Lesser Slave Lake Bird Observatory 2006 Annual Report



2006 Executive Summary

The Lesser Slave Lake Bird Observatory (LSLBO) completed its 13th year of migration monitoring in 2006. Spring migration monitoring coverage extended from April 24th to June 10th for a total of 47 days. Weather conditions allowed for excellent migration coverage, including 83.7% of the total possible net hours. 534 birds were banded, representing 40 different species and forms. It was lowest spring banding total since 1996.

Fall migration ran from July 12th until September 29th for 77days of coverage. Migration coverage was extensive, and mist-nets were set for 88.1% of the total possible net hours. 2241 birds were banded through the fall, representing an average fall banding total at the LSLBO. 60 different species and forms were banded during the fall period. One new species was added to the LSLBO's banding records, the first Northern Goshawk was banded by the LSLBO on August 21st. The LSLBO also documented its first fall banding records of both a Baltimore Oriole and Marsh Wren. No new species were observed during either spring or fall migration, maintaining the 243 birds on the LSLBO sight record list.

The Monitoring Avian Productivity and Survivorship (MAPS) program continued for the 13th year at the LSLBO. The four MAPS stations operated from June 11th to August 5th. A total of 192 birds were banded during the 2006 MAPS project from 23 different species and forms, representing an average MAPS banding season at the LSLBO. The breeding status was determined for 57 species encountered during the visits to MAPS stations.

387 birds were recaptured throughout the 2006 banding season. Most of these records were birds recaptured after being banded in the 2006 season. 62 recapture records were from birds banded in 2005 and 27 records were of birds originally banded before 2005. The oldest bird to be captured in 2006 was a Black-capped Chickadee. It was originally banded as an after-second-year bird in 2000, making it at least eight years old.

The Canada Warbler Project continued in 2006 focusing on nest searching and nest monitoring. Three Canada Warbler nests were found during the summer. Nest monitoring observed the successful fledging of all 12 baby Canada Warblers from the three nests.

The Northern Saw-whet Owl monitoring project continued in 2006 for its third year at the LSLBO. Banding occurred on 46 nights from August 21st to October 20th. There were some busy banding nights as 200 Northern Saw-whet Owls were banded. One Longeared Owl was also captured and banded, the first banding record for the LSLBO, bringing the total number of species banded by the station to 97.

The LSLBO had some incredible volunteer support in 2006. Staff and volunteers accumulated a total of 327 person days throughout the banding season. Two long-term volunteers, Erica Forrester and Dave Kallai, provided excellent assistance to the two banders during the season.

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1.0 Spring Migration Monitoring Summary

Spring migration monitoring at the LSLBO began on April 24th and ran until June 10th. Staff at the LSLBO operated the migration station for 47 of the possible 48 days within the spring monitoring period. The one day was missed due to poor weather conditions and limited access to the banding lab. The LSLBO uses four monitoring techniques (mistnetting, hourly visual migration counts, census, and incidental observations) to estimate the total number of birds of each species in the study area for each day of migration.

Mist-netting is weather dependent and is not conducted during periods of high wind, cold weather, or precipitation. Weather conditions allowed the migration mist-nets to be set for 3302.8 of the possible 3948 net hours, or 83.7% of the total possible net hours. Through mist-netting efforts, a total of 652 birds were captured: 534 were banded (Appendix I), 93 were recaptured, and 25 birds were released or escaped unbanded. Despite the excellent mist-netting coverage, the spring banding total was the second lowest spring banding total at the LSLBO. The capture rate of 19.7 birds per 100 net hours was the lowest spring capture rate on LSLBO's records.

40 different species and forms were banded during the spring (Appendix I), the second lowest spring diversity of banded birds since the LSLBO began migration monitoring. The top species banded through the spring were: Yellow-rumped Warblers (67), Swainson's Thrush (54), White-throated Sparrows (47), Ovenbirds (32), and American Redstarts (31). These species are within the top ten banded every spring.

Temperatures early in the banding season were warm; morning temperatures dropped below the freezing point only on four occasions. Rain completely hampered banding attempts on four days. Several days of heavy rainfall and poor drainage caused the flooding of net-lanes #6 and #11 in the middle of May. These two net-lanes typically have the highest capture rates of the 12 migration nets at the LSLBO. The nets were only closed for four days, but their closure coincided with a period of heavy songbird passage.

The peak banding day of the spring occurred on April 29th when 50 birds were banded, followed by May 21st and June 2nd with 40 and 31 birds banded respectively. Banding totals only reached the 20's on six other days. The peak movement periods of the spring, in terms of visual passage of migrants, occurred during the last few days of April and the first week of May. A heavy passage occurred on May 10th as the songbirds resumed migration after being held up by two straight days of rain. There were no unusual banding records or new species sighted at the LSLBO during the spring.

The warm temperatures experienced in April caused early spring time conditions. The snow had melted from the ground when the banding station opened. By the end of April the ice on Lesser Slave Lake was beginning to breakup and the leaves on the trees and shrubs had begun to emerge. These conditions may have caused an early movement of migrant songbirds to the area. However, the first sightings (the dates of first encounters) for many species were comparable to those of 2005 (Appendix II).

2.0 Spring Monthly Summaries

2.1 April

Migration monitoring for the 2006 season began on April 24th. Although early morning temperatures were slightly below the freezing point, it quickly warmed when the sun rose above the trees. Temperatures peaked in the mid-teens by the end of the banding day. Ice still covered most of the western basin of Lesser Slave Lake. A narrow band of open water, approximately 100 meters wide, had formed for along the shoreline. Mallards, Common Mergansers, Common Goldeneyes, and Red-necked Grebes were the early springtime waterfowl species that had taken advantage of the open water.

The majority of day on the 24th was spent organizing the banding lab for the upcoming field season and setting up the mist-nets for spring migration monitoring. Although no birds were captured the first day, there was plenty of bird activity throughout the day. Songs of Eastern Phoebes, Ruby-crowned Kinglets, Hermit Thrushes, and Song Sparrows greeted the banders first thing in the morning, but only a few individuals were singing in the forest and along the shoreline. Northern Flickers flew past constantly throughout the morning, 31 were counted by the end of the day. Several large flocks of American Robins passed over during the census and through the visual migration counts, bringing the total observed that day to 160. The American Robins were often mixed with large flocks of migrating blackbirds. Yellow-rumped Warblers were observed during the visual migration counts, but their numbers were limited to only a few individuals. Later in the morning, several flocks of Greater-white Fronted Geese, totaling 244 birds, and three flocks of Tundra Swans, totaling 106 birds, were observed flying over the frozen lake. Two Rough-legged Hawks soaring high overhead, two Bald Eagles, and two Northern Harriers flying along the shoreline were the only raptor species observed during the first morning of the 2006 field season.

The last week of April seemed unseasonably warm. Morning temperatures remained above the freezing point, while afternoon temperatures reached as high as 20 degrees. Heavy passage of migrant songbirds was observed near the end of April as American Robins and Yellow-rumped Warblers had very strong movements. The largest passage of American Robins of the spring occurred on the 26th when 1660 were counted. Yellow-rumped Warblers were also moving in large numbers on the 26th with 699 counted. New species were observed almost daily throughout the week, including: Osprey, Sharp-shinned Hawk, Merlin, Yellow-bellied Sapsucker, Say's Phoebe, Tree Swallow, Winter Wren, American Pipit, Orange-crowned Warbler, Savannah Sparrow, Lapland Longspur, Common Grackle, Red-winged Blackbird, and Brown-headed Cowbird. Daily species counts ranged from 40 to 50 throughout the week.

Banding throughout April was relatively slow compared to the number of birds seen moving through the area. A total of 86 birds were banded by the end of the month. The majority of those birds came from a single net check on the 29th as a flock of Yellow-rumped Warblers flew into the mist nets. 50 birds were banded that day, which ended being the highest daily banding total of the entire spring migration period.

The ice on the lake quickly broke up from the warm afternoon temperatures and new species of waterfowl were observed floating in the newly formed pockets of open water, which included: American Wigeon, Northern Pintail, Green-winged Teal, Northern Shoveler, Bufflehead, and Red-breasted Merganser. Greater Yellowlegs and Killdeer were the only shorebird species spotted along the shoreline in April. Ring-billed Gulls and Franklin Gulls were seen late in the month. Greater-white Fronted Geese were spotted daily flying over the lake in various sized flocks totaling over 100 birds a day, reaching over 600 on the 30th. The flocks of Tundra Swans had finished moving by the end of the month, but they were replaced by a few very small flocks of Sandhill Cranes. The first Common Loon was heard calling from far out of the lake on the 30th, greeting the banders early in the morning as they arrived to the banding station.

2.2 May

The first week of May began with cooler daytime temperatures and persistent strong winds which considerably slowed the heavy migration experienced during the last week of April. Observations were made of the first White-crowned Sparrows and Lincoln's Sparrows of the year. Only a few birds were singing in the forest and visual migration was at a standstill. By mid-week, the winds became calm and activity began to pick up as the first Eastern Kingbirds and Rose-breasted Grosbeaks, and Chipping Sparrows were spotted. Flocks of Blue-winged Teal, Long-tailed Ducks, and Surf Scoters began to arrive during the week as the diversity and the numbers of waterfowl on the lake increased. The first American White Pelicans, Double-crested Cormorants, and Belted Kingfishers were also seen late in the week. The bustling activity on the lake made up for the few songbirds seen in the forest.

Migration resumed on May 6th as over 400 Yellow-rumped Warblers were counted passing over throughout the day. The shoreline was also very busy on the 6th as season highs of both American Pipits (465) and Northern Harriers (40) were observed passing along it. Thousands of Greater White-fronted Geese began to pass through the area midweek and their spring numbers peaked on the 6th when 3295 were counted. One flock was mixed with 29 Snow Geese; the only sighting of Snow Geese for the year. Passage of Sandhill Cranes slowly increased as the week progressed. By the end of the week flocks were passing through and totaling 300 birds. Despite the increased movement late in the week, banding totals remained low with fewer than 10 birds banded each day.

The second week of May started with the first rain days of the season. Rain days this time of year can still be very busy as songbirds continue to migrate despite the rain, either slipping through the trees or in full migration. However, only shorebirds, a few American Pipits, and the first Peregrine Falcon of the year were the only birds seemingly not affected by the rain. The songbird movement was incredible on the 10th after the rain ended. The season high of Yellow-rumped Warblers (2020), Tree Swallows (576), Chipping Sparrows (344), and over 400 blackbirds were all counted that day. Literally thousands of songbirds were observed on the 10th, but not one bird was captured. It was a combination of the birds passing through well above the treetops, not stopping in the

trees to rest or forage, and the closer of the two most productive net-lanes that were flooded from the heavy rains. These two nets were kept closed for the remainder of the week until the lanes dried.

Even though the weather remained very warm and calm for the rest of the week, the heavy songbird passage was only a one day event. Visual migration was reduced to only a few individuals of Yellow-rumped Warblers, American Robins, blackbirds, and a few Sharp-shinned Hawks for the rest of the week. The forest had become more active as new songbird species were detected almost on a daily basis. Vesper Sparrows, White-throated Sparrows, Barn Swallows, Cliff Swallows, Clay-coloured Sparrows, Least Flycatchers, Black-and-white Warblers, Yellow Warblers, Ovenbirds, Palm Warblers, and Swainson's Thrush were all new to the area as the week came to a close. Banding remained very slow; only 33 birds were banded through the entire second week of May. White-winged Scoters joined the Surf Scoters and Long-tailed Ducks far out on the lake, and the first Common Terns were seen fishing on the lake. The final flock of Greater White-fronted Geese of the spring was seen on May 11th.

By the third week in May, visual migration was reduced to only a few Chipping Sparrows and Yellow-rumped Warblers passing overhead, but new species were still continually arriving at the banding lab throughout the week. Spotted Sandpipers, Mourning Doves, Blue-headed Vireos, Gray-cheeked Thrush, and Northern Waterthrush arrived early in the week. They were followed later by Western Wood-pewees, Warbling Vireos, Tennessee Warblers, Blackpoll Warblers, American Redstarts, and Western Tanagers. The number and diversity of birds now at the banding lab was apparent as counts shifted from visual migration to the ones in the forest setting up their breeding territories. Morning songs of species such as White-throated Sparrows, Chipping Sparrows, Ovenbirds, and Yellow Warblers had seemed to have taken over the forest. Like the rest of the spring, banding remained very slow with 87 birds banded for the week. A pair of Eastern Phoebes had been feverishly building a nest on the banding lab for some time. The nest was inspected for the first time on the 16th, the banders found a single egg.

An adverse weather system moved in during the fourth week of May bringing overcast skies, periods of rain, and cooler temperatures. Only a few observations were made on the visual migration counts during the week, making it seem that migration had come to an end. But birds were still moving into the area as the first Canada Warbler and Common Yellowthroat were heard early in the week. As the week progressed, many of the late spring migrants arrived at the banding station, including: Red-eyed Vireos, Magnolia Warblers, Alder Flycatchers, Mourning Warblers, Cedar Waxwings, and Philadelphia Vireos. Only a smaller number of the late spring migrants were still expected to arrive at the banding lab. Banding totals had increased this week, 129 birds were banded, and averaging about 20 birds banded a day.

The last few days of May brought a noticeable change to the banding lab. The forest within the monitoring area had become very quiet. Many of the birds usually singing had stopped, and counts had become quite low. This indicated that possibly many of the local breeders had already attracted mates and started nesting. The last few days of May also

brought some excitement to the banders as the only House Wren of the season and one of the few Sharp-shinned Hawks of the spring were captured.

2.3 June

The first day of June had the first and only sighting of a Baltimore Oriole of the spring at the banding lab. The first week of June also brought the last two species of the spring to the observatory: an Olive-sided Flycatcher singing behind the banding lab and a Yellow-bellied Flycatcher that flew into the nets. The annual Songbird Festival was held on June 3rd. Participation on the banding lab tours was quite low due to limited road access to the banding lab and very cold and windy temperatures. The highlight of the day was a spectacular view of a Peregrine Falcon as it flew low just above the treetops, and was stalled in the air as it fought against the wind. Cedar Waxwings made an unexpected migratory push on the 5th. 587 were counted as they steadily streamed past the banding lab for a good portion of the morning. The first young of the year birds were spotted on the 6th as three pairs of Canada Geese floated past the banding lab with goslings floating close behind. There were 15 goslings between the three pairs of parents, but it was difficult to tell who belonged to whom.

Only 119 birds were banded in June. Most of those were captured in the opening days of the month. Very few birds were banded in the last few days of spring migration monitoring. It is expected to be low at this time of year because spring migration had come to an end. Observations were consistently made of the birds that had claimed territories around the banding lab and along the census route. The Common Mergansers began to form feeding groups of over 100 individuals and proceeded to swim up and down the shoreline diving for food and getting into the occasional squabble.

3.0 Fall Migration Monitoring Summary

Fall migration monitoring at the LSLBO began on July 12th and ran daily until September 29th for a total of 77 days of migration coverage. Three days of monitoring activities were missed during the fall period due to staff availability. Fall migration monitoring follows the identical protocol to that of the spring; combining daily mist-netting, visual migration counts, census, and incidental observations as the monitoring techniques. Mist-netting occurred only when suitable weather conditions permitted.

Weather conditions were generally favourable and allowed for good mist-net coverage throughout the fall. Nets were set for 5695.5 of a possible 6468 net hours, or 88.1% of the total possible net hours. Only fours days of mist-netting coverage were lost due to rain, all other days had either full or partial coverage. A total of 2465 birds were captured in the mist-nets during the fall migration period. 2241 were banded (Appendix I), 206 recaptured, and 18 were released or escaped unbanded. This banding total was slightly above the average LSLBO fall banding total. The capture rate during the fall was 43.3 birds per 100 net hours, and represented an average fall at the LSLBO.

A total of 60 different species and forms were represented by birds captured in the mistnets (Appendix I), which is above the average LSLBO fall banding species diversity. The top five species banded were: Tennessee Warblers (289), American Redstarts (256), Yellow-rumped Warblers (243), Ovenbirds (222), and Swainson's Thrush (218). All five of these species are within the top ten species banded every fall.

The heaviest days of banding occurred in July and during the first half of August. The busiest banding day of the fall occurred on July 25th when 203 birds were banded. Daily banding totals reached 100 birds on three occasions: July 20th with 164 birds banded, August 5 with 119, and July 23rd with 100. 79% of all birds banded during the fall were banded within the first month of monitoring. Banding through the second half of August and in September was slow; banding totals surpassed 20 birds on only four occasions.

Although there were no new species added onto the LSLBO's sight records during fall monitoring, several new fall banding records were added. The LSLBO banded its very first Northern Goshawk on August 21st. The LSLBO also added the first fall banding records of both a Baltimore Oriole and Marsh Wren. With the addition of these species, the number of species banded in the fall increased to 87 and the total number of species banded by the LSLBO increased to 96.

The slow banding during the second half of monitoring did not represent the true migration of songbirds through the area. Migration was steady throughout the entire fall period; on many occasions birds were flying well above the nets. The first and last dates that species encountered during the fall are compared with 2005 (Appendix II), though it is only a rough comparison due to the relaxed nature of fall migration and the less conspicuous movement of the songbirds compared to that of the spring.

4.0 Fall Migration Monthly Summary

4.1 July

Fall migration monitoring at the LSLBO began on July 12th. It was a warm and calm day with a few clouds; good weather for migration monitoring. Net-lanes were set throughout the day as the banding station was prepared for the fall season. The forest was surprisingly quite, a small number of songbirds were detected on the census count. However, 45 birds were banded during the day, indicating that there were more birds in the area that were moving through the trees relatively undetected. 19 different species were banded, a high diversity compared to the number of birds banded. The top species banded were: American Redstarts (8), Ovenbirds (8), Tennessee Warblers (5), and Yellow-rumped Warblers (5). The highlights of the day included banding the first Western Tanager and Black-throated Green Warbler of the year. It was still early in the season for many birds to begin their fall migration, only a few Yellow-rumped Warblers were observed on the visual migration counts. A small group of Mallards and a lone Common Goldeneye were the only waterfowl that were spotted on the lake. Franklin's Gulls had begun to congregate along the edge of the lake and 140 were counted.

The rest first week of fall migration monitoring reflected the opening day. Weather conditions remained sunny and warm, cooperating with all monitoring activities. Observations were limited to a few birds still singing in the forest as the songbirds had not begun to migrate. Banding was steady, but not overly busy. An additional 137 birds were banded by the end of the week. American Redstarts, Tennessee Warblers, Yellow Warblers, Yellow-rumped Warblers, Swainson's Thrush, and Ovenbirds made up the majority of the birds banded. The flocks of Franklin's Gulls had begun to grow in size. Several hundred were counted on most days, but their numbers suddenly peaked on the 16th when 3366 were counted.

The third week of July was the busiest in terms of banding for the entire year. It began on the 20th when 164 birds were banded. The diversity of species banded was high, at 23 species, and included the first Cape-may Warbler, Blackpoll Warbler and Brown Creeper of the year. Almost a third of the birds captured that day were young Tennessee Warblers (48). Yellow-rumped Warblers (27), Yellow Warblers (16), American Redstarts (13), Swainson's Thrush (8), and Ovenbirds (7) rounded off the top banded species of the day. Banding slowed down for the next two days, with 53 and 63 birds banded respectively. However, with the slower banding came an increase in migration passage as Yellow-rumped Warblers, Tennessee Warblers, Western Tanagers, and Rose-breasted Grosbeaks were observed on visual migration counts. Several Yellow-bellied Sapsuckers were captured in the nets, providing the usual woodpecker extraction and aging challenges to the banders. The first Dark-eyed Junco of the fall was banded on the 22nd. Dark-eyed Juncos are more commonly seen passing through the area in September, but a few individuals do breed locally.

The latter half of the week was very busy in terms of both passage of songbirds and banding. Banding picked up again on the 23rd with 100 birds banded. The composition of

species captured in the nets remained similar to that of earlier in the week. Another 80 birds were banded on the 24th, and included banding the first Bay-breasted Warbler of the year. Visual migration counts were busy with large numbers of birds passing over, but like banding, the species moving were the same as seen earlier in the week. The busiest banding day of the fall occurred on the 25th. 203 birds were banded representing 21 different species. Although no new species of the year were captured in the nets, several species of the top banded species of the fall had their peak banding day, including: Yellow-rumped Warblers (36), American Redstarts (34), Yellow Warblers (20), Canada Warbler (18), and Swainson's Thrush (14). Unfortunately, incidental observations were at a minimum because of the high volume of birds in the nets.

Bird activity remained high for the start of the last week of July, although banding totals were much lower. Between 50 and 60 birds were banded for first days of the week. Diversity of species in the nets remained high, but the majority of the birds captured consisting of the usual Yellow Warblers, Tennessee Warblers, Yellow-rumped Warblers, American Redstarts, Ovenbirds, and Swainson's Thrush. An increasing number and species of birds were spotted on visual migration including: warbler species, tanagers, grosbeaks, swallows, and blackbirds. Flocks of Greater Yellowlegs began to move along the shoreline and the flocks of Franklin's Gulls began to increase in size again, over 1400 counted on the 27th. A weather system moved in for the last few days of July bringing rain and heavy winds which halted banding and most migration activity. An additional 203 birds were banded during the final week of July.

4.2 August

The first day of August was rained out, but the weather system quickly moved on bringing warm and sunny weather for the rest of the week. Banding was steady with daily totals on most days reaching between 60 and 80 birds; totaling 403 birds by the end of the week. Banding peaked on the 5th when119 birds were captured. A large flock of Tennessee Warblers flew into the nets late in the morning and accounted for over half of the birds banded on the day. Overall passage of songbirds was slow at the beginning of the week, but picked up during the last few days as Yellow-rumped Warblers, Tennessee Warblers, Yellow Warblers, blackbirds, Tree Swallows, Rose-breasted Grosbeaks, and Common Grackles moved through the area. Yellow-rumped Warblers still had the strongest presence of all the migrants, 460 were counted on the 7th. Ruby-crowned Kinglets were also seen on the 7th, a species that had been relatively quiet throughout the fall. Activity on the lake remained very quiet with only a few Mallards, American White Pelicans, Common Goldeneyes, and a few groups of Canada Geese observed on the water.

The second week of August began with a good day of banding. 69 birds were banded on the 8th; the majority of birds captured were Ovenbirds, American Redstarts, and Swainson's Thrush. Three Purple Finches, and the first Blue-headed Vireo and Palm Warbler of the fall made up the interesting captures of the day. Bird activity slowed dramatically during the middle of the week, with few birds banded and very little seen on migration watches. This was likely caused by moderately strong westerly winds. Bald

Eagles and Osprey enjoyed the winds; several individuals spent much of the day soaring above the banding lab. In typical migration fashion, activity suddenly picked up again on the 14th when 78 birds were banded. Wood-warblers had a commanding presence in the nets and made up 13 of the 18 species banded during the day. A season high of 7 Baybreasted Warblers were captured during the day and the very first fall Baltimore Oriole was also banded. The first Boreal Chickadee of the year was heard calling in the forest late in the day.

Two days of heavy rain and strong winds started off the third week of August. A steady passage of Yellow-rumped Warblers occurred when the weather cleared and lasted for the rest of the week. Most daily counts of Yellow-rumped Warblers through the week were over 100, but a large movement occurred on the 20th. 764 were counted as they passed overhead for the entire day. The season high of Sharp-shinned Hawks also occurred on the 20th, 13 were counted including the two that were captured in the nets. A small number of Dark-eyed Junco's were seen earlier in the fall, but they had now begun to move through the area more frequently and in larger numbers. Only 134 birds were banded during the week, a low banding total compared to the relative high volume of birds moving through the area. Banding saw the first Wilson's Warbler of the year on the 18th, but the last Canada Warbler of the year on the 20th. One of the highlight captures of the entire fall occurred on the 21st. A Northern Goshawk swooped in low and managed to become nicely tangled in the nets. Good timing and some luck allowed the banders to extract the bird from the net before it freed itself. It was first banding record of a Northern Goshawk for the LSLBO.

The weather during the last week of August remained warm and sunny. Large numbers of Yellow-rumped Warblers continued to migrate through the area, 800 were counted on the 22^{nd} . Their passage slowed for a few days, only to resume again on the 26^{th} when over 600 were counted. Fall passage for Yellow-rumped Warblers finally peaked on the 27^{th} with 913 counted. The strong passage of migrants kept banding totals low; only 104 birds were banded through the week. The only Red-breasted Nuthatch to be banded of the year was captured this week, and was easily one of the highlights of the week. The first White-crowned Sparrow of the fall was observed on the 24^{th} . The last Tennessee Warbler was seen on the 27^{th} . The quiet lake became even quieter as the last Spotted Sandpiper was also seen on the 27^{th} .

The remaining days of August saw the last Rose-breasted Grosbeak and Mourning Warbler of the year. The only Say's Phoebe of the fall was spotted on the 28th. Windy conditions helped keep bird activity and passage to a minimum. Some of the slowest banded days of the fall closed out the month. Although banding was slow, the first Fox Sparrow of the year was banded on the 30th.

4.3 September

September opened with amazing summer-like weather. A major shift in species encountered at the banding lab occurred during the first week of September as late fall migrants replaced the departing locally breeding species. The first Sandhill Cranes of the

fall passed over on the 5th. The cranes were making a huge racket, but turned out to be a flock of only three birds. The first flock of Greater White-fronted Geese passed over on the 7th, but it was a small flock made up of only 25 birds. The last Common Tern was observed fishing over the lake on the 7th. The last sightings were made of Yellow-bellied Sapsuckers and Northern Flicker and of many songbird species, including: Alder Flycatchers, Least Flycatchers, Yellow Warblers, Black-and-white Warblers, and Northern Waterthrush through the week. Visual passage of songbirds was very low, limited to American Pipits and Lapland Longspurs moving along the shoreline. One common observation was the number of different species following the Black-capped Chickadees through the trees. A group of chickadees was often accompanied by Ruby-crowned Kinglets, Yellow-rumped Warblers, Orange-crowned Warblers, and Redbreasted Nuthatches. Unfortunately, most times these roving groups of birds managed to avoid the net-lanes. Only 60 birds were banded for the entire week.

The second week of September did not see a high turn over of species, mostly due to bad weather conditions. The week began with heavy winds which eventually switched to rain by the end of the week. Only 36 birds were banded for the entire week; two days of banding were entirely missed because of rain and three other days only had partial banding because of wind. The first Golden-crowned Kinglet was heard on the 12th and the first American Tree Sparrow of the fall was captured the same day. The most songbird activity came from a few migrating Yellow-rumped Warblers, Pine Siskins, American Pipits, and Lapland Longspurs. The first Buffleheads of the fall arrived in the water in front of the banding lab on the 13th and joined the increasing number of congregating Common Goldeneyes and Canada Geese on the lake. Sandhill Cranes numbers peaked on the 8th when several flocks flew past, totaling 154 birds.

The last half of September was mixed with poor weather. Periods of rain and strong winds occurred frequently and only four days received full banding. As a result only 115 birds were banded. However, some very interesting and exciting birds were captured when banding did occur. A Varied Thrush was captured on the 18th, only the third banding record for the LSLBO. The 24th turned out to be one of the best bandings days of September. The first Marsh Wren in the LSLBO's fall records was banded early in the morning. The last two net-checks of the day produced three White-breasted Nuthatches, the only Golden-crowned Kinglet of the fall, a Brown Creeper, and a Fox Sparrow. All great birds to catch and made for a fun banding afternoon. Mist-nets were taken down for the final time on the 29th. The day was windy and overcast, with very little bird activity occurring around the banding lab. The last bird captured for the 2006 season was a Hairy Woodpecker, which just happened to be the first one captured for the year. American Pipits consistently passed through the last portion of banding season, peaking on the 21st with 107 birds. The last Red-eyed Vireo, Ovenbird, and American Redstart of the year were spotted on the 18th; all three were following the same group of Black-capped Chickadees through the trees. Two Peregrine Falcons were sighted near the end of the month, one on the 20th and the other on the 22nd. Groups of Common Goldeneyes in front of the lab were numbering in the 50's and were often mixed with Buffleheads. Flocking Greater White-Fronted Geese began to pass through daily on the 18th, but the flock sizes were small and their fall daily totals peaked at 162 on the 22nd.

5.0 Migration Coverage

Migration monitoring at the LSLBO follows a standardized protocol that maintains consistent data collection that allows for yearly comparison of migration results. Coverage each day of both spring and fall migration is gauged on the skill level of each observer, the number of visual migration counts conducted, if a census was conducted, the length of time the mist-nets were opened, and the amount of time staff is actively observing migration. Both spring and fall migration received excellent coverage in 2006.

The LSLBO usually begins daily spring migration monitoring within the third week of April. Only one day was missed this spring because of limited access to the banding lab. Visual migration counts and the census were conducted every day that the banding station operated. Rain forced the mist-nets to remain closed on three days; all other days received full or partial mist-netting coverage. Two net-lanes were flooded out middle of the season and were closed for four days until they dried up. Overall migration coverage in 2006 was comparable to previous years of monitoring (Table 1).

Table 1. Summary of effort during spring migration monitoring at LSLBO, 1998 – 2006.

SPRING	1998	1999	2000	2001	2002	2003	2004	2005	2006
Coverage									
First day	04-May	26-Apr	18-Apr	16-Apr	19-Apr	21-Apr	19-Apr	25-Apr	24-Apr
Last day	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun	10-Jun
# of days	36	46	57	57	54	50	50	43	47
Person-days	72	N/A	126	130	125	124	120	121	127
Banding1									
First day	04-May	29-Apr	20-Apr	16-Apr	20-Apr	21-Apr	20-Apr	25-Apr	24-Apr
Last day	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun	10-Jun
# of days	36	42	52	54	45	39	45	43	44
Av daily net-hrs.	74.5	69.1	62	72.9	63	48.9	60.5	71.2	70.3
Census									
First day	04-May	27-Apr	18-Apr	16-Apr	19-Apr	21-Apr	20-Apr	25-Apr	24-Apr
Last day	09-Jun	12-Jun	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun	10-Jun
# of days	32	34	55	57	54	50	49	43	47
Vis-Migs2									
First day	05-May	27-Apr	18-Apr	16-Apr	19-Apr	21-Apr	20-Apr	25-Apr	24-Apr
Last day	21-May	25-May	13-Jun	11-Jun	11-Jun	10-Jun	10-Jun	10-Jun	10-Jun
# of days	8	16	57	57	54	50	49	43	47
Av daily Vis-migs	3.8	N/A	8.2	7.8	8.4	8	8.2	8	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

Fall migration coverage lasted 77 days, beginning in the middle of July. Three days of monitoring were missed late in September because of staff availability. Census and visual migration counts were conducted every day the station operated. Weather conditions allowed for excellent mist-netting coverage throughout the entire fall though some days received partial coverage due to changing weather conditions throughout the day. Only four days of banding were missed because of rain. The fall received good coverage throughout the entire season and maintained the level of monitoring received in previous years (Table 2).

Table 2. Summary of effort during fall migration monitoring at LSLBO, 1998 – 2006.

FALL	1998	1999	2000	2001	2002	2003	2004	2005	2006
TTEE	1770	1,,,,	2000	2001	2002	2003	2001	2003	2000
Coverage									
First day	14-Jul	10-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul	12-Jul
Last day	24-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep	Sep-29
# of days	66	78	91	69	84	77	78	75	77
Person-days	126	N/A	207	192	173	158	164	170	149
Banding1									
First day	14-Jul	10-Jul	07-Jul	14-Jul	14-Jul	12-Jul	12-Jul	12-Jul	12-Jul
Last day	24-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep	29-Sep
Number of days	62	76	89	69	78	69	73	71	73
Av. Daily net-hrs.	48.5	56.7	74	74.6	62.9	73.8	69.8	76	73.9
Census									
First day	19-Jul	10-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul	12-Jul
Last day	24-Aug	08-Aug	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep	29-Sep
# of days	10	15	90	69	84	77	78	75	77
Vis-Mig2									
First day	25-Jul	13-Jul	07-Jul	14-Jul	13-Jul	12-Jul	12-Jul	12-Jul	12-Jul
Last day	02-Sep	25-Sep	06-Oct	22-Sep	04-Oct	30-Sep	30-Sep	29-Sep	29-Sep
Number of days	20	43	91	69	84	77	78	75	77
Av daily Vis-migs	2.8	3.9	7.7	7.9	7.7	7.6	7.6	7.7	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 is spearheaded by the Institute for Bird Populations. The main objective of the project is to provide long-term population monitoring on the breeding grounds. 2006 marks the 13th year that the LSLBO has been participating in the MAPS program as it remains one of the LSLBO's core monitoring projects.

The LSLBO operates four MAPS stations: Far-and-Away (FAWA), Roadside (ROAD), Fern Gulley (FEGU), and Residence (RESI). The FAWA and ROAD stations have operated every year since the LSLBO joined the MAPS program in 1994. The RESI station has completed its 7th consecutive year after it was created in 2000. FEGU has completed its 4th consecutive season after it was reopened in 2003.

Each MAPS station is visited 6 times during the summer months. The dates that the stations operated in 2006 were:

	FAWA	FEGU	ROAD	RESI
Period 5 (Jun 10 – 19)	June 12	June 13	June 14	June 11
Period 6 (June 20 – 29)	June 21	June 22	June 23	June 20
Period 7 (June 30 - July 9)	July 1	July 2	July 3	June 30
Period 8 (July 10 – 19)	July 12	July 13	July 14	July 10 & 11
Period 9 (July 20 – 29)	July 21	July 22	July 23	July 20
Period 10 (July 30 - August 8)	August 2	August 3	August 4	August 5

6.1 MAPS Captures

Each MAPS station receives a possible 360 net hours throughout the course of MAPS banding. FAWA, FEGU, and ROAD all received the full net coverage. Wet weather conditions allowed 319.5 net hours at the RESI site. The station was closed early on two visits because of rain. One net-lane in the station is situated in a low-lying boggy area and was flooded for most of the season. It was only opened on the last two visits.

A total of 192 birds were banded during the 2006 MAPS season, an average MAPS banding total for the LSLBO. 88 birds were recaptured. 23 species and forms were represented by birds captured in the nets. FAWA typically catches the fewest birds of the four stations. It maintained this reputation recording only 32 banded and 12 recaptured birds from 10 species (Table 3). It did receive its first banding record of a Lincoln's Sparrow. ROAD had the second lowest banding total with 35 birds banded and 31 recaptures from 12 species (Table 4). FEGU had the second highest banding total, 53 banded and 41 recaptures (Table 5). It had the highest diversity with 16 species and forms including the first banding records of a Bay-breasted Warbler and Common Yellowthroat for that station. RESI had the highest banding total at 72 and 4 birds were recaptured from 15 different species and forms (Table 6).

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

Table 3. Captures at the Fai			APS Station		37 '	T . 1.C		
Species	20				is Years'		-	
	Banded	Recap	94-'00	2001	2002	2003	2004	2005
Yellow-bellied Sapsucker		1					1	
Downy Woodpecker			1					
Least Flycatcher			4	9	1	1		
Swainson's Thrush			7		1			2
Hermit Thush						2		
American Robin			6	1	3		1	
Cedar Waxwing			1					
Phialdelphia Vireo			1					
Red-eyed Vireo			4	1		1		1
Tennessee Warbler	1		2	1	4	2		8
Yellow-warbler			3	2				
Chestnut-sided Warbler			1					
Magnolia Warbler			1					
Yellow-rumped Warbler	1		12	4	4	7	2	6
Black-and-white Warbler	1		1			1		
American Redstart	4	2	44	7	2	7	2	2
Ovenbird	5	3	23	4	3	1	6	9
Connecticut Warbler			1					
Mourning Warbler	3		54		2	5	3	2
Common Yellowthroat			2					
Canada Warbler	3	1	64	8	7	13	10	11
Western Tanager			1		1			
Rose-breasted Grosbeak			1					
Lincoln's Sparrow	1							
White-throated Sparrow	13	5	92	11	7	14	10	20
Total	32	12	326	49	35	55	35	61

Table 4. Captures at the Roadside (ROAD) MAPS station.

Table 4. Captures at the Roadside (ROAD) MAPS station.										
Species	200)6		Previ	ous Yea	ırs Captı	ures			
	Banded	Recap	94-'00	2001	2002	2003	2004	2005		
Ruffed-Grouse			2							
Yellow-bellied Sapsucker			6			1	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			2	1	1	4	2	1		
Red-breasted Nuthatch			1							
Brown Creeper				1						
Winter Wren			2			2		3		
Ruby-crowned Kinglet			_			2	1	1		
Swainson's Thrush	5	2	48	5	8	16	6	10		
Hermit Thrush	-	1		-	٥	-0	-	1		
American Robin	1	1	2		2			1		
Cedar Waxwing	1	•	3		_			1		
Warbling Vireo			1							
Red-eyed Vireo	1		2		1	1	1			
Tennessee Warbler	3	2	41	1	8	8	•	49		
Orange-crowned Warbler	3	2	1	1	O	O		77		
Yellow Warbler			6		2		1			
Chestnut-sided Warbler			4		2		1	1		
Magnolia Warbler		2	76	15	8	9	2	2		
Cape May Warbler		2	2	13	o	1	2	2		
Yellow-rumped Warbler		1	51	1	2	17	3	5		
Black-throated Green Warbler		1	6	1	2	1	3	3		
Palm Warbler			1			1				
Blackpoll Warbler			2							
Black-and-white Warbler			18			7	1	2		
American Redstart	3	10	128	12	31	18	7	22		
Ovenbird	5 6	7	49	12	14	22	10	12		
		/		12	14		10	12		
Northern Waterthrush Mourning Warbler	1 1		1 15			1	1	1		
Common Yellowthroat	1		2				1	1		
Canada Warbler	9	4		12	9	20	22	24		
	9	4	117 3	13	9	20	22	<i>2</i> 4		
Western Tanager			3 4							
Rose-breasted Grosbeak					_	4				
Chipping Sparrow			7		5	4				
Song Sparrow			2			1	1			
Lincoln's Sparrow	~	1	1	_	4	1	1	10		
White-throated Sparrow	5	1	89	6	4	9	5	10		
Purple Finch			1							
Pine Siskin			1							
m . 1	2.5	21	710	60	0.0	1.4.0		1.46		
Total	35	31	710	68	98	146	66	146		

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

Table 5. Captures at the Fern Gulley (FEGU) MAPS station. Species 2006 Previous Years' Total Captures										
Species					-	•				
North and Co. 1 1 0 1	Banded	Recap	94-'99	2003	2004	2005				
Northern Saw-whet Owl			1		1					
Yellow-bellied Sapsucker			_		1	•				
Alder Flycatcher			6		_	2				
Least Flycatcher			2	3	3					
Blue-headed Vireo			2	1						
Red-eyed Vireo			4	2		1				
Black-capped Chickadee		1	7		2					
Red-breasted Nuthatch			4							
Winter Wren	1		3			1				
Swainson's Thrush	3	1	50	8	7	10				
Hermit Thrush	2		1							
American Robin			4	1						
Cedar Waxwing				1		1				
Tennessee Warbler	4		30	20	5	20				
Orange-crowned Warbler			1							
Yellow Warbler		2	13	3		2				
Chestnut-sided Warbler			2							
Magnolia Warbler			17	5	1					
Yellow-rumped Warbler		1	26	2	1	6				
Black-throated Green Warbler			1							
Bay-breasted Warbler	1									
Black-and-white Warbler	1		12	3	1	3				
American Redstart	12	18	237	51	23	31				
Ovenbird	7	3	41	9	7	24				
Northern Waterthrush			1	1						
Mourning Warbler	2	1	51	4	6	7				
Common Yellowthroat	1									
Canada Warbler	5	8	112	36	11	30				
Western Tanager			1	2		1				
Chipping Sparrow	1		2							
Song Sparrow			5							
Swamp Sparrow			2							
White-throated Sparrow	13	6	102	17	9	14				
Pine Siskin			2							
Total	53	41	742	169	77	153				

Table 6. MAPS captures at Residence (RESI) station.

Table 6. MAPS captures at Residence (RESI) station. Species 2006 Previous Years' Total Captures										
Species	200						-			
		Recap	2000	2001	2002	2003	2004	2005		
Sharp-shinned Hawk	1		1							
Ruby-throated Hummingbird				1	1			_		
Yellow-bellied Sapsucker			2	3	6	4		2		
Northern Flicker						1				
Western Wood-Pewee			1							
Alder Flycatcher				1						
Least Flycatcher			11	8	14	6	5			
Black-capped Chickadee	8		1		6	5	3			
Red-breasted Nuthatch					1	2				
Brown Creeper						2				
Winter Wren	1			1	2	1				
Ruby-crowned Kinglet						2	1	1		
Swainson's Thrush	9	1	8	7	7	11	7	8		
Hermit Thrush	6		4	1	2	2	2	7		
American Robin	1		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	5		
Orange-crowned Warbler							1			
Yellow Warbler			4	4	3	4				
Magnolia Warbler			7	2	8	8	2	3		
Yellow-rumped Warbler			7	11	16	71	11	5		
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	7		10	21	13	13	15	5		
Ovenbird	14		5	6	9	3	3	23		
Northen Waterthrush						1				
Mourning Warbler	1		4		1	3	1	1		
Common Yellowthroat	1			1			1			
Canada Warbler	2		3	7	4	6	5	2		
Western Tanager			1	1			1			
Rose-breasted Grosbeak			1	1	3		2			
Chipping Sparrow	1		2		5	4				
Clay-colored Sparrow							1			
Lincoln's Sparrow	2	1	1			2		1		
White-throated Sparrow	5	2	14	19	14	23	14	11		
Purple Finch					1					
Pine Siskin			1							
Total	72	4	105	139	145	218	132	74		

6.2 Breeding Status

Breeding status was determined through banding and observations for 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 2006.								
Species	RESI ROAD	FEGU FAWA	Species					

Species	RESI 1	ROAD	FEGU	FAWA	Species	RESI	ROAD	FEGU	FAWA
Common Loon	Т	Т			Cedar Waxwing	Т	L	Т	Т
American White Pelican	1	1		T	Tennessee Warbler	В	В	В	В
Mallard			T	1	Yellow Warbler	В	В	В	В
Common Goldeneye		T	T		Magnolia Warbler	В	В	ъ	Б
· ·	T	T	1	T	•	В	В	В	В
Osprey Bald Eagle	1	T	Т	T	Yellow-rump'd Warb. Black-thrt'd Grn Warb.	ь L	L	ь L	Ь
Merlin		T	1	1	Bay-breasted Warbler	L	L	T	
Sharp-shinned Hawk	T	1		T	Black-and-white Warb.	В	В	В	В
Ruffed Grouse	В	В	В	L	American Redstart	В	В	В	В
Franklin's Gull	Ь	T	T	T	Ovenbird	В	В	В	В
Yellow-bellied Sapsucker	L	Ĺ	Ĺ	Ĺ	Northern Waterthrush	Ь	T	ь	Ь
Downy Woodpecker	_	_	T	T	Mourning Warbler	В	-	В	В
Hairy Woodpecker	L	L	T		Common Yellowthroat	L	В	В	В
Northern Flicker	L	L		L	Canada Warbler	В	В	В	В
Alder Flycatcher	В	В	В	В	Western Tanager	L		_	T
Least Flycatcher	В	В	В	В	Chipping Sparrow	В	В	В	В
Eastern Phoebe	T	В	В	T	Clay-colored Sparrow	-	L	В	В
Blue-headed Vireo	-	L	-	-	Song Sparrow		L	2	T
Red-eyed Vireo	В	В	В	В	Lincoln's Sparrow	В	В	В	Ĺ
Blue Jay	L	T	T	_	White-thrt'd Sparrow	В	В	В	В
American Magpie	T	T	T	T	Rose-breast'd Grosbeak	В		L	L
American Crow	T	T	T	T	Red-winged Blackbird				T
Common Raven		T	T	T	Brown-headed Cowbird				T
Tree Swallow		T	T		Pine Siskin	T	T	T	T
Black-capped Chickadee	В	В	В	В	Evening Grosbeak		T	T	
Red-breasted Nuthatch		В	В	L					
Brown Creeper	D	T	D	D	T-4-1 D 1 (D)	22	22	22	10
Winter Wren	В	В	В	В	Total sp. Breeder (B)	22	22	22	19
Ruby-crowned Kinglet	L	-		-	Total sp. Likely (L)	8	8	4	6
Swainson's Thrush	В	В	В	В	Total sp Transient (T)	8	16	16	16
Hermit Thrush	В	T	T	_	Total sp.	38	46	42	41
American Robin	В	В	L	В					

7.0 Recoveries

387 recapture birds were recorded for 2006 banding season: 93 during the spring, 88 during MAPS, and 206 in the fall. There were no foreign recapture records, all birds recaptured were originally banded by the LSLBO. Most of the recapture records were of birds banded during the 2006 season. 62 recapture records were of birds originally banded in 2005. 27 recapture records were birds that were banded in 2004 or before (Table 7). The oldest recapture record was of a Black-capped Chickadee originally banded in 2000, making it at least 8 years old. Three other recaptured birds were banded in 2000: a Canada Warbler and an Alder Flycatcher, both at least 7 years old, and an Ovenbird aged at six years old. There were no recoveries of birds banded before 2000.

Table 7. Age of recaptured birds originally banded before 2005

Species	Band Number	Orig	inal Banding			Recapture		
		Date	Location	Age	Date	Location	Age	
American Redstart	2150-92922	Aug 2, 03	Mig	HY	June 1, 06	Mig	3 years	
American Redstart	2150-92938	Aug 3, 03	Mig	HY	May 29, 06	Mig	3 years	
American Redstart	2150-92952	Aug 5, 03	Mig	HY	May 26, 06	Mig	3 years	
Myrtle Warbler	2160-63296	June 23, 04	ROAD	SY	May 17, 06	Mig	3 years	
Yellow Warbler	2160-63297	June 23, 04	ROAD	SY	May 26, 06	Mig	3 years	
Myrtle Warbler	2350-47274	May 26, 04	Mig	SY	May 27, 06	Mig	3 years	
Yellow Warbler	2350-47509	June 4, 04	Mig	SY	June 6, 06	Mig	3 years	
Magnolia Warbler	2330-37711	June 5, 04	Mig	SY	July 14, 06	Mig	3 years	
American Robin	1152-42565	May 11, 04	Mig	SY	May 12, 06	Mig	3 years	
White-throated Sparrow	1871-65001	July 11, 04	FEGU	AHY	June 22, 06	FEGU	3+ years	
Canada Warbler	2160-63315	July 11, 04	FEGU	AHY	Jul 22, 06	FEGU	3+ years	
Ovenbird	2181-79070	July 4, 04	ROAD	AHY	July 13, 06	Mig	3+ years	
American Redstart	2150-92354	July 16, 03	Mig	SY	May 29, 06	Mig	4 years	
Ovenbird	2181-79815	Jun 8, 03	Mig	SY	May 29, 06	Mig	4 years	
Swainson's Thrush	1761-21303	May 28, 03	Mig	SY	June 13, 06	FEGU	4 years	
Mourning Warbler	2160-63133	June 24, 03	FEGU	SY	June 22, 06	FEGU	4 years	
Song Sparrow	1761-21402	Aug 3, 03	Mig	AHY	May 23, 06	Mig	4+ years	
Swainson's Thrush	1761-21077	Jule 11, 04	RESI	ASY	July 10, 06	RESI	4+ years	
American Redstart	2100-07932	July 20, 03	FEGU	AHY	June 13, 06	FEGU	4+ years	
American Redstart	2330-37012	Aug 5, 03	FEGU	AHY	July 2, 06	FEGU	4+ years	
Red-eyed Vireo	2181-79836	July 17, 03	Mig	AHY	Aug 4, 06	Mig	4+ years	
American Redstart	2330-37822	July 28, 04	Mig	ASY	Jul 21, 06	Mig	4+ years	
American Redstart	2150-92299	June 7, 03	Mig	ASY	Jun 13, 06	FEGU	5+ years	
Ovenbird	1671-47866	July 21, 00	Mig	HY	May 22, 06	Mig	6 years	
Alder Flycatcher	2220-41364	July 17, 00	Mig	AHY	June 8, 06	Mig	7+ years	
Canada Warbler	1980-87090	June 26, 00	FAWA	AHY	June 13, 06	FEGU	7+ years	
Black-capped Chickadee	1671-46871	May 16, 00	Mig	ASY	July 26, 06	Mig	8+ years	

There were two reports of LSLBO banded birds recovered at other locations in 2006. Both birds were hatch-year female Northern Saw-whet Owls banded during the 2005 Northern Saw-whet Owl Monitoring Project. The first owl was banded on September 18 and recovered on October 11th at the Wind Mountain Banding Station in Montana. The second owl was banded on October 7th and recovered on November 13th near East Glacier, Montana.

8.0 Canada Warbler Project

The Canada Warbler Project was implemented in 2003 to study the breeding ecology of Canada Warblers nesting within the FEGU, ROAD, and RESI MAPS stations. The objectives of the project is to determine the abundance of breeding pairs in the study site, territory size, nest locations, growth rates of hatchlings, and to observe nesting behaviour.

Very little territory mapping was conducted in 2006 because of a late start to the Canada Warbler Project due to staff commitments to spring migration monitoring and the MAPS program. The focus was switched to nest searches and nest monitoring. Three Canada Warbler nests were found in the 2006 season. The first nest was found on June 20th with four eggs. The eggs hatched on July 1st and all four birds successfully fledged from the nest on July 9th at eight days old. The second nest was found on June 22nd with 4 young, approximately four days old. The young fledged the nest four days later. The third nest was found on June 27th with 4 eggs. The eggs hatched on July 5th. The young fledged from the nest on July 13th at eight days old. All the nestlings were banded before they left their nests.

Nestlings were measured daily to determine growth rates. Nests were monitored daily with video recording equipment provided by Tyler Flockhart. Passive monitoring was used to observe nest behaviour such as the frequency and length of time the female spent incubating. Recording sessions lasted two hours, and each nest was recorded at least once a day, but often two recordings (one in the morning and one in the evening) were possible. A total of 43 recording sessions occurred on all three nests. Nest one was recorded 25 times, nest two was recorded 6 times, and nest three was recorded 12 times. Results of the recordings were not available when this report was completed.

The main issue with the Canada Warbler Project is the availability of staff to commit to the project. Although the data collection is simple, it is time consuming to search out the breeding locations, locate nests, and to conduct the nest monitoring. The priorities of the LSLBO staff are to the migration monitoring and MAPS projects, all other projects are secondary. Every year a little data is collected from the project, and within a few years, there should be enough to compile together to publish in a paper format. Ideally, one staff member would be committed entirely to the Canada Warbler Project, but that has yet been able to happen.

9.0 Northern Saw-whet Owl Migration Monitoring

Northern Saw-whet Owl fall migration monitoring continued in 2006 for its third year of monitoring. Monitoring began on August 21st and ended on October 20th. Weather conditions and staff availability allowed for banding attempts on 46 nights. Mist-nets were set for a total of 684 net hours and 200 Northern Saw-whet Owls were banded in 2006. The majority of the captured owls were hatch-year birds (Table 8) and females (Table 9), which is consistent with age and sex proportions seen in the previous years of owl banding.

Northern Saw-whet Owls are the target species for the project, but other owls will respond to the audio lure used to catch the Saw-whets. Barred Owls have come in to investigate the lure, which occurred two times this fall, but they tend to remain at the canopy level and out of range of the mist-nets. Reports indicate that Boreal Owls will also respond to the lure and sometimes be captured. It is a little surprising that there has not been a Boreal Owl banded at the LSLBO yet since the banding occurs within their breeding habitat. The LSLBO finally captured a different species of owl in 2006. A Long-eared Owl was banded on October 13th. It was the first banding record for the LSLBO (bringing the total number of species banded at the LSLBO to 97) and doubled the number of species banded through the project (to two).

The first Northern Saw-whet Owl was captured on August 26th. Owls began to be captured on a nightly basis by the end of August. It was the busiest owl banding season seen yet at the LSLBO, frequently achieving high nightly banding totals. The busiest banding night occurred October 12th when 19 Saw-whets were banded. Banding totals reached 17 on three occasions (September 17th, 20th, and 25th). 16 owls were banded on September 12th, and 15 owls were banded on September 15th. Compared with the 2005 season, when single busiest night of banding was 14 owls.

Table 8. Number of Northern Saw-whet Owls captured by age class: 2004-2006

Year	HY	AHY	SY	ASY	Total
2004	65		14	12	91
2005	87	1	33	13	134
2006	158	1	31	10	200
Total	310	2	78	35	425

Table 9. Number of Northern Saw-whet Owls captured by sex class: 2004-2006

Year	Male	Female	Unknown	Total
2004	5	67	19	91
2005	5	89	40	134
2006	8	157	35	200
Total	18	313	94	425

10.0 Staff and Volunteers

The banding station was staffed with two banders in 2006: Richard Krikun, the Bander-in-Charge, and Sara Scobie, the assistant bander. It was their duty to ensure that daily monitoring operations were conducted and the necessary paperwork was completed. Together they accounted for 204 person days throughout the summer at the banding lab (Table 10).

Volunteer participation at the observatory was high in 2006 and accounted for 120 person days. The high amount of volunteer activity was due to the assistance to two long-term volunteers. Erica Forrester spent almost the entire field season assisting at the banding lab. She arrived for the first day of spring migration monitoring and remained at the banding station until the end of August. She then switched to assist at the Boreal Centre for Bird Conservation. Dave Kallai spent most of August at the banding lab to gain banding experience and to improve on identification skills. Together, Erica and Dave spent 91 days at the banding station.

Table 10. Number of staff and volunteer days at the LSLBO in 2006.

Spring	MAPS	Fall	Total
47	13	70	130
30	16	28	74
1			1
		2	2
78	29	100	207
40	6	24	70
5			5
4			4
	10		10
	6		6
		21	21
		2	2
		2	2
49	22	49	120
	47 30 1 78 40 5 4	47 13 30 16 1 1 78 29 40 6 5 4 10 6	47 13 70 30 16 28 1 2 78 29 100 40 6 24 5 4 10 6 21 2 2 2

The LSLBO also had two international visitors: Catherine Barlow from England, and Meredith Swett from the United States. Both stayed for a week and helped with the MAPS banding and the Canada Warbler Project.

The LSLBO also had the opportunity to assist with bander training in 2006. Alicia Kelly and Katie Cameron, from the Beaverhill Bird Observatory, came to the LSLBO in July to gain some experience with fall migration banding. The Beaverhill Bird Observatory begins fall banding after the LSLBO, so it was an excellent opportunity for the two banders to gain fall banding experience. Volunteering at another banding station was part of the conditions set for them to obtain their banding permits.

11.0 Visitors and Education

Education remains one of the priority mandates of the LSLBO. With the opening of the Boreal Centre for Bird Conservation this year, some of the weight of education component was lifted from the banders. One of the goals this year was to reduce the amount of walk-in visitors to the banding station and move towards organized banding lab tours originating from the Boreal Centre. This would increase the visitation to the Boreal Centre, allow the banders to focus on migration monitoring, and maintain a tangible birding experience for visitors.

600 visitors came to the banding station in 2006 (Table 11). General walk-in traffic was reduced from previous years. 10 organized tours were held throughout the summer. The Slave Lake Junior Bird Club and the Hay River Scout Troup visited the banding station during the spring. A group from the Anglo-diocese of Edmonton watched banding in the fall. Seven Boreal Centre lab tours were run throughout the fall, lead by either Parks or Boreal Centre staff. Turn out on most tours was good and over 100 visitors participated in the banding lab tours.

Table 11. Visitation at the banding station in 2006.

Season	Adults	Children	Songbird	Groups	Total
			Feastival		Visitors
Spring Migration	84	18	40 (5 tours)	34 – 2 groups	176
Fall Migration	229	69		126 – 8 groups	424
Total	313	87	40	160	600

The annual Songbird Festival was held on June 3rd, and is one of the largest public draws to the banding lab. The format for the Songbird Festival changed this year. Traditionally, the activities and pancake breakfast were held in the parking lot of the LSLBO banding lab with hourly tours led from the banding station. This year, the activities and breakfast of the Songbird Festival were held at the Boreal Centre. Guided tours were held throughout the morning and consisted of a walk from the Boreal Centre to the banding lab. Unfortunately, the weather did not cooperate for the 2006 Songbird Festival. It was a windy, cool, and overcast day, which kept participation on the banding lab hikes low. Wet weather conditions limited road access and put time constraints on all tours. However, nets were set and almost all the visitors on the tours were able to see a banding demonstration.

12.0 Recommendations

The LSLBO's monitoring activities ran smoothly for the 2006 banding season. There are a few recommendations for upcoming banding seasons.

The scheduled banding lab tours hosted by the Boreal Centre worked very well. Walk-in visitation rates were reduced and the presence of a knowledgeable tour leader allowed the banders to focus on migration monitoring. All the banding lab tours were held in the fall, potentially the busiest banding season. The guided tours ensured that the visitors have a good experience in case the banders were overrun with birds in the mist-nets. The lab tours seemed to have found a good balance between the education and monitoring priorities of the banding station and should be maintained in future years.

The LSLBO has had only one licensed bander for the past two field seasons; the assistant bander did not possess a banding permit. This put a great strain on the licensed bander who is required to be present during all banding activities. The Banding Office requires a banding permit candidate to have extensive knowledge of bird banding and the testimonial of two experienced banders. It is recommended to investigate solutions for the assistant bander to obtain their license and to find a second experienced bander to sign the testimonial. Possible solutions are to participate in banders workshops (usually at least one is held every year), or to visit another banding station to gain further banding experience. The banders from Beaverhill Bird Observatory both came to band at the LSLBO as part of their conditions to gain their permits. It may be possible to swap banders with Beaverhill in future years.

The LSLBO had an incredible volunteer base this year. The LSLBO achieved its goal of including as many long-term volunteer commitments as possible in 2006. This may not happen in future seasons. It is recommended to find local support to create a local volunteer base to call upon to help with the banding activities.

13.0 Acknowledgments

The 2006 was a successful year at the LSLBO. It was partially due to the hard work and dedication from the banding staff. The true success of the banding station came from many other people who ensured that the banding station would operate in 2006, providing logistical and support roles through the banding season and throughout the rest of the year.

We would like to thank the following people:

The LSLBO Board of Directors for the amazing amount of work they dedicate to the organization: Bob Deacon, Rhonda Groom, Peter Moore, Nanci Langford, Chelsea Martin, Jul Wojnowski, and Kevin Hanna.

Amy Wotton, the Executive Director of the LSLBO, for providing day to day support for the banding station.

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The Boreal Centre for Bird Conservation staff: Patti Campsall, Sharlene Ray, and Will Faughnan.

All the volunteers who helped at the banding lab. Special thanks goes to Erica Forrester for the amazing amount of time and work she put into at the banding station. We would also thank: Dave Kallai, Catherine Barlow, Meredith Swett, James Churchill, Jessica Murray, Alicia Kelly, Katie Cameron, Tyler Flockhart, and Jul Wojnowski.

We would also like to thank some of the frequent visitors to the banding station throughout the year: Aaron Lehman, Wayne Bowles, and Ken Orich. They always provided great company, great stories, and their visits made the banding day that much better.

Appendix I: Annual Banding Totals

	1993-2004	2005	2006 Spring	2006	2006 Fall	Grand
Species			Migration	MAPS	Migration	Total
"Audubon's" Warbler	2					2
Alder Flycatcher	1389	42	26		27	1484
American Goldfinch	1					1
American Kestrel	1					1
American Magpie	1					1
American Pipit	18					18
American Redstart	4947	266	31	26	256	5526
American Robin	183	13	12	2	15	225
American Tree Sparrow	302	1	2		12	317
Baltimore Oriole	4				1	5
Bay-breasted Warbler	51	13		1	19	84
Black-and-White Warbler	844	84	8	2	86	1024
Blackburnian Warbler	1					1
Black-capped Chickadee	588	25		8	19	640
Blackpoll Warbler	258	16			5	279
Black-throated Green						
Warbler	82	9			8	99
Blue Jay	19	2	1		6	28
Blue-headed Vireo	59	3			2	64
Boreal Chickadee	23	1				24
Brown Creeper	14	1			3	18
Brown -headed Cowbird	3	1				4
Canada Warbler	1627	176	26	33	92	1954
Cape May Warbler	81	3			13	97
Cedar Waxwing	89	7			5	101
Chestnut-sided Warbler	18	3				21
Chipping Sparrow	1500	122	19	2	4	1647
Clay-colored Sparrow	650	35	8		5	698
Common Grackle	1					1
Common Yellowthroat	446	15	10	2	17	490
Connecticut Warbler	19	4				23
Cooper's Hawk	1					1
Downy Woodpecker	30	1			2	33
Eastern Phoebe	76	4	10	7	1	98
Evening Grosbeak	1					1
Fox Sparrow	30				3	33
Golden-crowned Kinglet	56	3			1	60
Gray Catbird	5					5
Gray Jay	2					2
Gray-cheeked Thrush	59	2	9		2	72

	1993-2004	2005	2006 Spring	2006	2006 Fall	Grand
Species			Migration	MAPS	Migration	Total
Hairy Woodpecker	10	1	<u> </u>		1	12
Harris's Sparrow	5					5
Hermit Thrush	207	39	12	8	13	274
House Wren	16	1	1		2	20
Lapland Longspur	4					4
Lazuli Bunting	1					1
Le Conte's Sparrow	3					3
Least Flycatcher	1580	44	10		27	1661
Lincoln's Sparrow	455	35	10	3	40	543
Long-eared Owl					1	1
MacGillivray's Warbler	2					2
Magnolia Warbler	687	40	6		44	787
Marsh Wren	2				1	3
Mourning Warbler	594	54	15	7	38	708
Nashville Warbler	3					3
Northern Flicker	10		1		2	13
Northern Goshawk					1	1
Northern Mockingbird	1					1
Northern Pygmy-Owl	2					2
Northern Saw-whet Owl	96	134			200	430
Northern Shrike	1					1
Northern Waterthrush	370	34	25	1	22	452
Orange-crowned Warbler	750	54	10		29	843
Olive-sided Flycatcher	1					1
Ovenbird	1013	196	32	32	222	1495
Western Palm Warbler	177	4	1		2	184
Philadephia Vireo	120	15			15	150
Pileated Woodpecker	1					1
Pine Siskin	147	2				149
Purple Finch	40	1	1		5	47
Red-breasted Nuthatch	94	1			1	96
Red-eyed Vireo	488	30	6	1	21	546
Red-winged Blackbird	5					5
Rose-breasted Grosbeak	165	21	2		20	208
Ruby-crowned Kinglet	249	28	7		12	296
Savannah Sparrow	105	2	2		5	114
Sharp-shinned Hawk	210	28	3	1	17	259
Slate-colored Junco	560	38	11		47	656
Song Sparrow	127	14	10		14	165
Swainson's Thrush	2142	242	54	17	218	2673
Swamp Sparrow	108	8			9	125
Tennessee Warbler	3302	429	23	32	289	4075
Varied Thrush	1	1			1	3
Veery	6					6
Vesper Sparrow	1					1
Warbling Vireo	49	2	1			52

	1993-2004	2005	2006 Spring	2006	2006 Fall	Grand
			Migration	MAPS	Migration	Total
Species						
Western Tanager	97	6			13	116
Western Wood-Pewee	19					19
White-breasted Nuthatch	2				3	5
Gambel's White-crowned Sparrow	274	9	4		14	301
White-throated Sparrow	1414	119	47	36	56	1672
White-winged Crossbill	1					1
Wilson's Warbler	403	19			9	431
Winter Wren	11	4		2		17
Yellow Warbler	2301	195	5		172	2673
Yellow-bellied Flycatcher	63	2	2			67
Yellow-bellied Sapsucker	67	3	4		9	83
Yellow-rumped Warbler	6499	280	67	9	243	7098
Total number of birds						
banded	38552	2982	534	213	2442	44723
Total number of species banded	95	64	40	23	62	97

APPENDIX II. Species arrival and departure dates and maxima at LSLBO in 2006.

The following list includes seasonal first and last dates and maximum total for each of the 131 species in encountered in 2006. Seasonal first and last dates and maximum totals for 2005 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 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 30 - 1	May 2 - 2	Jul 13 - 1	July 12 - 2
Last Sighting	June 10 - 2	Jun 10 - 3	Sep 26 - 1	Sep 16 - 1
Peak Day	May 17 - 21	May 15 - 30	Aug 6 - 10	Sep 2 - 5

Red-necked Grebe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	Apr 28 - 1	Jul 20 - 2	Jul 13 – 1
Last Sighting	Jun 2 - 4	Jun 9 - 2	Sep 26 - 4	Sep 26 – 2
Peak Day	May 13 - 20	May 8 - 16	Sep 3 & 7 - 16	Aug 19 - 8

Horned Grebe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting				Aug 6 – 2
Last Sighting				Sep 28 – 2
Peak Day				Sep 2 – 10

Eared Grebe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting		May 7 - 2		Aug 14 - 1
Last Sighting				Aug 18 - 2
Peak Day				3 dates - 2

Western Grebe:

	Spring 2005	Spring 2005	Fall 2006	Fall 2005
First sighting	May 17 - 4	May 27 - 2	Aug 14 - 4	Sep 1 - 1
Last Sighting	Jun 5 - 1		Sep 24 - 4	Sep 13 - 4
Peak Day			Sep 3 - 32	Sep 11 -28

American White Pelican:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 1 - 1	May 9 - 3	Jul 15 - 1	Jul 13 - 1
Last Sighting	June 10 - 3	Jun 10 - 2	Sep 29 - 1	Sep 11 - 2
Peak Day	May 24 - 14	Jun 8 - 13	Aug 18 - 15	Aug 27 - 12

Double-crested Cormorant:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 7 - 19	May 27 - 3		
Last Sighting	May 21 - 35	Jun 5 - 1		
Peak Day				

Great Blue Heron:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	May 5 - 2	Aug 1 - 1	Jul 23 - 1
Last Sighting	May 30 - 1	May 11 -1	Aug 30 - 1	Sep 28 - 1
Peak Day	1 – 4 dates		Aug 7 - 3	3 dates - 1

Greater White-fronted Goose:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 244	May 2 - 30	Sep 7 - 25	Sep 10 - 72
Last Sighting	May 11 - 26	May 10 - 237	Sep 26 - 3	Sep 27 - 1
Peak Day	May 6 - 3295	May 3 - 1966	Sep 22 - 162	Sep 16 - 1257

Snow Goose:				
	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 6 - 29			
Last Sighting				
Peak Day				

Canada Goose:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 13	Apr 25 - 2	Jul 12 - 18	Jul 23 - 1
Last Sighting	Jun 10 - 50	Jun 8 - 2	Sep 29 - 2	Sep 16 - 15
Peak Day	May 31 - 74	May 28 - 22	Aug 19 - 61	Sep 15 - 86

Green-winged Teal:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 29 - 12	Apr 26 - 18		
Last Sighting	May 29 - 3	Jun 1 - 1		
Peak Day				

Mallard:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 12	Apr 25 - 4	Jul 12 - 14	Jul 22 – 1
Last Sighting	Jun 10 - 2	Jun 9 - 2	Sep 29 - 8	Sep 25 – 1
Peak Day	Apr 25 - 16	Jun 6 - 13	Sep 22 - 21	Jul 29, Sep 13 - 6

Northern Pintail:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 2			
Last Sighting	May 5 - 5			
Peak Day				

Blue-winged Teal:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 6 - 2	May 14 -1	Aug 29 - 12	
Last Sighting	May 31 - 3	Jun 10 - 1	Sep 18 - 4	
Peak Day	May 14 - 4	Jun 4 - 4		

Northern Shoveler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 28 - 8			
Last Sighting				
Peak Day				

Gadwall:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 21 - 2	Apr 26 - 2		
Last Sighting		May 12 - 2		
Peak Day				

American Wigeon:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 36	Apr 26 - 8	Jul 27 - 1	
Last Sighting	Jun 10 - 1	Jun 10 - 2	Sep 21 - 2	
Peak Day	Apr 27 - 50	Apr 26 & 28 - 8	Sep 17 - 4	

Long-tailed Duck:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 4 - 62	May 2 - 17		
Last Sighting	May 17 - 12	May 15 - 5		
Peak Dav	May 6 - 85	May 3 - 144		

Surf Scoter:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 4 - 5	May 3 - 15	Jul 30 - 3	Sept 5 - 1
Last Sighting	Jun 2 - 2	Jun 2 - 1		
Peak Day	May 19 - 91	May 13 - 132		

White-winged Scoter:

U	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 11 - 20	May 8 - 27		Sep 5 - 3
Last Sighting	May 30 - 17	May 26 - 2		
Peak Day				

Common Goldeneye:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 20	Apr 25 - 14	Jul 12 - 1	Jul 12 – 5
Last Sighting	Jun 10 - 6	Jun 10 - 2	Sep 29 - 9	Sep 29 – 1
Peak Day	May 17 - 30	Apr 28 - 38	Sep 18 - 72	Sep 17 - 47

Bufflehead:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 3	May 2 - 2	Sep 13- 3	Jul 19 - 1
Last Sighting	May 24 - 2	May 24 - 1	Sep 29 - 7	Sep 29 - 4
Peak Day	May 17 - 5	May 3 - 3	Sep 22 - 26	Sep 17 - 25

Common Merganser:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 15	Apr 25 - 7	Jul 16 - 2	Jul 12 - 30
Last Sighting	Jun 10 - 110	Jun 10 - 7	Sep 28 - 3	Sep 24 – 2
Peak Day	May 24 - 114	Jun 4 - 47	Aug 22 - 21	

Red-breasted Merganser:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 28 - 4	Apr 27 - 2		Jul 17 - 1
Last Sighting	Jun 9 - 4	Jun 9 - 9		
Peak Day	May 31 - 44	May 6 - 11		

Osprey:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 29 - 1	May 14 - 2	Jul 12 - 1	Jul 13 – 1
Last Sighting	Jun 9 - 1	Jun 6 - 1	Sep 6 - 1	Sep 5 – 1
Peak Day	Jun 3 - 4	May 22 - 3	Aug 4 - 4	Jul 14 & 17 - 3

Bald Eagle:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	Apr 25 - 1	Jul 12 - 1	Jul 13 – 1
Last Sighting	Jun 10 - 1	Jun 10 - 1	Sep 29 - 1	Sep 29 – 2
Peak Day	Jun 5 - 4	Apr 27, May 4 - 4	Several dates - 4	Sep 19 – 6

Northern Harrier:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	Apr 25 - 1	Jul 21 - 1	Jul 25 - 1
Last Sighting	Jun 5 - 1	Jun 10 - 1	Sep 27 - 1	Sep 28 - 1
Peak Day	May 6 - 40	May 4 - 6	Aug 25&Sep 22-4	Aug 28 - 5

Sharp-shinned Hawk:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 3	Apr 26 - 1	Jul 18 - 1	Jul 18 - 2
Last Sighting	Jun 3 - 1	Jun 7 - 1	Sep 27 - 1	Sep 28 - 2
Peak Day	3 - 5 dates	May 9 - 5	Aug 20 - 13	Aug 19 - 18

Northern Goshawk:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 5 - 1		Aug 21 - 1	Aug 15 - 1
Last Sighting			Sep 13 - 1	
Peak Day			7 dates - 1	

Red-tailed Hawk:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	Apr 29 – 1	Aug 22 - 1	Jul 13 - 1
Last Sighting	May 15 - 1		Sep 23 - 1	Sep 1 - 1
Peak Day	May 1 - 2		3 dates - 2	3 dates - 1

Rough-legged Hawk:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2			Sep 24 – 1
Last Sighting	May 5 - 1			
Peak Day	2 - 3 dates			

Merlin:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 1	May 4 - 1	Jul 12 - 1	Jul 30 - 1
Last Sighting	Jun 1 - 1	May 27 - 1	Sep 24 - 1	Sep 10 - 1
Peak Day	May 6 - 4		3 dates - 2	

Peregrine Falcon:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 9 - 1		Sep 20 - 1	Sep 26 – 1
Last Sighting	Jun 3 - 1		Sep 22 - 1	
Peak Day				

Ruffed Grouse:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	Apr 25 - 1	Jul 15 - 2	Jul 19 - 1
Last Sighting	Jun 2 - 1	Jun 9 - 1	Sep 29 - 1	Sep 27 - 4
Peak Day	3 – 2 dates	Several dates - 2	Jul 25 - 4	Jul 27 - 6

Sandhill Crane:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	May 3 - 32	Sep 5 - 3	Sep 10 - 4
Last Sighting	May 15 - 6	May 10 - 10	Sep 24 - 65	Sep 26 - 30
Peak Day	May 7 - 300	May 9 - 59	Sep 8 - 154	Sep 24 - 90

Semipalmated Plover:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting				
Last Sighting				
Peak Day				

Killdeer:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 27 - 4	Apr 25 - 1	Jul 29 - 1	Aug 17 - 1
Last Sighting	Jun 6 - 1		Aug 27 - 5	Aug 26 - 1
Peak Day	Apr 29 - 8			

Greater Yellowlegs:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 10	Apr 28 – 2	Jul 20 - 1	Jul 19 – 1
Last Sighting	May 31 - 1	May 27 – 1	Sep 26 - 2	
Peak Day	Apr 29 - 73	Apr 28, May 3 - 2	Aug 16 - 55	

Spotted Sandpiper:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 28 - 1	May 9 - 2	Jul 16 - 1	Jul 12 - 1
Last Sighting	Jun 10 - 5	Jun 10 - 2	Aug 27 - 2	Sep 9 - 1
Peak Day	May 21 - 11	May 19 - 15	Aug 18 - 15	Aug 20 - 9

Least Sandpiper

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Sep 1 - 30	
Last Sighting			Sep 4 - 8	
Peak Day				

Common Snipe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 1	May 12 - 1		
Last Sighting		May 22 - 1		
Peak Day				

Franklin's Gull:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 27 - 6	Apr 25 - 16	Jul 12 - 140	Jul 17 - 32
Last Sighting	Jun 4 - 6	Jun 4 - 1	Aug 18 - 54	Sep 3 - 5
Peak Day	May 18 - 144	May 16 - 36	Jul 16 - 3366	Aug 2 - 1731

Ring-billed Gull:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	May 2 - 3	Jul 14 - 7	Jul 14 – 2
Last Sighting	May 5 - 3	Jun 9 - 4	Sep 29 - 1	Sep 28 – 6
Peak Day		May 7 - 21	Aug 19 - 8	Jul 20 - 104

Herring Gull:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	Apr 25 - 10	Jul 14 - 7	Jul 17 - 1
Last Sighting	Jun 7 - 1	Jun 9 - 2	Sep 3 - 2	Sep 6 - 2
Peak Day	May 10 - 22			3 dates - 4

Common Tern:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 12 - 2	May 14 - 3	Jul 12 - 2	Jul 14 - 1
Last Sighting	Jun 10 - 1	Jun 10 - 2	Sep 7 - 1	Sep 7 - 6
Peak Day	May 19 - 8	May 29 - 8	Sep 4 - 20	Aug 5 - 25

Forster's Tern:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 22 - 2	Jun 8 - 1	Jul 15 - 2	Sep 2 – 1
Last Sighting	May 27 - 1		Jul 20 - 2	
Peak Day	May 22 & 23 - 2			

Mourning Dove:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 17 - 1	May 16 - 1		
Last Sighting	May 23 - 1	Jun 4 - 1		
Peak Day	2 dates - 1	2 dates - 1		

Belted Kingfisher:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 5 - 1	May 7 - 1	Jul 13 - 1	Aug 19 - 1
Last Sighting	Jun 5 - 1	May 19 - 1	Sep 22 - 1	Sep 2 - 1
Peak Day	May 10 - 3	3 dates - 1	9 dates - 1	4 dates - 1

Yellow-bellied Sapsucker:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 28 - 1	May 9 - 1	Jul 13 - 1	Jul 25 - 1
Last Sighting	May 27 - 1	May 27 - 1	Sep 3 - 1	
Peak Day	May 17 - 4	May 15 - 2	3 dates - 3	

Downy Woodpecker:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1		Jul 21 - 1	Jul 15 – 1
Last Sighting	May 13 - 1		Sep 27 - 1	Sep 28 – 1
Peak Day	Apr 28 - 2		3 dates - 2	4 dates – 1

Hairy Woodpecker:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 1	Apr 25 - 1	Aug 4 - 1	Jul 12 - 1
Last Sighting	May 23 - 1	Jun 1 - 1	Sep 29 - 1	Sep 28 - 1
Peak Day	3 dates - 1	May 27 - 2	Aug 26 - 2	Several dates - 1

Northern Flicker:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 31	Apr 25 - 2	Jul 15 - 1	Jul 20 - 2
Last Sighting	May 29 - 1	Jun 10 - 1	Sep 7 - 1	Sep 16 - 1
Peak Day	Apr 26 - 73	Apr 28, May 4 - 4	Aug 17 - 3	3 dates - 2

Pileated Woodpecker:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 1	Apr 25 - 1	Jul 25 - 1	Aug 10 - 1
Last Sighting	Jun 1 - 1	May 5 - 1	Aug 22 - 1	Sep 26 - 1
Peak Day	9 dates - 1	3 dates - 1	Jul 28 & 30 - 2	Aug 27, Sep 11 -2

Olive-sided Flycatcher:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Jun 3 – 1			
Last Sighting				
Peak Day				

Western Wood-Pewee:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 21 - 1	May 27 - 1		
Last Sighting	May 23 - 1	Jun 7 - 1		
Peak Day	2 dates - 1	4 dates - 1		

Yellow-bellied Flycatcher:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Jun 5 - 1	Jun 5 - 1		Jul 27 - 1
Last Sighting	Jun 6 - 1			
Peak Day	2 dates - 1			

Alder Flycatcher:

_	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 24 - 1	May 31 - 1	Jul 12 - 2	Jul 12 - 4
Last Sighting	Jun 10 - 8	Jun 10 - 7	Sep 2 - 1	Sep 5 - 1
Peak Day	Jun 6 - 12		5 dates - 3	Aug 4 - 14

Least Flycatcher:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 12 - 1	May 12 -1	Jul 13 - 1	Jul 13 -2
Last Sighting	Jun 10 - 1	Jun 7 - 1	Sep 3 - 2	Sep 17 - 1
Peak Day	May 22 - 8	May 19 - 11	Jul 25 - 10	Aug 15 - 10

Eastern Phoebe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	Apr 25 - 1	Jul 12 - 3	Jul 13 - 1
Last Sighting	Jun 10 - 3	Jun 10 - 2	Aug 25 - 1	Jul 29 - 1
Peak Day	May 1 & 2 - 6	May 9 - 4	Jul 30 - 4	Jul 15 - 3

Say's Phoebe:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 29 - 1	May 4 - 1	Aug 28 - 1	
Last Sighting	May 10 - 3	May 17 - 1		
Peak Day	May 6 - 5			

Eastern Kingbird:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 6 - 2	May 4 - 1	Aug 20 - 3	Aug 10 - 1
Last Sighting	Jun 5 - 1	May 27 - 1	Aug 22 - 4	Aug 21 - 2
Peak Day	May 11 - 5	May 5 - 5		Aug 16 - 3

Blue-headed Vireo:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 15 - 1	May 14 - 1	Aug 4 - 1	Aug 4 - 1
Last Sighting	May 27 - 1	May 31 -1	Aug 8 - 1	Sep 5 - 1
Peak Day	May 24 - 2	May 23 - 2		Aug 23 - 2

Warbling Vireo:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 19 - 2	May 28 - 1		Aug 5 - 1
Last Sighting	May 26 - 1	May 29 - 1		Aug 15 - 1
Peak Day	May 19 & 22 - 2			3 dates - 1

Philadelphia Vireo:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 26 - 1	May 30 -1	Jul 19 - 2	Jul 28 - 2
Last Sighting	May 29 - 1	Jun 10 - 1	Sep 2 - 1	Sep 11 - 1
Peak Day	3 dates - 1	Jun 1 - 2	Aug 17 - 4	Jul 30, Aug 10 - 3

Red-eyed Vireo:

-	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 23 - 1	May 19 - 1	Jul 12 - 3	Jul 12 - 5
Last Sighting	Jun 10 - 8	Jun 10 - 7	Sep 18 - 1	Sep 11 - 1
Peak Day		Jun 7 - 8	Jul 26 - 8	Jul 25 - 7

Gray Jay:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 28 - 1	Jun 4 - 1		Sept 26 - 1
Last Sighting				
Peak Day				

Blue Jay:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 29 - 1	Apr 27 - 1	Jul 12 - 1	Jul 28 - 1
Last Sighting	Jun 8 - 1	Jun 9 - 1	Sep 26 - 1	Sep 22 - 1
Peak Day	May 5 - 8	May 5 & 17 - 3	Aug 20 - 6	Sep 7 - 8

American Magpie:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005	
First sighting	Apr 25 - 4	Apr 25 - 1	Jul 12 - 1	Aug 1 - 6	
Last Sighting	Jun 10 - 2	Jun 4 - 1	Sep 29 - 2	Sep 28 - 1	
Peak Day	Apr 28 - 10	May 27 - 3	3 dates - 8	Sep 15 - 18	

American Crow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 13	Apr 25 - 6	Jul 12 - 3	Jul 12 - 2
Last Sighting	Jun 10 - 3	Jun 10 - 5	Sep 5 - 2	Sep 29 - 2
Peak Day	May 5 - 25	May 4 - 21	Aug 10 - 15	Aug 21 - 59

Common Raven:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 3	Apr 25 - 2	Jul 12 - 2	Jul 12 – 2
Last Sighting	Jun 10 - 1	Jun 10 - 1	Sep 29 - 6	Sep 29 – 5
Peak Day	Apr 29 & 30 - 8	May 15 - 5	Sep 28 - 23	Sep 23 - 17

Tree Swallow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 27 - 1	May 6 - 3	Jul 12 - 1	Jul 16 - 25
Last Sighting	Jun 10 - 2	Jun 9 - 2	Aug 8 - 2	Aug 8 - 1
Peak Day	May 10 - 576	May 9 - 208	Jul 28 - 32	

Barn Swallow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 10 - 3	May 22 - 1	Jul 13 - 1	
Last Sighting	Jun 3 - 1		Sep 19 - 3	
Peak Day	May 27 - 5			

Black-capped Chickadee:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	Apr 26 - 2	Jul 12 - 4	Jul 12 - 6
Last Sighting	Jun 10 - 4	Jun 8 - 1	Sep 29 - 3	Sep 28 - 9
Peak Day	May 10 - 7	May 3 - 5	3 dates - 20	Jul 29 - 22

Boreal Chickadee:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Aug 14 - 1	Sep 3 - 1
Last Sighting			Sep 22 - 1	Sep 22 - 1
Peak Day			Sep 20 - 3	3 dates - 1

Red-breasted Nuthatch:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 30 - 1	Jun 4 - 1	Jul 17 - 1	Jul 29 - 1
Last Sighting	May 29 - 1		Sep 27 - 1	Sep 28 - 3
Peak Day	5 dates - 1		Aug 30 - 5	

White-breasted Nuthatch:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 19 - 1		Aug 30 - 1	
Last Sighting			Sep 24 - 3	
Peak Day				

House Wren:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 29 - 1	Jun 7 - 1	Jul 28 - 2	
Last Sighting	Jun 9 - 1		Aug 22 - 1	
Peak Day				

Winter Wren:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	Apr 25 - 1		Jul 12 - 1
Last Sighting	Jun 10 – 2	Jun 10 - 1		Sep 15 - 1
Peak Day	May 11 & 12 - 3	7 dates - 2		3 dates - 2

Marsh Wren:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Sep 24 - 1	
Last Sighting				
Peak Day				

Golden-crowned Kinglet:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Sep 12 - 1	Aug 31 - 1
Last Sighting			Sep 29 - 2	Sep 26 - 2
Peak Day			Sep 18 - 7	Sep 25 - 3

Ruby-crowned Kinglet:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 2	Apr 25 - 1	Jul 20 - 3	Jul 20 - 1
Last Sighting	Jun 6 - 1	Jun 9 - 1	Sep 28 - 1	Sep 28 - 5
Peak Day	Apr 26 - 9	May 4 & 5 - 6	Sep 17 - 22	Sep 11 - 8

Gray-cheeked Thrush:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 16 - 2	May 15 - 1	Sep 17 - 1	
Last Sighting	May 23 - 1	May 30 - 1	Sep 18 - 1	
Peak Day	May 21 - 6			

Swainson's Thrush:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 14 - 1	May 6 - 1	Jul 12 - 4	Jul 12 - 2
Last Sighting	Jun 10 - 4	Jun 10 - 4	Sep 27 - 1	Sep 17 - 1
Peak Day	3 dates - 12	May 18 - 11	Jul 28 - 20	Aug 15 & 24 - 16

Hermit Thrush:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	Apr 25 - 1	Jul 12 - 1	Jul 27 - 1
Last Sighting	May 22 - 1	Jun 7 - 1	Sep 25 - 1	Sep 29 - 1
Peak Day	Apr 27 - 5	May 16 - 5	3 dates - 2	Sep 26 - 4

Varied Thrush:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Sep 18 - 1	Sep 7 - 1
Last Sighting				
Peak Day				

American Robin:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 160	Apr 25 - 3	Jul 12 - 4	Jul 12 - 3
Last Sighting	Jun 10 - 2	Jun 10 - 2	Sep 26 - 2	Sep 28 - 3
Peak Day	Apr 26 - 1660	May 9 - 23	Aug 7 - 10	Jul 25 - 12

American Pipit:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	May 12 - 1	Aug 10 - 12	Aug 24 - 1
Last Sighting	May 13 - 40	May 23 - 1	Sep 28 - 4	Sep 27 - 21
Peak Day	May 6 - 465	May 15 - 6	Sep 21- 107	Sep 5 - 47

Cedar Waxwing:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 27 - 3	May 19 - 2	Jul 12 - 4	Jul 12 - 7
Last Sighting	Jun 10 - 4	Jun 10 - 16	Sep 24 - 2	Sep 25 - 1
Peak Day	Jun 5 - 587	Jun 1 - 33	Aug 14 - 24	Aug 19 - 82

Tennessee Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 18 - 1	May 17 - 50	Jul 12 - 9	Jul 12 - 2
Last Sighting	Jun 10 -5	Jun 10 - 4	Aug 27 - 19	Sep 3 - 2
Peak Day	May 26 - 18		Aug 22 - 150	Aug 19 - 138

Orange-crowned Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 2	May 3 - 4	Jul 20 - 6	Sep 5 - 1
Last Sighting	May 13 - 3	May 23 - 1	Sep 27 - 1	Sep 28 - 3
Peak Day	May 6 - 25	May 9 - 22	Sep 18 - 22	Sep 10 - 19

Yellow Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 13 - 3	May 15 - 1	Jul 12 - 14	Jul 12 - 17
Last Sighting	Jun 10 - 6	Jun 10 - 14	Sep 5 - 2	Aug 27 - 1
Peak Day	May 26 - 24	May 19 - 61	Aug 6 - 54	Jul 25 - 71

Magnolia Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 23 - 1	May 27 - 1	Jul 12 - 2	Jul 12 - 2
Last Sighting	Jun 10 -1	Jun 8 - 1	Sep 18 - 1	Sep 10 - 2
Peak Day	May 29 - 4	May 28 - 5	Aug 17 - 13	Aug 15 - 4

Cape May Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Jul 20 - 1	Aug 14 - 2
Last Sighting			Aug 27 - 2	Sep 28 - 1
Peak Day			Jul 22 - 4	

Yellow-rumped Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 13	Apr 25 - 6	Jul 12 - 11	Jul 12 - 24
Last Sighting	Jun 9 - 1	Jun 10 - 5	Sep 27 - 10	Sep 28 - 13
Peak Day	May 10 - 2020	May 9 - 362	Aug 27 - 913	Sep 2 - 490

Black-throated Green Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 23 - 1	May 13 - 1	Jul 12 - 1	Jul 19 - 1
Last Sighting	Jun 6 - 1	Jun 8 - 1	Aug 10 - 1	Aug 16 - 2
Peak Day	4 dates - 1	May 31 - 2	Jul 25, Aug 6 - 2	

Palm Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 14 - 1	May 9 - 1	Aug 8 - 1	Sep 2 - 1
Last Sighting		May 23 - 2	Sep 5 - 2	
Peak Day		May 14 - 3	3 dates - 2	

Bay-breasted Warbler:

_	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Jul 24 - 1	Jul 26 - 1
Last Sighting			Aug 14 - 7	Aug 23 - 1
Peak Day				Aug 16 - 3

Blackpoll Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 21 - 1	May 18 - 12	Jul 20 - 1	Jul 26 - 2
Last Sighting	May 28 - 1	May 27 - 1	Aug 14 - 1	Sep 11 - 1
Peak Day	May 22 - 2		Aug 8 & 13 - 2	3 dates - 2

Black-and-white Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 12 - 1	May 10 - 1	Jul 12 - 3	Jul 12 - 4
Last Sighting	Jun 10 - 3	Jun 10 - 4	Sep 4 - 1	Aug 26 - 2
Peak Day	May 21 - 8	May 17 - 11	3 dates - 12	Aug 6 - 10

American Redstart:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 15 - 4	May 17 - 6	Jul 12 - 22	Jul 12 - 12
Last Sighting	Jun 10 - 6	Jun 10 - 9	Sep 18 - 3	Sep 16 - 1
Peak Day	June 2 - 20	Jun 1 - 35	Aug 14 - 67	Jul 25 - 46

Ovenbird:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 13 - 2	May 13 - 1	Jul 12 - 10	Jul 12 - 2
Last Sighting	Jun 10 - 3	Jun 10 - 4	Sep 13 - 1	Sep 11 - 1
Peak Day	May 22 - 9	May 31 - 9	Jul 25 - 20	Aug 15 - 16

Northern Waterthrush:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 17 - 1	May 8 - 1	Jul 13 - 2	Jul 16 - 1
Last Sighting	June 4 - 1	May 26 - 1	Sep 7 - 1	Sep 11 - 1
Peak Day	May 21 - 14	May 18 - 5	Aug 7 - 3	3 dates - 3

Mourning Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 24 - 1	May 31 - 3	Jul 19 - 1	Jul 13 - 2
Last Sighting	Jun 9 - 1	Jun 10 - 1	Aug 30 - 1	Sep 6 - 1
Peak Day	Jun 4 - 6	3 dates - 3	Aug 5 - 7	Aug 14 - 6

Common Yellowthroat:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 22 - 2	May 17 - 1	Jul 12 - 3	Jul 20 - 1
Last Sighting	Jun 10 - 3	Jun 10 - 4	Sep 22 - 4	Sep 22 - 1
Peak Day	4 dates - 4	Jun 8 - 7	Aug 27 - 13	Jul 31 - 4

Wilson's Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting		May 23 - 1	Aug 18 - 1	Aug 6 - 1
Last Sighting		Jun 1 - 1	Sep 22 - 1	Sep 16 - 1
Peak Day		May 26 - 2	Sep 4 & 5 - 4	Aug 15 - 5

Canada Warbler:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 22 - 2	May 22 - 2	Jul 12 - 3	Jul 12 - 1
Last Sighting	Jun 10 - 4	Jun 10 - 5	Aug 20 - 1	Aug 31 -1
Peak Day	May 28 - 10	Jun 1 - 9	Jul 25 - 34	Aug 4 - 29

Western Tanager:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 19 - 1	May 15 - 1	Jul 12 - 2	Jul 22 - 1
Last Sighting		Jun 9 - 1	Aug 14 - 1	Aug 27 - 1
Peak Day		May 31 - 2	Jul 28 - 16	Aug 5 - 15

American Tree Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 27 - 2		Sep 12 - 1	Sep 10 - 6
Last Sighting	Apr 28 - 1		Sep 29 - 7	Sep 21 - 4
Peak Day			Sep 22 - 8	

Chipping Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 7 - 2	May 8 - 5	Jul 12 - 3	Jul 12 - 1
Last Sighting	Jun 10 - 4	Jun 9 - 2	Sep 23 - 1	Aug 19 - 1
Peak Day	May 10 - 344	May 19 - 410	Sep 5 - 39	Jul 25 - 11

Clay-colored Sparrow:

•	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 12 - 1	May 17 - 25	Jul 12 - 5	Jul 12 - 12
Last Sighting	Jun 10 - 3	Jun 10 - 5	Sep 13 - 1	Sep 10 -1
Peak Day	May 22 - 12	May 19 - 27	Jul 17 - 6	

Vesper Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting				
Last Sighting				
Peak Day				

Savannah Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 28 - 1	May 5 - 1	Aug 20 - 1	Sep 5 - 1
Last Sighting	May 11 - 1	May 22 - 1	Sep 24 - 1	Sep 26 - 1
Peak Day	Apr 29 - 4	May 17 - 8	Sep 21 - 3	Sep 15 - 2

Le Conte's Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 15 - 1	May 19 - 1		
Last Sighting				
Peak Day				

Fox Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Aug 30 - 1	
Last Sighting			Sep 24 - 1	
Peak Day			3 dates - 1	

Song Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	Apr 25 - 3	Jul 12 - 8	Jul 12 - 6
Last Sighting	Jun 10 - 4	Jun 10 - 3	Aug 31 - 1	Aug 19 - 2
Peak Day	May 7 - 8	May 3 - 9	Jul 19 - 9	3 dates - 7

Lincoln's Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 1 - 1	May 6 - 1	Jul 12 - 3	Jul 12 - 1
Last Sighting	Jun 10 - 3	May 31 - 1	Sep 19 - 1	Sep 13 - 1
Peak Day	May 18 - 7	3 dates - 4	Jul 25 - 7	Sep 11 - 8

Swamp Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Jul 19 - 1	Jul 20 - 1
Last Sighting			Sep 26 - 1	Aug 27 - 1
Peak Day			Aug 17 - 4	Jul 29 - 2

White-throated Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 5 - 2	May 9 - 2	Jul 12 - 10	Jul 12 - 8
Last Sighting	Jun 10 - 9	Jun 10 - 7	Sep 26 - 2	Sep 28 - 2
Peak Day	May 24 - 23	May 18 - 49	Jul 25 - 19	Jul 26 & 29 - 15

White-crowned Sparrow:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 1 - 1	May 3 - 1	Aug 24 - 2	Aug 28 - 1
Last Sighting	May 16 - 1	May 23 - 1	Sep 28 - 1	Sep 28 - 1
Peak Day	May 14 & 15 - 2	May 6 - 19	Sep 17 - 14	Sep 27 - 6

Dark-eyed Junco:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	April 24 - 1	Apr 25 - 4	Jul 17 - 1	Aug 22 - 1
Last Sighting	May 1 - 8	May 28 - 1	Sep 29 - 9	Sep 28 - 2
Peak Day	Apr 30&May 1 -8	Apr 26 - 5	Sep 13 - 32	Sep 7 - 26

Lapland Longspur:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 198	May 5 - 6	Aug 27 - 5	Sep 2 - 1
Last Sighting	May 12 - 1	May 18 - 23	Sep 25 - 2	Sep 26 - 1
Peak Day		May 9 - 35	Sep 5 - 42	Sep 13 - 9

Rose-breasted Grosbeak:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	May 4 - 1	May 11 - 1	Jul 15 - 2	Jul 13 - 1
Last Sighting	Jun 10 - 1	Jun 10 - 1	Aug 30 - 1	Aug 27 - 1
Peak Day	May 22 & 29 - 8	4 dates - 3	Jul 28 - 15	Aug 4 - 14

Red-winged Blackbird:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	Apr 25 - 1		Jul 30 - 1
Last Sighting	Jun 5 - 1	Jun 10 - 1		
Peak Day	May 1 - 25	May 15 - 119		

Brewer's Blackbird:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting			Jul 14 - 4	
Last Sighting				
Peak Day				

Common Grackle:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 30 - 3	May 15 - 3	Aug 6 - 1	Jul 18 - 3
Last Sighting	May 15 - 2	Jun 6 - 1	Sep 5 - 1	Sep 7 - 1
Peak Day	May 6 - 7		Aug 7 - 3	Aug 16 - 4

Brown-headed Cowbird:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 26 - 12	May 9 - 6	Aug 7 - 16	Jul 21 - 1
Last Sighting	Jun 8 - 2	Jun 9 - 2	Aug 19 - 2	Jul 24 - 3
Peak Day	May 17 - 39	May 18 - 31		

Baltimore Oriole:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Jun 1 - 1	Jun 1 - 1	Aug 14 - 1	
Last Sighting				
Peak Day				

Purple Finch:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 7	Apr 26 - 10	Jul 30 - 1	Aug 5 - 3
Last Sighting	May 4 - 1	May 14 - 1	Sep 18 - 1	Sep 11 - 3
Peak Day	Apr 26 - 10	May 11 - 12	Aug 27 - 11	Aug 8 & 10 - 5

Pine Siskin:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 25 - 1	May 7 - 1	Jul 12 - 2	Jul 12 - 3
Last Sighting	Jun 5 - 1	Jun 10 - 4	Sep 27 - 2	Sep 29 - 3
Peak Day	Apr 26 - 82	May 18 - 13	Sep 12 & 13 - 70	Aug 19 - 129

Evening Grosbeak:

	Spring 2006	Spring 2005	Fall 2006	Fall 2005
First sighting	Apr 24 - 1	May 3 - 2	Jul 12 - 1	Jul 20 - 14
Last Sighting	Jun 10 - 2	Jun 5 - 1	Sep 27 - 2	Sep 28 - 9
Peak Day	May 11 - 13	May 11 - 22	Jul 25 - 7	Aug 16 - 20