69	78	69	73	71
Av. Daily net-hrs.	60.9	48.5	56.7	74	74.6	62.9	73.8	69.8	76
Census									
First day	06-Aug	19-Jul	10-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul
Last day	03-Sep	24-Aug	08-Aug	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep
# of days	8	10	15	90	69	84	77	78	75
Vis-Mig2									
First day	06-Aug	25-Jul	13-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul
Last day	26-Sep	02-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep
Number of days	29	20	43	91	69	84	77	78	75
Av daily Vis-migs	1.7	2.8	3.9	7.7	7.9	7.7	7.6	7.6	7.7

1- Protocol changes in 2000 included increasing the six-hour standard banding period to seven hours

2- Starting in fall 1999 Vis-Migs were reduced from 10 minutes to five minutes

6.0 Monitoring Avian Productivity and Survivorship (MAPS)

The Monitoring Avian Productivity and Survivorship (MAPS) program remains one of the main projects the LSLBO contributes data to. Organized by the Institute for Bird Populations, MAPS is a long-term program focused on monitoring bird populations on the breeding grounds. The LSLBO has been providing data to the MAPS program since 1994.

2005 marked the 12th consecutive year that both the Far-and-Away (FAWA) and Roadside (ROAD) sites have been operating. The Residence (RESI) has been operating for six consecutive years, and the Fern Gulley (FEGU) site has been operative for three consecutive years after being reopened in 2003. The dates the stations were operational in 2005 were:

	FAWA	**FEGU**	**ROAD**	**RESI**
Period 5 (Jun 10 - Jun 19)	Jun 15&16	Jun 17	Jun 17	Jun 11
Period 6 (Jun 20 - Jun 29)	Jun 24	Jun 29	Jun 29	Jun 21
Period 7 (Jul 30 - Jul 9)	Jul 1	Jul 2	Jul 3	Jun 30
Period 8 (July 10 - July 19)	Jul 11	Jul 12	Jul 14	Jul 10
Period 9 (July 20 - July 29)	Jul 21	Jul 26	Jul 27	Jul 20
Period 10 (July 30 - Aug 8)	Jul 31	Aug 2	Aug 3	Jul 30

6.1 Captures

Weather conditions throughout most of June were fairly wet. The only station to have been negatively affected was RESI. Rain on the first visit forced an early closure of nets, and one netlane was not operational for two visits because heavy rains at the end of June flooded the low-lying area the RESI site is situated. RESI still received 332.5 of the possible 360 net hours. FAWA almost had full net hours: a large mammal destroyed one net and it was down for an hour until it was replaced. Both the ROAD and FEGU received full net hours.

A total of 311 birds were banded during the 2005 MAPS season; the second highest MAPS banding total at the LSLBO (the highest being 423 in 2003). An additional 123 birds were recaptured. 23 species and forms were recorded from captured birds. FAWA had the lowest capture with 38 birds banded and 23 recaptured from 9 species (Table 3). RESI had the second lowest with 59 birds banded and 15 recaptures from 13 species (Table 4). FEGU had the second highest banding total with 103 birds and an additional 50 recaptures from 15 species (Table 5). ROAD and the highest banding total with 111 birds and an additional 35 recaptures from 16 species; including its first banding record of a Hermit Thrush (Table 6).

Both the FEGU and ROAD sites experienced their peak banding days during the 9th round as juvenile birds made a major movement; 41 birds banded at FEGU and 74 at ROAD. FAWA had its peak banding during the 10th round with 23 birds banded. RESI, which has had the highest captures of the MAPS stations in previous years, missed the movement of young birds in the last rounds and only 14 birds were banded on the last round.

Table 3. Captures at the Far Away (FAWA) MAPS station.

Species	2005		Previous Years' Total Captures					
	Banded	Recap	94-99	2000	2001	2002	2003	2004
Yellow-bellied Sapsucker								1
Downy Woodpecker				1				
Least Flycatcher			4		9	1	1	
Swainson's Thrush	2		6	1		1		
Hermit Thush							2	
American Robin			6		1	3		1
Cedar Waxwing			1					
Phialdelphia Vireo			1					
Red-eyed Vireo		1	4		1		1	
Tennessee Warbler	7	1	2		1	4	2	
Yellow-warbler			3		2			
Chestnut-sided Warbler			1					
Magnolia Warbler			1					
Yellow-rumped Warbler	4	2	9	3	4	4	7	2
Black-and-white Warbler			1				1	
American Redstart	1	1	36	8	7	2	7	2
Ovenbird	4	5	18	5	4	3	1	6
Connecticut Warbler			1					
Mourning Warbler	2		50	4		2	5	3
Common Yellowthroat			2					
Canada Warbler	6	5	54	10	8	7	13	10
Western Tanager			1			1		
Rose-breasted Grosbeak				1				
White-throated Sparrow	12	8	82	10	11	7	14	10
Total	38	23	283	43	49	35	55	35

Table 4. MAPS captures at Residence (RESI) station.

Species	2005		Previous Years' Total Captures				
	Banded	Recap	2000	2001	2002	2003	2004
Sharp-shinned Hawk			1				
Ruby-throated Hummingbird					1		
Yellow-bellied Sapsucker	2		2	3	6	4	
Northern Flicker						1	
Western Wood-Pewee			1				
Alder Flycatcher				1			
Least Flycatcher			11	8	14	6	5
Black-capped Chickadee			1		6	5	3
Red-breasted Nuthatch					1	2	
Brown Creeper						2	
Winter Wren				1	2	1	
Ruby-crowned Kinglet	1					2	1
Swainson's Thrush	5	3	8	7	7	11	7
Hermit Thrush	4	3	4	1	2	2	2
American Robin			2			1	2
Red-eyed Vireo				2			6
Philadelphia Vireo				1			1
Warbling Vireo				1		1	
Blue-headed Vireo				1			2
Tennessee Warbler	5		9	27	28	42	40
Orange-crowned Warbler							1
Yellow Warbler			4	4	3	4	
Magnolia Warbler	2	1	7	2	8	8	2
Yellow-rumped Warbler	4	1	7	11	16	71	11
Black-throated Green Warbler			1	1	1		2
Bay-breasted Warbler			2	3			1
Blackpoll Warbler				1			1
Black-and-white Warbler			3	4			2
American Redstart	5		10	21	13	13	15
Ovenbird	21	2	5	6	9	3	3
Northen Waterthrush						1	
Mourning Warbler		1	4		1	3	1
Common Yellowthroat				1			1
Canada Warbler	1	1	3	7	4	6	5
Western Tanager			1	1			1
Rose-breasted Grosbeak			1	1	3		2
Chipping Sparrow			2		5	4	
Clay-colored Sparrow							1
Lincoln's Sparrow	1		1			2	
White-throated Sparrow	8	3	14	19	14	23	14
Purple Finch					1		
Pine Siskin			1				
Total	59	15	105	139	145	218	132

Table 5. Captures at the Fern Gulley (FEGU) MAPS station.

Species	2005		Previous Years' Total Captures		
	Banded	Recap	94-'99	2003	2004
Northern Saw-whet Owl			1		
Yellow-bellied Sapsucker					1
Alder Flycatcher	2		6		
Least Flycatcher			2	3	3
Blue-headed Vireo			2	1	
Red-eyed Vireo		1	4	2	
Black-capped Chickadee			7		2
Red-breasted Nuthatch			4		
Winter Wren		1	3		
Swainson's Thrush	7	3	50	8	7
Hermit Thrush			1		
American Robin			4	1	
Cedar Waxwing	1			1	
Tennessee Warbler	20		30	20	5
Orange-crowned Warbler			1		
Yellow Warbler	2		13	3	
Chestnut-sided Warbler			2		
Magnolia Warbler			17	5	1
Yellow-rumped Warbler	5	1	26	2	1
Black-throated Green Warbler			1		
Black-and-white Warbler	2	1	12	3	1
American Redstart	14	17	237	51	23
Ovenbird	9	15	41	9	7
Northern Waterthrush			1	1	
Mourning Warbler	6	1	51	4	6
Canada Warbler	22	8	112	36	11
Western Tanager	1		1	2	
Chipping Sparrow			2		
Song Sparrow			5		
Swamp Sparrow			2		
White-throated Sparrow	11	3	102	17	9
Pine Siskin			2		
Total	102	51	742	169	77

Table 6. Captures at the Roadside (ROAD) MAPS station.

Species	2005		Previous Years Captures					
	Banded	Recap	94-'99	2000	2001	2002	2003	2004
Ruffed-Grouse			2					
Yellow-bellied Sapsucker	1		6				1	1
Downy Woodpecker							1	
Hairy Woodpecker							1	1
Pileated Woodpecker					1			
Yellow-bellied Flycatcher			1					
Alder Flycatcher			5			1		
Least Flycatcher			7			2		1
Black-capped Chickadee	1		2		1	1	4	2
Red-breasted Nuthatch			1					
Brown Creeper					1			
Winter Wren	2	1	1	1			2	
Ruby-crowned Kinglet	1						2	1
Swainson's Thrush	5	5	36	12	5	8	16	6
Hermit Thrush	1							
American Robin	1		2			2		
Cedar Waxwing			3					
Warbling Vireo			1					
Red-eyed Vireo			2			1	1	1
Tennessee Warbler	49		41		1	8	8	
Orange-crowned Warbler			1					
Yellow Warbler			6			2		1
Chestnut-sided Warbler		1	4					
Magnolia Warbler	1	1	66	10	15	8	9	2
Cape May Warbler			2				1	
Yellow-rumped Warbler	4	1	50	1	1	2	17	3
Black-throated Green Warbler			5	1			1	
Palm Warbler			1					
Blackpoll Warbler			2					
Black-and-white Warbler	2		15	3			7	1
American Redstart	13	9	120	8	12	31	18	7
Ovenbird	7	5	41	8	12	14	22	10
Northern Waterthrush			1				1	
Mourning Warbler	1		15					1
Common Yellowthroat			2					
Canada Warbler	16	8	104	13	13	9	20	22
Western Tanager			3					
Rose-breasted Grosbeak			4					
Chipping Sparrow			7			5	4	
Song Sparrow			2					
Lincoln's Sparrow			1				1	1
White-throated Sparrow	6	4	86	3	6	4	9	5
Purple Finch			1					
Pine Siskin			1					
Total	111	35	650	60	68	98	146	66

6.2 Breeding Status

Breeding status was determined through banding and observations of each of the 57 species recorded at the MAPS stations (Table 2). Observations were restricted to MAPS banding site visits only.

Table 2. Breeding Status of MAPS birds in 2005.

Species	RESI	ROAD	FEGU	FAWA	Species	RESI	ROAD	FEGU	FAWA
Common Loon	T			T	Cedar Waxwing	L	L	T	L
American White Pelican		T		T	Tennessee Warbler	B	B	L	B
Canada Goose					Yellow Warbler	B	B	B	B
Mallard	T		T	T	Chestnut-sided Warb.		T		
Common Goldeneye		T			Magnolia Warbler	B	B		L
Osprey		T		T	Yellow-rump'd Warb.	B	B	B	B
Bald Eagle		T	T	T	Black-thrt'd Grn Warb.	L	L	L	
Sharp-shinned Hawk		T		T	Black-and-white Warb.	B	B	B	B
Ruffed Grouse	L	B	B		Blackburnian Warbler		M		
Franklin's Gull				T	American Redstart	B	B	B	B
Ring-billed Gull			T		Ovenbird	B	B	B	B
Yellow-bellied Sapsucker	L	T	T		Mourning Warbler	L	L	L	L
Hairy Woodpecker	L	L	B	L	Common Yellowthroat			L	
Northern Flicker	L	T	L	L	Canada Warbler	L	B	B	B
Pileated Warbler	L		L		Western Tanager	L		L	T
Alder Flycatcher	L	B	L	B	Chipping Sparrow	L	T	L	
Least Flycatcher	B	B		L	Clay-colored Sparrow	L	B	L	L
Eastern Phoebe	T	B	B		Song Sparrow		L		T
Blue-headed Vireo	L			L	Lincoln's Sparrow	L			
Warbling Vireo	L				White-thrt'd Sparrow	B	B	B	B
Philadelphia Vireo			T		Rose-breast'd Grosbeak	L	L	L	B
Red-eyed Vireo	B	B	B	B	Brown-headed Cowbird	T	T		T
Blue Jay	T	T	T	T	Purple Finch	T			
American Crow	T	T	T	T	Pine Siskin	T	T	T	T
Common Raven	T	T	T	T					
Tree Swallow		T							
Black-capped Chickadee	B	B	L	L					
Red-breasted Nuthatch	L	L	L	L					
Winter Wren	B	B	B	L	Total sp. Breeder (B)	14	18	13	11
Ruby-crowned Kinglet	L	L			Total sp. Likely (L)	20	9	13	14
Swainson's Thrush	B	B	B	L	Total sp Transient (T)	9	16	11	14
Hermit Thrush	B	T		L	Total sp. Migrant (M)		1		
American Robin	L	L	T	L	Total sp.	43	44	37	39

7.0 Recaptures

Throughout the banding season, the LSLBO recorded 381 recaptured birds; 87 from spring migration, 171 from fall migration and 123 from MAPS banding. There were no foreign recaptures recorded: all recaptured birds were originally banded by the LSLBO.

The majority of the recaptured birds were originally banded during the 2005 season. 59 records were banded during the 2004 season and 38 birds were originally banded before 2004 (Table 7). An Alder Flycatcher and Canada Warbler were originally banded in 2000, making them both at least six years old. An Alder Flycatcher was recaptured that was originally banded as an adult in 1996, making it at least ten years old! It was recaptured at the LSLBO in 2002, where it made a new longevity record for the species; at least seven years old. It has not been reported yet if it had become a new longevity record.

There were no reports of any of LSLBO's banded birds recovered at another location in 2005.

Table 7. Age of recaptured birds originally banded before 2004

Species	Band Number	Original Banding			Recapture		
		Date	Location	Age	Date	Location	Age
Alder Flycatcher	2320-38418	Aug 4 '03	Mig	HY	Jul 24 '05	Mig	2 years
Black-capped Chickadee	2320-38483	Aug 8 '03	Mig	HY	Aug 23 '05	Mig	2 years
American Redstart	2150-92938	Aug 3 '03	Mig	HY	June 9 '05	Mig	2 years
American Redstart	2150-92952	Aug 5 '03	Mig	HY	May 24 '05	Mig	2 years
Ovenbird	2181-79037	Jul 10 '03	FEGU	HY	Aug 2 '05	FEGU	2 years
Swainson's Thrush	1761-21303	May 28 '03	Mig	SY	Jul 26 '05	Mig	3 years
Swainson's Thrush	1761-21334	Jul 12 '03	Mig	SY	Jun 29 '05	FEGU	3 years
American Redstart	2100-07905	July 1 '03	ROAD	SY	Jun 2 '05	Mig	3 years
American Redstart	2150-92354	July 16 '03	Mig	SY	Jun 8 '05	Mig	3 years
Ovenbird	2181-79642	Aug 18 '02	Mig	HY	Jul 13 '05	Mig	3 years
Canada Warbler	2160-63129	Jun 24 '03	FEGU	SY	Jul 12 '05	FEGU	3 years
Red-eyed Vireo	2181-79836	July 17 '03	Mig	AHY	Jun 4 '05	Mig	3+ years
Black-and-white Warbler	2320-38370	Aug 2 '03	Mig	AHY	May 22 '05	Mig	3+ years
American Redstart	2330-37012	Aug 5 '03	FEGU	AHY	Jun 17 '05	FEGU	3+ years
Ovenbird	2181-79034	Jul 1 '03	FEGU	AHY	Jun 29 '05	FEGU	3+ years
Canada Warbler	2160-63161	Jul 10 '03	FEGU	AHY	Jul 1 '05	FAWA	3+ years
Song Sparrow	1761-21402	Aug 3 '03	Mig	AHY	May 8 '05	Mig	3+ years
Black-capped Chickadee	2200-38387	Jul 31 '01	Mig	HY	Apr 26 '05	Mig	4 years
Swainson's Thrush	1641-32817	Jun 7 '02	Mig	SY	Jul 15 '05	Mig	4 years
Myrtle Warbler	2160-63074	Jun 23 '02	RESI	SY	Jun 21 '05	RESI	4 years
Ovenbird	2181-79533	Jun 4 '02	Mig	SY	Jun 29 '05	ROAD	4 years
Swainson's Thrush	1761-21322	May 31 '03	Mig	ASY	May 30 '05	Mig	4+ years
Swainson's Thrush	1761-21322	May 31 '03	Mig	ASY	Jun 23 '05	ROAD	4+ years
Myrtle Warbler	2250-13206	Jun 6 '02	Mig	AHY	May 13 '05	Mig	4+ years
American Redstart	2150-92299	Jun 7 '03	Mig	ASY	Jun 17 '05	FEGU	4+ years
Canada Warbler	2250-13258	Jul 16 '02	Mig	AHY	Jun 1 '05	Mig	4+ years

White-throated Sparrow	1641-32836	July 21 '02	Mig	AHY	May 21 '05	Mig	4+ years
White-throated Sparrow	1761-21040	Jul 1 '03	FEGU	ASY	Jun 15 '05	FAWA	4+ years
White-throated Sparrow	1451-90597	Jul 4 '02	RESI	AHY	Jun 21 '05	RESI	4+ years
White-throated Sparrow	1761-21013	Jun 12 '03	FAWA	ASY	Jun 24 '05	FAWA	4+ years
White-throated Sparrow	1761-21019	Jun 24 '03	FEGU	ASY	Jun 29 '05	ROAD	4+ years
American Redstart	2230-71050	Aug 1 '00	Mig	HY	Jul 27 '05	ROAD	5 years
American Redstart	2230-71768	May 28 '01	Mig	AHY	Jun 1 '05	Mig	5+ years
American Redstart	2230-72569	Jun 1 '02	Mig	ASY	Jun 3 '05	Mig	5+ years
American Redstart	2100-07805	Jun 14 '02	FAWA	ASY	Jun 17 '05	FEGU	5+ years
Alder Flycatcher	2220-41364	Jul 17 '00	Mig	AHY	Jun 9 '05	Mig	6+ years
Canada Warbler	1980-87090	Jun 26 '00	FAWA	AHY	Jul 11 '05	FAWA	6+ years
Alder Flycatcher	1990-60111	Jul 27 '96	Mig	AHY	Jul 21 '05	Mig	10+ years

8.0 Staff and Volunteers

Between LSLBO staff, Lesser Slave Lake Provincial Park employees and program volunteers, 324 person days were accumulated from the migration programs and MAPS (Table 8). LSLBO staff accumulated 251 person days at the lab. The LSLBO Educator, Patti Campsall, spent a large portion of time at the lab through July and August leading tours and greeting walk-in visitors. Lesser Slave Lake Provincial Park interpreters, Jeff Manchak and Samantha Magnus, also spent time throughout the summer helping with banding activities and with visitors. Volunteer support was very low in 2005. Seven volunteers spent time at the lab learning about banding, with only two staying for a week. The LSLBO is very grateful for all the time and effort from the all volunteers and staff.

Table 8. Number of person days during the 2005 field season

	Spring	**Maps**	**Fall**	**Total**
LSLBO Staff				
Richard Krikun	41	16	65	122
Sara Bumstead	28	14	29	71
Amy Wotton	5		13	18
Patti Campsall	10		24	34
Jul Wojnowski	2		1	3
Tyler Flockhart			3	3
Total Staff Days	**86**	**30**	**135**	**251**
Parks Staff				
Jeff Manchak	10		10	20
Samantha Magnus	9		9	18
Total Park Staff Days	**19**		**19**	**38**
Volunteers				
Aaron Lehman	6		6	12

Lila Tauzer	3	2		5
Paula Schneider	7			7
Richard Klauke			8	8
Jean-Francios Jette		1		1
Chuck Priestley			1	1
Lisa Priestley			1	1
Total Volunteer Days	**16**	**3**	**16**	**35**

9.0 Visitors and Education

The LSLBO greeted just over 1000 visitors throughout the migration periods (Table 9); the majority were walk-in visitors during the summer months. About 300 visitors attended the annual Songbird Festival, which was held on June 4th. Attendance was lower than in previous year, a possible artifact of poor weather conditions.

Several group tours were organized throughout the summer including three grade three classes from Wabasca, a group from the Saskatoon Natural History and Folklore Society, Junior Forest Rangers, classes from Northern Lakes College, a group from Nature Canada, and a group from the Athabasca Adult Care Centre. Staff took the time to talk to all visitors about role of migration monitoring in conservation, give banding demonstrations, and to show off the very pretty birds.

Table 9. Number of visitors to the LSLBO during the spring and fall banding seasons

Season	Adults	Children	Songbird Festival	Number of Groups	Total Visitors
Spring (Apr 25 - Jun 10)	233	88	300	6	621
Fall (Jul 12 - Sept 29)	333	106		3	439
Total	**566**	**194**	**300**		**1060**

10.0 Canada Warbler Project

The Canada Warbler Project was continued during the 2005 field season. Poor weather conditions, staff availability, and conflicts with MAPS banding did not allow much time to be devoted to the project. Staff did take the opportunity, when possible, to locate territories of breeding males, conduct nest searches and colour band Canada Warblers in the study site. Although results were limited, the information gathered will be useful in future analysis of the data.

The Canada Warbler Grid was visited nine times in June and July to map the territories Canada Warblers breeding in the site. Twelve pairs of Canada Warblers were found

breeding in the study site. Only six were colour banded. Attempts to colour band other adults through targeted banding all failed. Rough territories were found for eight of the adults.

To help with marking adults in the breeding site, all Canada Warblers captured during MAPS banding were also colour banded. Since target banding is not always successful and usually only catches males defending territories, using the MAPS banding to supplement marking is effective. 17 adults, 11 male and 6 females, were colour banded during MAPS banding. As mentioned above, territories were discovered for only 12 pairs, and many were not colour banded. Either there were more breeding territories not discovered, or many of the males banded were floaters in the population that were unable to find a mate a set up a territory.

Nest searches produced only one nest. Located in the Roadside MAPS site, the nest was found in a pocket in the ground. Fortunately, the young had just hatched when the nest was located; there were four hatchlings a few hours old and one egg. When the last egg finally hatched, nestlings were measured daily for growth rates. Nest behaviour and feeding rates could not be documented because a video camera was unavailable in 2005. All five young successfully fledged the nest at approximately eight days old.

11.0 Northern Saw-whet Owl Migration Monitoring

The success of the Northern Saw-whet Owl migration monitoring pilot project in 2004 prompted the continuation of owl monitoring in 2005. Monitoring began on August 21st and ended on October 24th. Monitoring ended on October 16th in 2004; the aim in 2005 was to extent monitoring until the end of October. Banding occurred for a total of 41 days. 14 nights were missed because of poor weather conditions and availably of staff. An additional nine straight nights were missed from October 11 until October 19 because staff was attending a conference. Monitoring was shortened on four nights because poor weather moved in during the banding period.

134 Northern Saw-whet Owls were banded in 2005 (Tables 10 and 11). One Saw-whet was recaptured two weeks after it was originally banded at the site. The first Saw-whet was banded on August 27th. Owls were captured periodically until September 9th, when captures became nightly. Steady captures occurred from September 16th until October 8th, when coverage became sporadic. 2005 saw some busier nights of banding than in 2004; fourteen Saw-whets were captured on the 27th and ten owls were captured on September 22nd, September 31st and October 1st. The last owl was captured on October 24th; extending the banding season until the end of October will become standard practice. The busiest night was on September 22nd, when ten owls were captured in just over an hour. A thunderstorm rolled in and forced the nets closed early, but there were still owls in the area.

Banding protocol was deviated from on October 2nd. A pair of Barred Owls was heard hooting near the nets. Not missing an opportunity to catch the owls, the standard

Northern Saw-whet Owl call used as the lure was replaced with a Barred Owl call lure. The lure worked great. The Barred Owls came to the nets almost immediately; however, the nets are located in a poor location to catch Barred Owls, not high enough and bordering the treeline. The Barred Owls hooted back at the lure for a while, eventually lost interest, and moved on.

Table 10. Captures of Northern Saw-whet Owls by age class in 2004 and 2005.

	HY	AHY	SY	ASY	Total
2005	87	1	33	13	134
2004	65		14	12	91
Total	152	1	47	25	**225**

Table 11. Captures of Northern Saw-whet Owls by sex class in 2004 and 2005.

	Male	Female	Unknown	Total
2005	5	89	40	134
2004	5	67	19	91
Total	10	156	59	**225**

12.0 LSLBO's Activities

12.1 Training

The LSLBO's banding staff had the opportunity to attend three banding workshops in 2005. These workshops are invaluable to the banders, providing practice with aging and sexing techniques in a classroom environment. A MAPS workshop was held in Calgary in early March to teach aging techniques and to learn data gathering methods for the MAPS program. A bander's workshop was held the last weekend of April in Saskatoon. It was a basic workshop on ageing and sexing songbirds. Another workshop was held in Prince Edward Point, Ontario in the middle of October. The content of this workshop was similar to the content covered in the workshop in Saskatoon.

12.2 Presentations

Staff of the LSLBO and the Lesser Slave Lake Provincial Park teamed up for three evening presentations during the summer. *Masters of the Night Sky*, held on April 20th, discussed owls species found in the Slave Lake area and highlighted the unique adaptations that owls possess. *Songbird Symphony* was held on May 26th as an introductory bird course focusing on the identification of some of the common breeding species in the Slave Lake area. The third presentation was held on September 15th and titled *Creatures of the Night.* This presentation introduced the different feeding and breeding strategies that moths, bats, and owls use as to be successful nocturnal creatures. Unfortunately, public participation for these presentations was lower than expected, with about 20 people per show.

Two presentations were made at the Martin River Campground Amphitheatre, one on May 21st, the second on August 14th. The presentations were titled *A Day in the Life of a Bander*. The presentations were used to promote the monitoring activities of the LSLBO through banding demonstrations, banding small children instead of live birds, and a mock census count. The presentation in May had a small group of about 20 people. The August presentation was to a full house and received full audience participation.

12.3 Baillie Bird-a-thon

Staff of the Lesser Slave Lake Bird Observatory and Lesser Slave Lake Provincial Parks and Protected Areas took part in the Baillie Bird-a-thon on May 27th. This fundraiser has participants locating as many species as possible in a 24-hour period. The 2005 bird-a-thon began at the banding lab, counting species during the normal migration monitoring period. Then it was off to explore the lakeshore, ponds, and forests around Slave Lake. 92 species were found in the 12 hours spent looking for birds.

13.0 Recommendations

The 2005 banding season was a success with the core monitoring programs (spring and fall migration monitoring and MAPS) completed to the best of the ability of available staff. The following recommendations are made to improve banding operations in the future.

The assistant bander for the 2005 season did not have a banding license. This put a great strain on the bander-in-charge. It is becoming increasingly difficult to find licensed banders, even more so now the process of getting a license has become more involved. It is even becoming difficult to find personnel with banding experience. Every effort should be made to have a field assistant in place with a license before the field season begins. This will include encouraging the return of previous assistant banders who have knowledge of the stations protocols.

With the opening of the Boreal Centre for Bird Conservation in 2006 there will be an expected increase of visitors to the Observatory. Steps need to be taken to accommodate increased visitation without compromising the quality of data. In past years, the banding staff was responsible for both public education and the lab and migration monitoring. In August of 2005, the LSLBO educator spent a large amount of time at the Observatory greeting visitors and explaining the banding process. This system worked well, especially when only one bander was present. A position should be created or the educator position modified to spend more time at the lab during the summer months when many families are on vacation.

2005 had almost no volunteer support. Volunteers, specifically long-term ones, are an important aspect of the LSLBO's operation. For instance, the Canada Warbler Project did

not meet its expectations in 2005 because of staff constraints. Increasing advertisements for volunteers, both local and abroad, should be done. The volunteer agreement should be modified to better accommodate long-term volunteers, for example, by reducing the housing costs for them.

14.0 Acknowledgments

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Appendix I: Annual Banding Totals

	1993-2003	2004	2005 Spring	2005	2005 Fall	Grand
Species			**Migration**	**MAPS**	**Migration**	**Total**
"Audubon's" Warbler	2					2
Alder Flycatcher	1286	103	5	2	35	1431
American Goldfinch	1					1
American Kestrel	1					1
American Magpie	1					1
American Pipit	18					18
American Redstart	4683	264	38	33	195	5213
American Robin	171	12	4	1	8	196
American Tree Sparrow	294	8			1	303
Baltimore Oriole	4					4
Bay-breasted Warbler	47	4			13	64
Black-and-White Warbler	783	61	13	4	67	928
Blackburnian Warbler	1					1
Black-capped Chickadee	558	30	3	1	21	613
Blackpoll Warbler	235	23	8		8	274
Black-throated Green Warbler	79	3			9	91
Blue Jay	13	6	1		1	21
Blue-headed Vireo	53	6			3	62
Boreal Chickadee	22	1			1	24
Brown Creeper	14				1	15
Brown -headed Cowbird	3				1	4
Canada Warbler	1510	117	22	50	104	1803
Cape May Warbler	80	1			3	84
Cedar Waxwing	83	6		1	6	96
Chestnut-sided Warbler	17	1			3	21
Chipping Sparrow	1392	108	113		9	1622
Clay-colored Sparrow	569	81	16		19	685
Common Grackle		1				1
Common Yellowthroat	421	25	9		6	461
Connecticut Warbler	18	1			4	23
Cooper's Hawk	1					1
Downy Woodpecker	30				1	31
Eastern Phoebe	68	8	3		1	80
Evening Grosbeak	1					1
Fox Sparrow	25	5				30
Golden-crowned Kinglet	56				3	59
Gray Catbird	5					5
Gray Jay	2					2
Gray-cheeked Thrush	33	26	2			61

	1993-2003	2004	2005 Spring	2005	2005 Fall	Grand
Species			**Migration**	**MAPS**	**Migration**	**Total**
Hairy Woodpecker	9	1			1	11
Harris's Sparrow	4	1				5
Hermit Thrush	177	30	13	5	16	241
House Wren	14	2	1			17
Lapland Longspur	4					4
Lazuli Bunting		1				1
Le Conte's Sparrow	1	2				3
Least Flycatcher	1513	67	7		37	1624
Lincoln's Sparrow	403	52	7	1	27	490
MacGillivray's Warbler	2					2
Magnolia Warbler	663	34	6	3	31	737
Marsh Wren	2					2
Mourning Warbler	557	37	9	9	36	648
Nashville Warbler	3					3
Northern Flicker	9	1				10
Northern Mockingbird	1					1
Northern Pygmy-Owl	1	1				2
Northern Saw-whet Owl	5	91			131	227
Northern Shrike	1					1
Northern Waterthrush	303	67	11		23	404
Orange-crowned Warbler	652	98	23		31	804
Olive-sided Flycatcher	1					1
Ovenbird	873	140	10	41	145	1209
Western Palm Warbler	170	7	4			181
Philadephia Vireo	118	2	1		14	135
Pileated Woodpecker	1					1
Pine Siskin	144	3			2	149
Purple Finch	39	1			1	41
Red-breasted Nuthatch	92	2			1	95
Red-eyed Vireo	457	31	6	1	23	518
Red-winged Blackbird	5					5
Rose-breasted Grosbeak	143	22			21	186
Ruby-crowned Kinglet	216	33	15	2	11	277
Savannah Sparrow	98	7	2			107
Sharp-shinned Hawk	180	30	7		21	238
Song Sparrow	111	16	3		11	141
Swainson's Thrush	1651	491	42	19	181	2384
Swamp Sparrow	100	8			8	116
Tennessee Warbler	3148	154	16	81	332	3731
Varied Thrush	1				1	2
Veery	6					6
Vesper Sparrow	1					1
Warbling Vireo	48	1			2	51
Western Tanager	82	15		1	5	103
Western Wood-Pewee	19					19
White-breasted Nuthatch	2					2

	1993-2003	2004	2005 Spring	2005	2005 Fall	Grand
Species			**Migration**	**MAPS**	**Migration**	**Total**
Gambel's White-crowned Sparrow	259	15	5		4	283
White-throated Sparrow	1305	109	54	37	28	1533
White-winged Crossbill	1					1
Wilson's Warbler	383	20	3		16	422
Winter Wren	11			2	2	15
Yellow Warbler	2162	139	14	2	179	2496
Yellow-bellied Flycatcher	56	7	1		1	65
Yellow-bellied Sapsucker	53	14		3		70
Yellow-rumped Warbler	6327	172	123	17	140	6779
Slate-colored Junco	537	23	5		33	598
Total number of birds banded	**35704**	**2848**	**625**	**316**	**2038**	**41531**
Total number of species banded	**93**	**64**	**38**	**22**	**58**	**95**

APPENDIX II. Species arrival and departure dates and maxima at LSLBO in 2005.

The following list includes seasonal first and last dates and maximum total for each of the 137 species in encountered in 2005. Seasonal first and last dates and maximum totals for 2004 have been included as a comparison in dates for the two seasons. Unless otherwise stated, all sightings are from the migration monitoring station in Lesser Slave Lake Provincial Park.

Common Loon:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 2 - 2	Apr 30 - 1	July 12 - 2	Jul 12 - 1
Last Sighting	Jun 10 - 3	Jun 10 - 1	Sep 16 - 1	Sep 27 - 1
Peak Day	May 15 - **30**	May 23 - **18**	Sep 2 - **5**	Jul 30 - **9**

Red-necked Grebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 28 - 1	May 2 - 8	Jul 13 - 1	Jul 19 - 1
Last Sighting	Jun 9 - 2	Jun 4 - 2	Sep 26 - 2	Sep 29 - 1
Peak Day	May 8 - **16**	May 22 - **22**	Aug 19 - **8**	Jul 30 - **7**

Horned Grebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		May 26 - **1**	Aug 6 - 2	
Last Sighting			Sep 28 - 2	
Peak Day			Sep 2 - **10**	

Eared Grebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 7 - **2**	May 16 - **6**	Aug 14 - 1	Sep 8 - **6**
Last Sighting			Aug 18 - **2**	Sep 13 - **6**
Peak Day			3 dates - **2**	3 dates - **6**

Western Grebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 27 - **2**	May 19 - 3	Sep 1 - 1	Jul 12 - 1
Last Sighting		May 29 - 2	Sep 13 - 4	Sep 30 - 1
Peak Day		May 27 - **14**	Sep 11 -**28**	Aug 25 - **10**

American White Pelican:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 9 - 3	May 20 - 2	Jul 13 - 1	Jul 12 - 3
Last Sighting	Jun 10 - 2	May 31 - 4	Sep 11 - 2	Sep 23 - 1
Peak Day	Jun 8 - **13**	May 24 - **6**	Aug 27 - **12**	Aug 9 - **20**

Double-crested Cormorant:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 27 - **3**	June 6 - **1**		
Last Sighting	Jun 5 - 1			
Peak Day				

Great Blue Heron:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 5 - **2**	May 4 - 1	Jul 23 - **1**	Aug 16 - **1**
Last Sighting	May 11 -1	June 6 - 1	Sep 28 - **1**	Aug 29 - **1**
Peak Day		May 23 - **3**	3 dates - **1**	

Greater White-fronted Goose:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 2 - 30	Apr 21 - 60	Sep 10 - 72	Sep 5 - 579
Last Sighting	May 10 - 237	May 8 - 13	Sep 27 - 1	Sep 24 - 20
Peak Day	May 3 - **1966**	May 1 - **1889**	Sep 16 - **1257**	Sep 16 - **1380**

Canada Goose:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 2	Apr 19 - 3	Jul 23 - 1	Aug 14 - 2
Last Sighting	Jun 8 - 2	Jun 10 - 5	Sep 16 - 15	Sep29 - 4
Peak Day	May 28 - **22**	May 31- **108**	Sep 15 - **86**	Aug 21- **70**

Green-winged Teal:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 26 - **18**	May 4 - **5**		Aug 18 - 1
Last Sighting	Jun 1 - 1	Jun 10 - 1		Sep13 - **2**
Peak Day				

Mallard:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 4	Apr 21 - 2	Jul 22 - 1	Jul 13 -1
Last Sighting	Jun 9 - 2	Jun 10 - 6	Sep 25 - 1	Sep 30 - 2
Peak Day	Jun 6 - **13**	May 2 - **20**	Jul 29, Sep 13 - **6**	Aug 30 - **30**

Blue-winged Teal:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 14 -1	May 7 - 6		Aug 19 - **35**
Last Sighting	Jun 10 - 1	Jun 9 - 1		
Peak Day	Jun 4 - **4**	May 12 - **17**		

Gadwall:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 26 - **2**	May 2 - 4		
Last Sighting	May 12 - **2**	May 21 - 2		
Peak Day		May 16 – **9**		

American Wigeon:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 26 - **8**	Apr 26 – 4		Jul 20 - **12**
Last Sighting	Jun 10 - 2	Jun 10 – 2		Aug 26 - 3
Peak Day	Apr 26 & 28 - **8**	May 1 – **27**		

Long-tailed Duck:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 2 - 17	May 6 – 1		
Last Sighting	May 15 - 5	May 27 – 2		
Peak Day	May 3 - **144**	May 19 - **75**		

Surf Scoter:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 3 - 15	May 6 – 6	Sept 5 - **1**	
Last Sighting	Jun 2 - 1	May 31 – 6		
Peak Day	May 13 - **132**	May 16 - **88**		

White-winged Scoter:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 8 - **27**	May 4 - 6	Sep 5 - **3**	
Last Sighting	May 26 - 2	May 25 - 3		
Peak Day		May 15 - **9**		

Common Goldeneye:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 14	Apr 21 - 1	Jul 12 - 5	Jul 12 - 1
Last Sighting	Jun 10 - 2	Jun 10 - 5	Sep 29 - 1	Sep 30 - 13
Peak Day	Apr 28 - **38**	Apr 30 - **67**	Sep 17 - **47**	Sep 27 - **28**

Bufflehead:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 2 - 2	Apr 25 - 1	Jul 19 - 1	Sep 11 - 9
Last Sighting	May 24 - 1	Jun 4 - 1	Sep 29 - 4	Sep 30 - 16
Peak Day	May 3 - **3**	May 6 - **8**	Sep 17 - **25**	Sep 25 & 27 - **38**

Common Merganser:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 7	Apr 22- 2	Jul 12 - **30**	Jul 14 - 90
Last Sighting	Jun 10 - 7	Jun 9 - 12	Sep 24 - 2	Sep 30 - 1
Peak Day	Jun 4 - **47**	Jun 5 - **147**		Aug 18 - **123**

Red-breasted Merganser:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 27 - 2	Apr 27 - 5	**Jul 17 - 1**	Aug 12 - **1**
Last Sighting	Jun 9 - 9	Jun 10 - 14		
Peak Day	May 6 - **11**	Apr 30 - **24**		

Osprey:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 14 - 2	May 1 - 1	Jul 13 - 1	Jul 12 - **4**
Last Sighting	Jun 6 - 1	Jun 10 - 1	Sep 5 - 1	Sep 11 - 1
Peak Day	May 22 - **3**	May 7 - **3**	Jul 14 & 17 - **3**	

Bald Eagle:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 1	Apr 19 - 2	Jul 13 - 1	Jul 12 - 3
Last Sighting	Jun 10 - 1	Jun 9 - 2	Sep 29 - 2	Sep 30 - 1
Peak Day	Apr 27, May 4 - **4**	May 23 - **7**	Sep 19 - **6**	Sep 12 - **5**

Northern Harrier:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 1	Apr 20- 1	Jul 25 - 1	Aug 12 - 1
Last Sighting	Jun 10 - 1	May 29 - 2	Sep 28 - 1	Sep 27 - 1
Peak Day	May 4 - **6**	Apr 24 - **24**	Aug 28 - **5**	Sep 17 - **6**

Sharp-shinned Hawk:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 26 - 1	Apr 21- 1	Jul 18 - 2	Jul 13 - 1
Last Sighting	Jun 7 - 1	Jun 4 - 1	Sep 28 - 2	Sep 28 - 2
Peak Day	May 9 - **5**	3 dates - **2**	Aug 19 - **18**	Aug 30, Sep 12-**12**

Northern Goshawk:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		May 9 - **1**	Aug 15 - **1**	Aug 18 - 2
Last Sighting				Sep 23 - 1
Peak Day				Sep 21 - **3**

Broad-winged Hawk:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 9 - **1**			Jul 14 - **1**
Last Sighting				
Peak Day				

Red-tailed Hawk:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 29 - **1**	Apr 19- 1	Jul 13 - 1	Aug 18 - 1
Last Sighting		May 26 - 1	Sep 1 - 1	Sep 9 - **2**
Peak Day		May 6 & 19 - **2**	3 dates - **1**	

Rough-legged Hawk:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		Apr 23 - 1	Sep 24 - **1**	
Last Sighting		May 7 - 1		

American Kestrel:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		May 13 - **2**	Sep 2 - **1**	
Last Sighting		Apr 21 - 1		

Merlin:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 4 - 1	Apr 20 - 1	Jul 30 - **1**	Jul 16 - 1
Last Sighting	May 27 - 1	Jun 6 - 1	Sep 10 - **1**	Sep 9 - 1

Peregrine Falcon:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		May 8 - **1**	Sep 26 - **1**	Sep 4 - **1**
Last Sighting		May 20 - **1**		
Peak Day				

Ruffed Grouse:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	Apr 20- 1	Jul 19 - 1	Sep 14 - 1
Last Sighting	Jun 9 - 1	Jun 7 -1	Sep 27 - 4	Sep 30 - 2
Peak Day	Several dates - **2**	3 dates - **3**	Jul 27 - **6**	Sep 25 & 29 - **4**

Sandhill Crane:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 3 - 32	Apr 24 - 6	Sep 10 - 4	Sep 3 - 1
Last Sighting	May 10 - 10	May 18 - 30	Sep 26 - 30	Sep 20 - 20
Peak Day	May 9 - **59**	May 3 - **495**	Sep 24 - **90**	Sep 9 - **779**

Killdeer:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - **1**	Apr 19 - 1	Aug 17 - **1**	Jul 21 - **1**
Last Sighting		Jun 10 - 1	Aug 26 - **1**	Aug 29 - **1**
Peak Day		May 12 - **7**		

Greater Yellowlegs:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 28 - **2**	May 2 - 7	Jul 19 - **1**	Aug 26 - 2
Last Sighting	May 27 - 1	Jun 4 - 1		Sept 25 - **3**
Peak Day	Apr 28, May 3 - **2**	May 12 - **31**		

Spotted Sandpiper:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 9 - 2	May 13 - 1	Jul 12 - 1	Jul 14 - 2
Last Sighting	Jun 10 - 2	Jun 10 - 3	Sep 9 - 1	Sep 17 - 2
Peak Day	May 19 - **15**	May 29 - **11**	Aug 20 - **9**	Set 13 - **6**

Sanderling

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 5 - 2	
Last Sighting			Sep 9 - **10**	
Peak Day				

Baird's Sandpiper

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep - **1**	
Last Sighting				
Peak Day				

Upland Sandpiper

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 17 - **1**			
Last Sighting				
Peak Day				

Common Snipe:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 12 - **1**	May 7 - **1**		
Last Sighting	May 22 - **1**	Jun 4 - **1**		
Peak Day		7 dates - **1**		

Parasitic Jaeger:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 7 - **1**	
Last Sighting				
Peak Day				

Bonaparte's Gull:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting		Apr 30 - **25**	Sep 3 - 2	
Last Sighting		May 2 - 10	Sep 9 - 5	
Peak Day			Sep 4 & 6 - **6**	

Franklin's Gull:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 16	Apr 30 - 50	Jul 17 - 32	Jul 20 - 6
Last Sighting	Jun 4 - 1	May 28 - 30	Sep 3 - 5	Sep 11 - 1
Peak Day	May 16 - **36**	May 11 - **306**	Aug 2 - **1731**	Aug 5 - **1624**

Mew Gull:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting		May 7 - 4	Aug 31 - **1**	
Last Sighting		May 16 - 6		
Peak Day		May 8 – **8**		

Ring-billed Gull:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 2 - 3	Apr 26 - 4	Jul 14 - 2	Jul 12 - 16
Last Sighting	Jun 9 - 4	Jun 7 - 1	Sep 28 - 6	Sep 30 - 1
Peak Day	May 7 - **21**	May 8 - **30**	Jul 20 - **104**	Jul 20 - **172**

Herring Gull:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - **10**	Apr 24 - 2	Jul 17 - 1	Jul 20 - 1
Last Sighting	Jun 9 - 2	Jun 6 - 3	Sep 6 - 2	Aug 27 - 1
Peak Day		Apr 30 - **14**	3 dates - **4**	Aug 5 & 6 - **2**

Common Tern:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 14 - 3	May 19 - 4	Jul 14 - 1	Jul 25 - **8**
Last Sighting	Jun 10 - 2	Jun 5 - 2	Sep 7 - 6	
Peak Day	May 29 - **8**	May 27 - **20**	Aug 5 - **25**	

Forster's Tern:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Jun 8 - **1**	May 24 - 5	Sep 2 - **1**	Jul 14 - 3
Last Sighting		Jun 10 - 5		Sep 26 - 8
Peak Day		Jun 8 - **8**		Jul 24 - **11**

Black Tern

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 3 - **1**	
Last Sighting				
Peak Day				

Mourning Dove:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 16 - **1**	May 11 - **1**		
Last Sighting	Jun 4 - **1**	Jun 5 - **1**		
Peak Day	2 dates - **1**	4 dates - **1**		

Long-eared Owl:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - **1**	May 3 - **1**		
Last Sighting				
Peak Day				

Ruby-throated Hummingbird:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting		Jul 16 - **1**	Aug 2 - **1**	
Last Sighting		Aug 2 - **1**		
Peak Day		4 dates - **1**		

Belted Kingfisher:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 7 - 1	May 11 - 1	Aug 19 - **1**	Aug 16 - **1**
Last Sighting	May 19 - 1	Jun 2 - 1	Sep 2 - **1**	Aug 20 **- 1**
Peak Day	3 dates - **1**	May 12 & 21 - **2**	4 dates - **1**	4 dates - **1**

Yellow-bellied Sapsucker:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 9 - 1	May 11 - 2	Jul 25 - **1**	Jul 12 - 2
Last Sighting	May 27 - 1	Jun 10 - 1		Sep 14 - 1
Peak Day	May 15 - **2**	May 12 - **12**		Jul 23 - **5**

Downy Woodpecker:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting		Apr 26 - 1	Jul 15 - **1**	Jul 25 - 1
Last Sighting		Jun 4 - 1	Sep 28 - **1**	Sep 30 - 1
Peak Day		May 4 - **2**	4 dates - **1**	Sep 26 - **2**

Hairy Woodpecker:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	Apr 21 - 1	Jul 12 - **1**	Jul 29 - **1**
Last Sighting	Jun 1 - 1	Jun 5 - 1	Sep 28 - **1**	Sep 30 - **1**
Peak Day	May 27 - **2**	May 19 - **2**	Several dates - **1**	several dates- **1**

Northern Flicker:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 2	Apr 24 - 1	Jul 20 - **2**	Jul 19 - **1**
Last Sighting	Jun 10 - 1	Jun 10 - 1	Sep 16 - 1	Sep 14 - **1**
Peak Day	Apr 28, May 4 - **4**	May 2 - **31**	3 dates - **2**	several dates - **1**

Pileated Woodpecker:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - **1**	Apr 19- 1	Aug 10 - 1	Jul 13 - **1**
Last Sighting	May 5 - **1**	Jun 10 - 1	Sep 26 - 1	Sep 27 - **1**
Peak Day	3 dates - **1**	Apr 26, May 2 - **2**	Aug 27, Sep 11 -**2**	many dates - **1**

Western Wood-Pewee:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 27 - **1**	May 28 - **1**		
Last Sighting	Jun 7 - **1**			
Peak Day	4 dates - **1**			

Yellow-bellied Flycatcher:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Jun 5 - **1**	Jun 10 - **2**	Jul 27 - **1**	Jul 13 - 1
Last Sighting				Aug 23 - 1
Peak Day				Aug 13 - **2**

Alder Flycatcher:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 31 - 1	Jun 1 - 2	Jul 12 - 4	Jul 13 - 2
Last Sighting	Jun 10 - **7**	Jun 10 - 7	Sep 5 - 1	Sep 14 - 1
Peak Day		Jun 9 - **9**	Aug 4 - **14**	Aug 14 - **15**

Least Flycatcher:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 12 -1	May 10 - 2	Jul 13 -2	Jul 13 - 2
Last Sighting	Jun 7 - 1	Jun 9 - 1	Sep 17 - 1	Sep 11 - 1
Peak Day	May 19 - **11**	Jun 1 - **12**	Aug 15 - **10**	Aug 4 - **9**

Eastern Phoebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 1	Apr 24 - 1	Jul 13 - 1	Jul 29 - **1**
Last Sighting	Jun 10 - 2	Jun 6 - 3	Jul 29 - 1	Aug 11 - **1**
Peak Day	May 9 - **4**	May 11 - **4**	Jul 15 - **3**	

Say's Phoebe:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 4 - **1**	May 3 - 1		Aug 12 - **1**
Last Sighting	May 17 - **1**	May 21 - 1		Sep 14 - **1**
Peak Day		May 12 - **4**		3 dates - **1**

Eastern Kingbird:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 4 - 1	May 24 - **1**	Aug 10 - 1	Aug 12 - 4
Last Sighting	May 27 - 1	Jun 10 - **1**	Aug 21 - 2	Sep 17 - 1
Peak Day	May 5 - **5**		Aug 16 - **3**	Aug 16 - **5**

Blue-headed Vireo:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 14 - 1	May 15 - **1**	Aug 4 - 1	Aug 10 - 1
Last Sighting	May 31 -1	May 29 - **1**	Sep 5 - 1	Sep 9 - **2**
Peak Day	May 23 - **2**	3 dates - **1**	Aug 23 - **2**	

Warbling Vireo:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 28 - **1**		Aug 5 - **1**	Jul 14 - **1**
Last Sighting	May 29 - **1**		Aug 15 - **1**	Aug 4 - **1**
Peak Day			3 dates - **1**	3 dates - **1**

Philadelphia Vireo:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 30 -1	Jun 9 - **1**	Jul 28 - 2	Aug 13 - **1**
Last Sighting	Jun 10 - 1	Jun 10 - **1**	Sep 11 - 1	Sep 1 - **1**
Peak Day	Jun 1 - **2**		Jul 30, Aug 10 -**3**	

Red-eyed Vireo:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 19 - 1	Jun 1 - 2	Jul 12 - 5	Jul 12 - 1
Last Sighting	Jun 10 - 7	Jun 10 - 4	Sep 11 - 1	Sep 14 - 1
Peak Day	Jun 7 - **8**	Jun 5 & 6 - **6**	Jul 25 - **7**	Jul 23 - **10**

Gray Jay:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	**Jun 4 -** 1			Sept 26 - **1**
Last Sighting				
Peak Day				

Blue Jay:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 27 - 1	May 10 - 2	Jul 28 - 1	Aug 2 - 1
Last Sighting	Jun 9 - 1	May 27 - 1	Sep 22 - 1	Sep 29 - 1
Peak Day	May 5 & 17 - **3**	May 12 - **10**	Sep 7 - **8**	Sep 16 - **3**

American Magpie:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 1	May 2 - 1	Aug 1 - 6	Jul 25 - 1
Last Sighting	Jun 4 - 1	Jun 7 - 1	Sep 28 - 1	Sep 30 - 1
Peak Day	May 27 - **3**	Jun 4 - **9**	Sep 15 - **18**	Sep 9 - **10**

American Crow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 6	Apr 19 - 2	Jul 12 - 2	Jul 12 - 4
Last Sighting	Jun 10 - 5	Jun 10 - 4	Sep 29 - 2	Sep 4 - 1
Peak Day	May 4 - **21**	May 10 - **18**	Aug 21 - **59**	Aug 25 - **42**

Common Raven:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 2	Apr 19 - **5**	Jul 12 - 2	Jul 12 - 4
Last Sighting	Jun 10 - 1	Jun 10 - 1	Sep 29 - 5	Sep 30 - 1
Peak Day	May 15 - **5**		Sep 23 - **17**	Sep 5 - **9**

Tree Swallow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 6 - 3	Apr 24 - 1	Jul 16 - **25**	Jul 28 - 2
Last Sighting	Jun 9 - 2	Jun 4 - 1	Aug 8 - 1	Aug 12 - 61
Peak Day	May 9 - **208**	May 12 - **512**		Aug 5 - **139**

Barn Swallow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 22 - **1**	May 14 - 1		Jul 31 - 4
Last Sighting		May 25 - 2		Sep 11 - 1
Peak Day		May 17 - **6**		Jul 31 & Aug 4 - **4**

Black-capped Chickadee:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 26 - 2	Apr 19 - **2**	Jul 12 - 6	Jul 12 - 6
Last Sighting	Jun 8 - 1	Jun 10 - 1	Sep 28 - 9	Sep 30 - 2
Peak Day	May 3 - **5**		Jul 29 - **22**	Sep 13 - **17**

Boreal Chickadee:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 3 - **1**	Aug 18 - 1
Last Sighting			Sep 22 - **1**	Sep 29 - 1
Peak Day			3 dates - **1**	Sep 16 - **3**

Red-breasted Nuthatch:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Jun 4 - **1**	Apr 19 -1	Jul 29 - 1	Jul 13 - 1
Last Sighting		Jun 10 -1	Sep 28 - **3**	Sep 24 - 2
Peak Day		3 dates - **2**		Aug 13 - **4**

White-breasted Nuthatch:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 7 - **1**	Sep 23 - **3**
Last Sighting			Sep 28 - **1**	
Peak Day			3 dates - **1**	

House Wren:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Jun 7 - **1**	May 21 - **1**		Aug 4 - **1**
Last Sighting		Jun 3 - **1**		Aug 11 - **1**
Peak Day		3 dates - **1**		

Winter Wren:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	Apr 30 - **1**	Jul 12 - 1	Jul 13 - **1**
Last Sighting	Jun 10 - 1	Jun 7 - **1**	Sep 15 - 1	Aug 15 - **1**
Peak Day	7 dates - **2**	several dates - **1**	3 dates - **2**	10 dates - **1**

Rock Wren:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 15 - **1**			
Last Sighting				
Peak Day				

Golden-crowned Kinglet:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Aug 31 - 1	Sep 8 - **2**
Last Sighting			Sep 26 - 2	
Peak Day			Sep 25 - **3**	

Ruby-crowned Kinglet:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	Apr 19 - 2	Jul 20 - 1	Jul 13 - 1
Last Sighting	Jun 9 - 1	Jun 10 - 2	Sep 28 - 5	Sep 29 - 1
Peak Day	May 4 & 5 - **6**	Apr 26 - **7**	Sep 11 - **8**	Sep 16 - **9**

Gray-cheeked Thrush:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 15 - **1**	May 11 -2		Sep 3 -**1**
Last Sighting	May 30 - **1**	May 25 - 2		Sep 20 -**1**
Peak Day		May 21 - **6**		3 dates - **1**

Swainson's Thrush:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 6 - 1	May 11 - 5	Jul 12 - 2	Jul 12 -1
Last Sighting	Jun 10 - 4	Jun 10 - 3	Sep 17 - 1	Sep 30 -1
Peak Day	May 18 - **11**	May 21 - **192**	Aug 15 & 24 - **16**	Aug 18 - **20**

Hermit Thrush:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	May 4 - 1	Jul 27 - 1	Aug 9 - 2
Last Sighting	Jun 7 - 1	Jun 5 - 1	Sep 29 - 1	Sep 30 - 1
Peak Day	May 16 - **5**	May 12 - **19**	Sep 26 - **4**	Sep 20 - **3**

Varied Thrush:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Sep 7 - **1**	
Last Sighting				
Peak Day				

American Robin:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 3	Apr 19- 24	Jul 12 - 3	Jul 13 - 2
Last Sighting	Jun 10 - 2	Jun 10 - 3	Sep 28 - 3	Sep 30 - 4
Peak Day	May 9 - **23**	May 12 - **186**	Jul 25 - **12**	Sep 23 - **20**

American Pipit:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 12 - 1	Apr 26- **15**	Aug 24 - 1	Aug 28 - 1
Last Sighting	May 23 - 1	May 23 - 2	Sep 27 - 21	Sep 30 - 6
Peak Day	May 15 - **6**		Sep 5 - **47**	Sep 17 - **37**

Cedar Waxwing:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 19 - 2	Jun 1 - 1	Jul 12 - 7	Jul 12 - 5
Last Sighting	Jun 10 - 16	Jun 10 - 26	Sep 25 - 1	Sep 29 - 2
Peak Day	Jun 1 - **33**	Jun 5 - **100**	Aug 19 - **82**	Aug 30 - **102**

Tennessee Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 17 - **50**	May 13 - 2	Jul 12 - 2	Jul 13 - 2
Last Sighting	Jun 10 - 4	Jun 10 - 2	Sep 3 - 2	Sep 7 - 1
Peak Day		May 27 - **74**	Aug 19 - **138**	Aug 1 - **21**

Orange-crowned Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 3 - 4	May 3 - 1	Sep 5 - 1	Aug 26 - 1
Last Sighting	May 23 - 1	May 24 - 2	Sep 28 - 3	Sep 29 - 1
Peak Day	May 9 - **22**	May 12 - **28**	Sep 10 - **19**	Sep 21 - **30**

Yellow Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 15 - 1	May 10 - 3	Jul 12 - 17	Jul 12 - 5
Last Sighting	Jun 10 - 14	Jun 10 - 10	Aug 27 - 1	Sep 9 - 1
Peak Day	May 19 - **61**	Jun 3 - **27**	Jul 25 - **71**	Jul 15 - **30**

Magnolia Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 27 - 1	Jun 1 - 1	Jul 12 - 2	Jul 12 - 1
Last Sighting	Jun 8 - 1	Jun 10 - 3	Sep 10 - 2	Sep 21 - 1
Peak Day	May 28 - **5**	Jun 5 & 6 - **4**	Aug 15 - **4**	8 dates - **2**

Chestnut-sided Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		Jun 4 - **1**	Jul 25 - **3**	
Last Sighting				
Peak Day				

Cape May Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting			Aug 14 - **2**	Aug 1 - **1**
Last Sighting			Sep 28 - 1	Aug 26 - **1**
Peak Day				

Yellow-rumped Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 6	Apr 20 - 1	Jul 12 - 24	Jul 13 - 35
Last Sighting	Jun 10 - 5	Jun 10 - 5	Sep 28 - 13	Sep 23 - 21
Peak Day	May 9 - **362**	May 18 - **345**	Sep 2 - **490**	Sep 14 - **527**

Black-throated Green Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 13 - 1	Jun 4 - **1**	Jul 19 - 1	Aug 1 - 1
Last Sighting	Jun 8 - 1		Aug 16 - **2**	Aug 13 - 1
Peak Day	May 31 - **2**			Aug 2 - **2**

Palm Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 9 - 1	May 11 - 1	Sep 2 - **1**	Sep 6 - **4**
Last Sighting	May 23 - 2	Jun 3 - 1		Sept 16 - 1
Peak Day	May 14 - **3**	May 13 - **6**		

Bay-breasted Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting			Jul 26 - 1	Aug 26 - **3**
Last Sighting			Aug 23 - 1	
Peak Day			Aug 16 - **3**	

Blackpoll Warbler:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 18 - **12**	May 12 - 1	Jul 26 - **2**	Jul 28 - 2
Last Sighting	May 27 - 1	Jun 4 - 1	Sep 11 - 1	Sep 9 - 1
Peak Day		Jun 1 - **6**	3 dates - **2**	Sep 3 - **7**

Black-and-white Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 10 - 1	May 8 - 1	Jul 12 - 4	Jul 13 -5
Last Sighting	Jun 10 - 4	Jun 10 - 3	Aug 26 - 2	Aug 26 -5
Peak Day	May 17 - **11**	Jun 7 - **7**	Aug 6 - **10**	5 dates - **5**

American Redstart:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 17 - 6	May 25 - 1	Jul 12 - 12	Jul 12 - 20
Last Sighting	Jun 10 - 9	Jun 10 - 6	Sep 16 - 1	Sep 23 - 1
Peak Day	Jun 1 - **35**	Jun 3 - **47**	Jul 25 - **46**	Jul 23 - **27**

Ovenbird:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 13 - 1	May 20 - 1	Jul 12 - 2	Jul 12 - 2
Last Sighting	Jun 10 - 4	Jun 10 - 3	Sep 11 - 1	Sep 10 - 1
Peak Day	May 31 - **9**	Jun 1 & 3 - **10**	Aug 15 -**16**	Aug 27 - **9**

Northern Waterthrush:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 8 - 1	May 11 - 2	Jul 16 - 1	Jul 15 - 1
Last Sighting	May 26 - 1	Jun 4 - 1	Sep 11 - 1	Sep 4 - 3
Peak Day	May 18 - **5**	May 21 & 22 - **9**	3 dates - **3**	Aug 8 - **8**

Connecticut Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting			Aug 13 - 1	Aug 12 - **1**
Last Sighting			Sep 1 - 1	
Peak Day			4 dates - **1**	

Mourning Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 31 - **3**	Jun 3 - **3**	Jul 13 - 2	Jul 12 - 1
Last Sighting	Jun 10 - 1	Jun 10 - **3**	Sep 6 - 1	Aug 26 - 2
Peak Day	3 dates - **3**		Aug 14 - **6**	4 dates - **2**

Common Yellowthroat:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 17 - 1	May 25 - 1	Jul 20 - 1	Jul 13 - 1
Last Sighting	Jun 10 - 4	Jun 9 - 2	Sep 22 - 1	Sep 14 - 1
Peak Day	Jun 8 - **7**	Jun 6 - **8**	Jul 31 - **4**	Jul 23, Aug 27 - **5**

Wilson's Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 23 - 1	Jun 4 - **1**	Aug 6 - 1	Jul 30 - 1
Last Sighting	Jun 1 - 1		Sep 16 - 1	Sep 26 - 1
Peak Day	May 26 - **2**		Aug 15 - **5**	Aug 26 - **3**

Canada Warbler:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 22 - 2	May 31 - 1	Jul 12 - 1	Jul 12 - 1
Last Sighting	Jun 10 - 5	Jun 10 - 2	Aug 31 -1	Sep 3 - 1
Peak Day	Jun 1 - **9**	Jun 5 - **15**	Aug 4 - **29**	Aug 4 - **11**

Western Tanager:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 15 - 1	May 17- **1**	Jul 22 - 1	Jul 22 -2
Last Sighting	Jun 9 - 1	Jun 4 - **1**	Aug 27 - 1	Aug 30 -1
Peak Day	May 31 - **2**	several dates - **1**	Aug 5 - **15**	Aug 14 - **14**

American Tree Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		Apr 20 - 2	Sep 10 - **6**	Sep 24 - 1
Last Sighting		May 13 - 1	Sep 21 - 4	Sep 30 - 5
Peak Day		May 1 - **9**		Sep 29 - **8**

Chipping Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 8 - 5	May 10 - 1	Jul 12 - 1	Jul 13 - 3
Last Sighting	Jun 9 - 2	Jun 10 - 4	Aug 19 - 1	Aug 28 -2
Peak Day	May 19 - **410**	May 12 - **1353**	Jul 25 - **11**	Aug 5 - **108**

Clay-colored Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 17 - 25	May 16 - 1	Jul 12 - **12**	Jul 13 - 5
Last Sighting	Jun 10 - 5	Jun 10 - 8	Sep 10 -1	Sep 12 - 1
Peak Day	May 19 - **27**	May 27 - **51**		Jul 14 & 23 - **6**

Savannah Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 5 - 1	May 1 - 1	Sep 5 - 1	Aug 18 - **1**
Last Sighting	May 22 - 1	May 30 - 1	Sep 26 - 1	Aug 29 - **1**
Peak Day	May 17 - **8**	May 19 - **8**	Sep 15 - **2**	

Le Conte's Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 19 - **1**	May 12 - **10**		Aug 18 - **1**
Last Sighting		May 24 - 2		Sep 3 **-1**
Peak Day				4 dates - **1**

Song Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 25 - 3	Apr 21- 1	Jul 12 - 6	Jul 12 - 1
Last Sighting	Jun 10 - 3	Jun 10 - 2	Aug 19 - 2	Aug 29 - 2
Peak Day	May 3 - **9**	May 21 - **8**	3 dates - **7**	Jul 17 - **8**

Lincoln's Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 6 - 1	May 11 - 1	Jul 12 - 1	Jul 15 - 1
Last Sighting	May 31 - 1	Jun 10 - 2	Sep 13 - 1	Sep 23 - 1
Peak Day	3 dates - **4**	May 12 - **10**	Sep 11 - **8**	Jul 29 - **9**

Swamp Sparrow:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting		May 12 - **2**	Jul 20 - 1	Aug 14 - 1
Last Sighting		May 23 - 1	Aug 27 - 1	Sep 3 - **2**
Peak Day			Jul 29 - **2**	

White-throated Sparrow:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 9 - 2	May 11- 1	Jul 12 - 8	Jul 12 - 4
Last Sighting	Jun 10 - 7	Jun 10 - 8	Sep 28 - 2	Sep 25 - 1
Peak Day	May 18 - **49**	May 21 - **31**	Jul 26 & 29 - **15**	Aug 16 - **12**

White-crowned Sparrow:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 3 - 1	May 8 - 3	Aug 28 - 1	Sep 4 - 1
Last Sighting	May 23 - 1	May 28 - 1	Sep 28 - 1	Sep 27 - 1
Peak Day	May 6 - **19**	May 13 - **4**	Sep 27 - **6**	5 dates - **3**

Dark-eyed Junco:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 4	Apr 20- 1	Aug 22 - 1	Aug 26 - 1
Last Sighting	May 28 - 1	May 12 - 1	Sep 28 - 2	Sep 30 - 7
Peak Day	Apr 26 - **5**	May 1 - **7**	Sep 7 - **26**	Sep 29 - **23**

Lapland Longspur:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 5 - 6	May 12 - **4**	Sep 2 - 1	Sep 9 - 2
Last Sighting	May 18 - 23		Sep 26 - 1	Sep 23 - 2
Peak Day	May 9 - **35**		Sep 13 - **9**	Sep 14 - **35**

Rose-breasted Grosbeak:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 11 - 1	May 12 - 3	Jul 13 - 1	Jul 28 - 3
Last Sighting	Jun 10 - 1	Jun 10 - 1	Aug 27 - 1	Sep 4 - 1
Peak Day	4 dates - **3**	May 27 - **15**	Aug 4 - **14**	Aug 11 - **13**

Red-winged Blackbird:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	Apr 25 - 1	Apr 20- 2	Jul 30 - **1**	Jul 24 - 11
Last Sighting	Jun 10 - 1	Jun 10 - 4		Aug 16 - 32
Peak Day	May 15 - **119**	May 12 - **163**		Jul 28 - **150**

Rusty Blackbird:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 14 - **1**	Apr 26 - 6	Sep 2 - **1**	Aug 29 - **16**
Last Sighting		May 19 - 2		
Peak Day		May 12 - **71**		

Common Grackle:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 15 - **3**	Apr 19 - 1	Jul 18 - 3	Aug 2 - 1
Last Sighting	Jun 6 - 1	Jun 1 - **4**	Sep 7 - 1	Sep 23 - 1
Peak Day		Apr 25, Jun 1 - **4**	Aug 16 - **4**	Aug 29 - **12**

Brown-headed Cowbird:

	Spring 2005	Spring 2004	Fall 2005	Fall 2004
First sighting	May 9 - 6	Apr 22 - 2	Jul 21 - 1	Jul 16 - **3**
Last Sighting	Jun 9 - 2	Jun 9 - 1	Jul 24 - **3**	
Peak Day	May 18 - **31**	May 18 - **30**		

Baltimore Oriole:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Jun 1 - **1**	Jun 1 - **2**		
Last Sighting		Jun 2 - 1		
Peak Day				

Purple Finch:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	Apr 26 - 10	Apr 21 - 1	Aug 5 - 3	Aug 17 - 1
Last Sighting	May 14 - 1	May 13 - 1	Sep 11 - 3	Aug 25 - 1
Peak Day	May 11 - **12**	Apr 26 - **15**	Aug 8 & 10 - **5**	Aug 19 - **5**

Pine Siskin:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 7 - 1	Apr 20 - **156**	Jul 12 - 3	Jul 13 - 2
Last Sighting	Jun 10 - 4	Jun 2 - 3	Sep 29 - 3	Sep 30 - 2
Peak Day	May 18 - **13**		Aug 19 - **129**	Aug 12 - **182**

American Goldfinch:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 29 - 1	May 1 - 1	Sep 2 - **1**	
Last Sighting	Jun 4 - 1	Jun 10 - **2**		
Peak Day	3 dates - **1**			

Evening Grosbeak:

	Spring 2005	**Spring 2004**	**Fall 2005**	**Fall 2004**
First sighting	May 3 - 2	Apr 21 - 1	Jul 20 - 14	Jul 23 - 6
Last Sighting	Jun 5 - 1	Jun 5 - 1	Sep 28 - 9	Aug 27 - 1
Peak Day	May 11 - **22**	Apr 23 - **14**	Aug 16 - **20**	Aug 13 - **13**