

THE BIRDS OF AUDUBON PARK

A City of Deltona property

A survey conducted from October 14, 2013 to December 30, 2015

By

Harry Robinson

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INTRODUCTION

I visited this 60 acre park for the first time on October 14, 2013 with Kacy Ray we surveyed the park and saw a total of 30 species. This small park intrigued me because of its diverse habitat and a survey was born. Initially in 2013 I only visited the park once a week but from January, 2014 it was up to four days a week and I normally took six hours to conduct each survey. The city had given me permission to go into the park whilst it was dark and this allowed me to gather information on the nocturnal species. In all I completed 421 surveys and saw/heard 208 species.

With one exception I recorded what I saw or heard from the park it did not matter how far they were away. So this included everything that flew overhead and the larger birds such as the Wood Stork which I could identify at a great distance. The exception was the bike trail. As this trail ran along the southern border I included it for the length of the park. To the west I continued to what I call "the Swamp" as this was part of the city property if not the park and it dealt with the runoff from the impoundments and the marsh.

I am not a botanist so the following description of the habitat is far from perfect. The entrance to the park is from Doyle Road and you drive into a grassed parking lot. The boundary to the south is scrub oak and to the north somewhat more mature trees. At the far end of the parking lot the ground drops away and you come to a very short canal which disappears into the vegetation. There is a line of tall trees behind the canal and behind them is the "Marsh". The trail goes through a piece of oak woodland. At the end of this wood the trail splits and straight ahead there is a boardwalk that crosses the marsh.

As you cross the marsh to your right the marsh curves back towards the parking lot. There are areas of open water but button bush dominates. To your left the marsh stretches for some 400 yards with scattered trees set in a sea of grass. On both sides of the marsh there are stretches of woodland with multiple tree species. At the far end of the boardwalk there is a narrow belt of woodland. The woodland continues to your left but there is a wooded small holding to your right. Remember this park is only 60 acres so everything is on a small scale. You then come out into a large open area with a series of impoundments. Perhaps more importantly there is a large oak tree with a picnic table from which a large area can be checked.

This is a storm water treatment facility the water is initially pumped into the pond in front of you there is little emergent vegetation but under the surface plant growth is luxuriant. The second pond is long and narrow and forms the western boundary of the park. This has a thick growth of plants with numerous saplings; there are still some small areas of open water.

In the center there is another wetland section. The southern two-thirds is covered in plants whilst the northern third has open water with water lilies. This section is linked to the second area. The third and largest pond is deeper with little vegetation. Having these three very different ponds creates an interesting environment.

The northern boundary by the ponds is scrub backed by woodland. The western boundary consists of a short grass field with a patchwork of trees and scrub. To the south-west there is a large area of grassland in the park which is favored by flocks of White Ibis, Cattle Egrets, Sandhill Cranes and Wild Turkeys in the early morning. Behind this there is a band of deciduous woodland that stretches from the track (which leads to the bike trail) west to the swamp. The trees are tall with an open canopy. This type of wood only extends to the bike trail. On the other side of the trail the trees are more suited to a drier habitat. There is a drainage ditch that drains excess water from the marsh and the treated water from the ponds; this ditch leads through the wood to the swamp. To the east of the ponds there is a narrow strip of woodland.

If you took the other trail you would initially go alongside the marsh with taller trees before you did a loop through drier scrub-oaks until you came out on the track that leads to the bike trail. That is perhaps an over simplified description of the habitat.

The Survey

On arrival in the dark I would take the trail through the wood, across the marsh to the ponds listening all the while. Owls would be the year round target with Eastern Whip-poor-wills in the winter and in the summer Chuck-will's-widows and Yellow-crowned Night-Herons. I always hoped for that unexpected species. As it was getting light I would move to the north-western corner of the ponds as this was the best spot from which to see the birds flying from their roosts to their feeding areas. When this initial activity quieted down I would do a circuit of the ponds before returning to the parking lot.

By now the warblers and woodpeckers should be active. I would do a circuit of the parking lot before going again to the marsh and its boardwalk. After spending some time there I would take the woodland trail to the track turning left to the bike trail. During the spring and fall passages I would then walk the bike trail to the boundary to the east and to the swamp in the west. I tended to stop at the swamp for a bit. Next I returned to the parking lot by the ponds and the marsh.

I then collected my telescope and went to the picnic table and its oak tree. I would stay there to midday checking pretty well everything that moved. In the winter it could be ducks and gulls. During the spring and fall anything and in the summer Swallow-tailed Kites and hopefully Short-tailed Hawks. At all seasons with the thermals came the vultures, hawks and eagles.

ACKNOWLEDGMENTS

This survey would not have been possible without the help of Jerry Mayes, Chris Cornett and Steve Moore from the City of Deltona. I am especially grateful for their permission to enter the park whilst it was still dark that made a huge difference.

This book could not have been put together without the considerable help of Rachel Gerker. She designed the front cover, manipulated the pictures until they fitted together and placed them in the middle of the book. She dealt with some technical difficulties and she created the P.D.F. version for the printers. Rachel you know just how indebted I am to you.

Harry Robinson

Photographs: all the photographs were taken by the author with the exception of the Short-tailed Hawk, that picture was taken by Keith Gardner. Thanks Keith.

THE SYSTEMATIC LIST OF ALL SPECIES SEEN DURING THE SURVEY

Here I deal with each species in as little space as possible. The systematic order that I use is old, circa 2000, but as the order changes every year that is not that significant.

Common Loon (*Gavia immer*)

A rare passage migrant that could be seen flying overhead on passage in all there were five sightings. For the late fall passage there were singles on November 21, 2015 and November 24, 2013. For the winter passage there was one on December 31, 2013. For the late spring passage there were five flying to the north (a flock) on March 13, 2014 with one on March 26, 2015.

Pied-billed Grebe (*Podilymbus podiceps*)

A winter visitor in varying numbers seen from December 26, 2013 to April 5, 2014 there were singles with two from January 9 to March 15, 2014. In the fall of 2014 seen from October 5 to April 7, 2015 counts peaked at eight from November 24 to December 16, then five seen to February 20 with one to April 7, 2015. In the fall of 2015 there was one on September 20, a migrant. Later one was seen from October 14 with two from October 16 to December 13 then one seen to the end of the survey. The winters with two present caused no problems but the flock of eight did as they chased away Common Gallinule, American Coot and the Hooded Mergansers.

American White Pelican (*Pelecanus erythrorhynchos*)

None visited the park but birds were seen in flight in the early morning having left Lake Monroe. This was a spring passage migrant. For the early spring passage in 2014 there were sightings on February 11 and February 20 the high count was that of seven on February 11, 2014. The main spring passage ran from March 3 to May 15 in 2014 with a high count of 18 on March 18, 2014. Exceptionally there were 22 on December 29, 2014. For the early spring passage in 2015 there were sightings from January 10 to February 16 with a high count of 19 on February 11, 2015. The main spring passage in 2015 was the event this passage ran from March

3 to April 18. Whilst there were 20 on March 3 it is the April records that were exceptional as there were 435 on April 13, 2015 and 295 on April 18, 2015.

Brown Pelican (*Pelecanus occidentalis*)

This was a vagrant there were just four sightings for the two years, none actually visited the ponds. For the winter there was one on December 15, 2014. This was really a late spring passage migrant with one on March 7, 2015, seven on April 7, 2014 and four on May 13, 2015.

Double-crested Cormorant (*Phalacrocorax auritus*)

This species did visit the ponds from time to time but the majority was seen flying overhead. They could be seen at any season but the late spring passage was the heaviest event. For the late fall passage in 2013 there were seven on November 14. For the winter passage in 2013 there were 34 on December 26. There were no sightings for the early spring passage in 2014. The main spring passage in 2014 ran from March 27 to April 29 with a high count of 182 on April 14, 2014 (that is the highest count). The summer passage in 2014 ran from May 4 to June 15 with a high count of two on May 4, 2014. The early fall passage was also a minimal event in 2014 the passage ran from July 14 to October 5 with a high count of two on July 28, 2014. The main fall passage in 2014 ran from October 25 to November 17 with a high count of 56 on November 1, 2014. The winter passage then ran from December 6, 2014 to January 1, 2015 with a high count of 40 on December 8, 2014. The early spring passage in 2015 ran from January 12 to March 2 with a high count of 12 on January 12. The main spring passage in 2015 ran from March 3 to April 27 with a high count of 58 on April 13, 2015. The summer passage ran from April 30 to May 25 in 2015 with a high count of six on May 22. In 2015 just three singles were seen for the early fall passage which ran from August 9 to August 29. The main fall passage in 2015 ran from October 23 to November 26 with a high count of 40 on November 11, 2015. Finally the winter passage in 2015 ran from November 28 to December 30 with a high count of 11 on December 6. The weakest events were the summer and the early fall passages and that was to be expected.

Anhinga (*Anhinga anhinga*)

Up to five can be seen at the ponds any time of the year; much higher numbers may be seen overhead from March to August. The larger flocks appear from the south or south-east rising up on the thermals before leaving to the north-west. For the late fall passage in 2013 singles seen from October 22 to November 12. The winter passage was only a little better it ran from December 3, 2013 to January 9, 2014 with a high count of two on December 10, 2013. The early spring passage in 2014 ran from January 11 to February 26 with high counts of seven on January 25 and February 13. Counts were now higher; the main spring passage ran in 2014 from March 1 to May 1 with a high count of 55 on March 8, 2014. The summer passage in 2014 ran from May 4 to June 28 with a high count of 14 on June 3. The early fall passage in 2014 ran from June 30 to September 23 with a high count of 65 on August 16. The late fall passage in 2014 ran from September 25 to November 27 with a high count of 25 on October 28, 2014. The winter passage ran from November 29, 2014 to January 6, 2015 with a high count of six on December 21, 2014. The early spring passage in 2015 ran from January 8 to February 28 with a high count of ten on February 16. The main spring passage in 2015 ran from March 2 to April 27 with a high count of 91 on March 19, 2015 (this was the highest count). The summer passage in 2015 ran from April 30 to June 26 with a high count of 44 on May 1. The early fall passage in 2015 ran from June 27 to October 2 with a high count of 40 on July 31, 2015. The late fall passage in 2015 ran from October 4 to December 6 with high counts of 15 on October 10 and October 11. The winter passage in 2015 was even lighter this ran from December 9 to December 30 with a high count of four on December 11.

American Bittern (*Botaurus lentiginosus*)

There were 11 records for the two years nine were seen in the late fall passage with one individual being seen on two dates in the early spring passage. There was for the late fall passage perhaps just one bird that was seen on six dates from September 30, 2015 to November 20, 2015 a second individual was seen on October 25, 2014 and November 3, 2014. For the early spring passage there was one from January 16, 2015 to January 20, 2015.

Least Bittern (*Ixobrychus exilis*)

This was a vagrant there were just two records for the early fall passage both came from the western vegetated pond. There were singles on July 28, 2014 and September 1, 2015.

Great Blue Heron (*Ardea herodias*)

A non-breeding "resident" normally there were one to three a day seen. In both 2014 and 2015 there was a significant late spring passage with a lesser passage in October. In 2015 there were also higher counts during the summer as this species nests in the winter the summer is in reality its winter. In 2014 this stronger spring event ran from February 26 to April 29 with counts of four to five on eight dates and eight on March 29. In 2015 this event ran from March 21 to April 13 with five counts of four to five a day and seven on March 21. The late fall event was minor by comparison in 2014 there were counts of four on October 4 and October 17 with in 2015 four on October 7. In 2015 but not 2014 there was a summer event the higher counts were: eight on May 8, five on May 27, six on June 12 and five on July 5. A single individual was in residence roosting in the trees by the ponds and it would chase away any visitors. The higher counts relate to days when others flew over the park.

Great Egret (*Ardea alba*)

Present all year again a single individual would chase others away there were also migrants flying to the north or the south depending on the season. The lowest numbers were seen from October to February. From October, 2013 to late March 2014 just one to two a day were seen with seven on January 11, 2014. Counts started to climb in April with four to five a day in 2014 and a high count of seven on April 15. In 2014 for the summer passage numbers gradually fell there were three to five a day in May with two to four a day in June the highest count was that of nine on June 3, 2014. Passage was strong for the early fall passage there were five to six a day in July with for August four to six a day. September had a strong passage to the 15th with four to seven a day then only one to three a day seen to the end of the month. The higher counts were nine on July 28, 2014 and 12 on August 2, 2014. The passage from October to December was dealt with earlier. For 2015 January and February there were just one to two a day with a high count of six on February 17, 2015. With the late spring passage numbers started to climb for March there were three to six a day with four to five a day in April the highest count was that of nine on April 11. For the summer passage in 2015 there were four to six a day in May with six to nine a day in June. The highest counts were 11 on May 27 and 11 on June 10. For the early fall passage there was a strong passage in July and August but low numbers in September. For July there were four to six a day with four to nine a day for August. The higher counts were eight on July 26, 2015, 11 on August 7, 2015, nine on August 8, 2015 and eight on August 21, 2015. For September there were just two to five all month the highest count was that of eight on September 2, 2014. Overall July and August had the highest numbers.

Snowy Egret (*Egretta thula*)

The highest numbers were seen in 2014 from late April to mid-September and in 2015 the highest numbers such as they were fell between mid-March and early May. For the rest of the time only one to two a day were seen when present. In 2014 the herons (especially the Little Blue Heron) gouged on the frogs in the western pond. When it came to the summer of 2015 there were few frogs so the herons had to feed elsewhere. For the late fall passage in 2013 only one to two a day seen. For the winter passage the only records relate to one on December 14, 2013 and two on January 4, 2014. The early spring passage ran from January 11, 2014 to February 26, 2014 it was better with singles on most days apart for two from February 11 to February 17. The late spring passage ran from March 1, 2014 to April 26, 2014 normally only one to two a day seen but there were four on March 24. The summer passage ran from April 29, 2014 to June 28, 2014 there were normally four to eight a day with ten on June 17, this is in sharp contrast to the earlier passages. The early fall passage in 2014 was the main event this passage ran from June 30, 2014 to September 13, 2014. Up to 11 a day seen with high counts of 19 on August 19 and August 21; these are the highest counts by far for the park. For the balance of the early fall passage to September 30, 2014 only one to two a day seen. The late fall passage ran from October 2, 2014 to December 1, 2014 normally one to three a day seen but there were four on October 21 with six on November 6. The winter passage ran from December 2, 2014 to January 5, 2015 up to three a day seen. The early spring passage was worse the only sightings to mid-February were of singles on January 12 and February 4 then from February 14 to February 28 there were one to two a day. The main spring passage ran from March 5, 2015 to May 2, 2015 normally only singles seen but there were four on March 1 with two on March 19 and three on March 26. The summer passage was similar it ran from May 9 to June 27 normally one to two a day seen with seven on May 9 and three on May 25. The early fall passage ran from July 1, 2015 to October 3, 2015 no large numbers this year. In July and August there were one to three a day. In September there were one to two a day with four on September 5 and September 9. The late fall passage ran from October 7 to November 29 there were one to two a day to October 27 then singles seen. There were higher counts of four on October 9, October 14 and October 16 with two on November 6. The winter passage was worse the passage ran from December 6, 2015 to December 30, 2015 there were only singles seen apart for two on December 21. If only the herons had rationed themselves they could have fed well in 2015.

Little Blue Heron (*Egretta caerulea*)

This was the commonest of the herons and egrets especially so in the summer and early fall of 2014. In 2014 only adults seen to June 15 after which the juveniles put in an appearance.

These herons used to fly in at first light they were exceptionally quarrelsome but they were experts at catching the frogs. From the late fall of 2013 to the end of the early spring passage one to two a day seen with three on February 17, 2014. Numbers started to climb with the main spring passage this event ran from March 4, 2014 to May 1, 2014 normally three to nine a day seen with higher counts of 11 on March 27, 2014 and ten on April 24, 2014. The summer and the early fall passages were by far the main event. The summer passage ran from May 3, 2014 to June 26, 2014. In May 12 to 23 a day were seen with in June 24 to 37 a day. The highest count was that of 42 on June 12, 2014. The early fall passage ran from June 28, 2014 to October 5, 2014 the highest count was that of 44 on July 11, 2014. This is the highest count for the park. From June 28 to July 14 from 22 to 23 a day seen, from July 15 to August 14 there were 14 to 25 a day and from August 16 on October 5 just 11 to 22 a day. The counts show how the numbers gradually falling away. The late fall passage ran from October 7, 2014 to December 1, 2014 initially to October 21 the counts stayed at 11 to 19 a day with a high count of 27 on October 14. From October 23 to December 1 the counts gradually fell ending up at four to five a day. For the winter passage from December 2, 2014 to December 21, 2014 the counts stayed at four to five a day. From December 25, 2014 to January 6, 2015 only single were seen. For the early spring passage in 2015 just one to two a day seen with seven on January 22; this passage ran from January 8, 2015 to February 28, 2015. Numbers were higher with the main spring passage which ran from March 2, 2015 to May 1, 2015. From March 2 to April 14 normally three to nine a day were seen with 16 on March 19. From April 16 to May 1 there were two to 14 a day with 17 on April 16. The summer passage was the strongest event of the year this passage ran from May 2, 2015 to July 3, 2015. In May from 12 to 22 a day were seen with a high count of 25 on May 27. In June there were 11 to 24 a day with a high count of 25 on June 14. Numbers for the early fall passage fell away the passage ran from July 4, 2015 to October 2, 2015. In July there were normally ten to 12 a day with a high count of 18 on July 17. In August there were only four to 11 a day with a high count of 12 on August 29. In September there were from two to nine a day with a high count of nine on September 14. Now counts were down to very low levels for the late fall passage only one to five a day seen from October 3, 2015 to November 28, 2015. Finally for the winter passage there was one to two a day from November 29, 2015 to December 30, 2015.

Tricolored Heron (*Egretta tricolor*)

This was by far the rarest of the regularly occurring herons. As sometimes happens the patterns for 2014 and 2015 were different in 2014 the highest numbers were in the summer and early fall passages whilst in 2015 the highest numbers were during the main spring and summer passages. From the late fall passage of 2013 to the early spring passage of 2014 just

one to two a day seen with three on February 13, 2014. Numbers for the main spring passage were slightly higher often there were one to three a day from March 1, 2014 to April 29, 2014 with five on April 19, 2014. The summer passage ran from May 1, 2014 to June 28, 2014 with three to eight a day (there were counts of eight on nine days). The early fall passage ran from June 30, 2014 to September 30, 2014 during this time numbers gradually declined. From June 30 to July 12 there were from four to seven a day. For the balance of July there were two to five a day with seven on July 31, 2014. In August two to six a day noted with a count of six on August 14, 2014. In September there were two to three a day with a count of four on September 6, 2014. The late fall passage ran from October 2, 2014 to November 29, 2014 with one to three a day when present the high count was that of four on November 1, 2014. For the winter and early spring passages only one to two a day seen; there were no records from February 2 to February 19. The main spring passage was very different this passage ran from March 17, 2015 to April 30, 2015. Counts variable with one to nine a day there were also 14 on March 21, 2015. The summer passage was similar this event ran from May 1, 2015 to June 19, 2015 with three to nine a day. The highest count was that of 15 on May 25, 2015. Only low numbers now seen the early fall passage ran from June 20, 2015 to October 3, 2015 there were just one to four a day from June 20 to July 31 then for the balance of the passage to October 3, 2015 there were only one to two a day. Finally there were only one to two a day seen when present for all of the late fall and winter passages

Cattle Egret (*Bubulcus ibis*)

Every morning they flew to the south-east at first light a varying number stopped off by the ponds to feed. During the breeding season in the late morning they returned north to perhaps two colonies (one to the north of the park and the other to the north-west). In both years passage was heaviest from March to November with peak numbers in July and August. The first fledged young was seen on July 11, 2015. Initially for the late fall passage of 2013 only one to seven a day seen. There was perhaps surprisingly a noticeable winter passage this event ran from December 3, 2013 to January 11, 2014 counts were very variable ranging from one to 22 a day with a high count of 27 on December 7, 2013. The early spring passage ran from January 13, 2014 to March 1, 2014 with one to seven a day and a high count of 15 on January 13, 2014. The first part of the late spring passage (from March 3, 2014 to March 20, 2014) had counts of one to seven a day. For the balance of the late spring passage from March 22, 2014 to April 16, 2014 there were seven to 27 a day with a high count of 35 on March 31, 2014. Passage was lighter during the summer; this event ran from April 17, 2014 to June 20, 2014 with three to 11 a day and a high count of 21 on May 4, 2014. The early fall passage was the heaviest event in 2014 this passage ran from June 21, 2014 to September 23, 2014. In July there were

seven to 13 a day with a high count of 40 on July 19, 2014. In August there were 19 to 38 a day with a high count of 91 on August 4, 2014. In September there were 13 to 40 a day with a high count of 53 on September 11, 2014. Numbers now fell to the end of the year. For the late fall passage which ran from September 27, 2014 to November 25, 2014 there were three to 33 a day with a high count of 41 on October 7, 2014. The winter passage ran from November 27, 2014 to January 1, 2015 just one to seven a day. These counts of “one to seven” relate to the basic population level when there is no actual passage. The early spring passage ran from January 5, 2015 to February 28, 2015. During January just one to seven a day continued to be seen. From February 3, 2015 to February 28, 2015 there were two to 11 a day seen with high counts of 12 on February 6, 2015 and February 10, 2015. Counts now climbed through to July. The main spring passage ran from March 2, 2015 to April 27, 2015. In March there were from seven to 21 a day seen with a high count of 24 on March 19, 2015. In April there were 14 to 31 a day with a high count of 45 on April 23, 2015. The summer passage ran from April 30, 2015 to July 4, 2015 with high counts of 40 on May 16, 2015 and 97 on June 28, 2015. During May from 13 to 32 a day were seen with in June much higher counts of 28 to 67 a day. The early fall passage was the main event the passage ran from July 5, 2015 to September 30, 2015. In July there were 36 to 111 a day with a high count of 152 on July 11, 2015. This is by far the highest count for the park. In August there were 42 to 74 a day with a high count of 90 on August 12, 2015. In September there were four to 29 (a major drop) a day with a high count of 45 on September 5, 2015. The late fall passage ran from October 2, 2015 to November 26, 2015 there were six to 26 a day with a high count of 50 on October 30, 2015. There was very little difference between the October and November counts. Finally the winter passage ran from November 27, 2015 to December 30, 2015 just four to 24 a day with a high count of 26 on December 27, 2015.

Green Heron (*Butorides virescens*)

There were no sightings of this retiring heron until March 22, 2014 when one seen. There were also singles on April 1 and April 14, 2014. For the summer passage there was one on May 22 with four on June 3, 2014 that was the highest count for the park. Singles were then seen on June 9, June 17 and June 28, 2014. There were more frequent sightings for the early fall passage which ran from July 5, 2014 to October 4, 2014. Normally singles seen but there were two on September 21, 2014. Singles continued to be seen from October 17, 2014 to February 4, 2015 i.e. for the late fall, the winter and most of the early spring passages. There was now a gap with no records for the balance of the early spring passage and all of the late spring passage. This species nests very early so this gap corresponds with their breeding season. For the summer passage (their early fall passage) there were two on May 2, 2015 with singles from

May 20 to May 27. Later two present from June 7 to June 27 with one on June 28, 2015. For the early fall passage there was one on July 5, 2015 with two on July 12 and three on July 19, then two seen on August 9 with singles to September 11. There were two on September 12 with singles to September 27, 2015. For the late fall passage there was one on October 4, 2015 with three on October 7, later one seen on October 31. The only record for the winter passage was that of one on December 20, 2015.

Black-crowned Night-Heron (*Nycticorax nycticorax*)

This was a vagrant there were 14 records for the two years they were all heard flying over in the dark. For the early spring passage in 2014 there was one on February 20. For the early fall passage there were two on July 15, 2014 with singles on August 9, August 21, September 21 and September 27. For the late fall passage there were singles on October 5 and October 18. Finally for 2014 there was one on November 29 this is perhaps best treated as a winter record. There were no records for the early spring passage in 2015. For the late spring passage there was one on March 10, 2015 that was it. There were no summer records. For the early fall passage there was one on September 13, 2015 with two on September 26. Finally for the late fall passage there were singles on October 14 and October 18, 2015. There were no later records.

Yellow-crowned Night-Heron (*Nyctanassa violacea*)

For the summer of 2014 there were a number of records and in light of 2015 a pair may have bred at the marsh. Initially there were singles on April 22, 2014 and April 26, 2014. Later there were two on May 27. There was also one from June 24, 2014 to July 1 with two on July 5, 2014. Finally for 2014 there was a juvenile on September 2. Unlike the last species many of these birds were seen during the day. In 2015 a pair did breed at the marsh raising one young now that was a special event. There was one on May 27 with two from May 29. The juvenile was first seen on June 20 and was present to at least July 22. The family party was seen from June 20 to July 19. Just one adult was with the juvenile on July 22. An adult then stayed to August 1. There were no later records.

White Ibis (*Eudocimus albus*)

This was the last of the common wading birds that visited the ponds flocks could often be seen in the early morning probing the mud for food. In 2014 the heaviest passage was from

March to mid-October with the highest numbers in October. In 2015 it was a little different the heaviest passage was from early March to early July. The highest counts for the late spring passage were those of 291 on March 3 and 233 on March 10. The summer passage in 2015 was truly exceptional just one influx filled the whole passage and the highest count was that of 875 on May 29. For both passages the birds were flying from north to south in the early morning with a small number stopping to feed in the ponds. For each season (except for the fall of 2013) I am giving two sets of figures the first indicates a range and these birds will have fed at the ponds. The second figure will relate to flocks that I saw flying over the park. The late fall passage in 2013 ran from October 14 to November 28 with four to eight a day present. The winter passage ran from December 3, 2013 to January 13, 2014 with 14 to 22 a day in the area. The highest count possibly also at the ponds was that of 30 on December 17, 2013. The early spring passage followed from January 16, 2014 to March 1 2014 with 14 to 32 a day. The highest count was only that of 46 on February 26, 2014 so they may have been at the ponds. Until I come to describe the early spring passage in 2015 all the higher counts I detail will relate to flocks flying overhead. The main spring passage ran from March 3, 2014 to April 27, 2014 there were ten to 54 a day the highest count was that of 183 on March 22, 2014. The summer passage ran from April 29, 2014 to July 1, 2014 at the ponds there were ten to 56 a day with a high count of 112 on June 3, 2014. The early fall passage ran from July 3, 2014 to October 2, 2014 with a high count of 107 on August 25. In the area in July there were three to 36 a day then in August and September there were four to 21 a day. In October there seems to have been a separate event. The whole late fall passage ran from October 4, 2014 to November 25, 2014. For October there were 18 to 49 a day at the ponds with high counts of 270 on October 5 and 460 on October 13. For November there were just seven to 17 a day with a high count of 26 on November 19. The winter passage ran from November 27, 2014 to January 6, 2015 with four to 22 a day at the ponds. The highest count however was that of 251 on December 9. It is likely that all the counts for the early spring passage in 2015 relate to birds feeding at the ponds. This event ran from January 8 to March 2 there was one to 13 a day seen with a high count of 46 on February 17. Now we are back to the higher numbers. The main spring passage ran from March 3, 2015 to April 27, 2015 with high counts of 291 on March 3 and 233 on March 10. At the ponds there were from six to 43 a day in March with 17 to 76 a day in April. The summer passage ran from April 30, 2015 to July 3, 2015 in this case I cannot separate out any birds that fed at the ponds. There is a single influx by that I mean the counts rose to a peak on May 29 and then fell away again. To detail this exceptional influx there were 92 on May 1 with 170 on May 8, 207 on May 9, 289 on May 13, 310 on May 20, 338 on May 22, 359 on May 23, 710 on May 25 and 875 on May 29 (the first juveniles were seen on this date), then 587 seen on May 30 with 548 on June 3, 319 on June 10, 280 on June 13, 104 on June 14, 62 on June 17, 60 on June 21 and 27 on June 24. The early fall passage was by comparison a minor event this passage ran from July 4, 2015 to October 2, 2015 there were four to 45 a day at the ponds. The higher

counts were those of 120 on August 21, 197 on September 4 and 120 on September 12. For the rest of the survey only birds at the ponds noted. The late fall passage ran from October 3, 2015 to November 29, 2015 there were from four to 21 a day seen with a high count of 45 on October 27, 2015. Finally the winter passage ran from December 6, 2015 to December 30, 2015 with 12 to 31 a day at the ponds, the high count was that of 31 on December 12, 2015.

Glossy Ibis (*Plegadis falcinellus*)

In contrast this species was an irregular visitor to the park it is likely that all or nearly all the sightings relate to birds feeding at the ponds. There were no sightings for the late fall passage in 2013. The winter passage ran from December 7, 2013 to January 11, 2014 up to five a day seen from time to time. The early spring passage was similar the passage ran from January 13, 2014 to February 26, 2014 with one to four a day and a high count of nine on February 17. At no time during the two years was this species seen daily. The main spring passage ran from March 1, 2014 to April 29, 2014 with a high count of 13 on March 11. In March there were three to seven a day with in April one to two a day. For the summer passage only one to three a day seen on occasions from May 3, 2014 to June 28, 2014 there were no higher counts. The early fall passage was identical with one to three from June 30, 2014 to July 19, 2014. There were no sightings for the rest of July, August and September. The late fall passage only ran from October 17, 2014 to December 1, 2014 there were one to four a day. The winter passage was a little better this ran from December 4, 2014 to January 6, 2015 there were one to six a day with a high count of nine on December 6 and December 9. There were just two records for the early spring passage in 2015 there were three on January 12 and January 13. There were just scattered records for the late spring passage the higher counts were those of 21 on March 12, 30 on April 4 and ten on April 17. The summer passage ran from May 9, 2015 to June 19, 2015 there were singles on seven dates with four on May 9. Like 2014 the early fall passage was a minimal event for 2015 there were just four records. There were two on August 9 with later one on September 9 and three on September 16, then one seen on September 25. The late fall passage was no better there were five on October 10 with singles to the 17th. Finally the winter passage ran from November 26, 2015 to December 30, 2015 one to seven a day seen with eight on December 25, December 27 and December 30.

Roseate Spoonbill (*Platalea ajaja*)

This was a vagrant as the birds that did visit the ponds could find no suitable feeding area that met their needs. There were just five records for the two years. For the summer passage of 2014 there were singles on June 2 and June 9. Exceptionally for the winter passage

of 2014/2015 there was one on December 4. For the summer passage in 2015 there were three on May 1 with one on May 2. That was it.

Wood Stork (*Mycteria americana*)

They were an occasional visitor to the park feeding in the western pond. They could also be seen riding the thermals on their way to other sites. At times they even roosted on one or more of the snags by the ponds. I am not able to separate out those that just flew across the park. This species was seen on scattered dates through the two years so when I say so many a day I am really saying so many a day when present. For the late fall passage in 2013 there was one on November 28. There were no records for the winter passage in 2013/2014. The early spring passage ran from January 7, 2014 to February 24, 2014 with one to three a day there was a higher count of six on February 2. The late spring passage ran from March 3, 2014 to April 27, 2014 there were one to three a day. There were just five sightings for the summer passage there was one on May 1 with two on May 3, then one seen on May 10. Later there were singles on June 2 and June 9, 2014. For the early fall passage which ran from June 28, 2014 to September 21, 2014 there were only seven records with singles on six dates and three on July 5. The late fall passage ran from October 14, 2014 to November 24, 2014 again there were seven records the higher counts were: three on October 17, four on November 11 and three on November 19. The winter passage was a bit stronger this passage ran from November 27, 2014 to January 5, 2015 with one to three a day. There were higher counts of 12 on November 27 and 17 on December 29. The early spring passage ran from January 8, 2015 to February 26, 2015 with one to four a day when present. The main spring passage ran from March 3, 2015 to April 30, 2015 there were one to eight a day with 12 on March 10. The summer passage ran from May 8, 2015 to June 21, 2015 only one to two a day seen. The early fall passage only ran from June 28, 2015 to August 16, 2014 there were one to four a day. There were no sightings for late August or September. The late fall passage was one of the weakest events the passage ran from October 10, 2015 to November 26, 2015 with just one to two a day occasionally. Finally the winter passage ran from November 27, 2015 to December 30, 2015 there were one to five a day with five on December 11, seven on December 27 and nine on December 30.

Black Vulture (*Coragyps atratus*)

Seen all year round in variable numbers sometimes they left their roosts by the bike trail at first light at other times they followed the Turkey Vultures. Some days they would head off downwind on other days they flew in the opposite direction into the wind. They were just very unpredictable. Counts were lowest from April to June and again from October to December

except for 2014 when numbers remained high from July, 2014 to March, 2015. For the late fall passage in 2013 only two to 15 a day seen with a high count of 49 on November 24, 2013. The winter passage was a little better the passage ran from December 7, 2013 to January 9, 2014 with 11 to 63 a day and a high count of 73 on December 26, 2013. Numbers were now higher the early spring passage ran from January 11, 2014 to February 24, 2014 there were from 25 to 95 a day with a high count of 182 on February 13, 2014. The late spring passage ran from March 1, 2014 to April 29, 2014, passage in March was heavy whilst the passage in April was light. In March from 61 to 114 a day noted with a high count of 218 on March 8, 2014 then in April there were from 17 to 44 a day with a high count of 66 on April 5, 2014. The summer passage ran from May 1, 2014 to June 28, 2014 normally 17 to 52 a day seen with a high count of 57 on June 3, 2014. With the early fall passage the higher counts returned this passage ran from June 30, 2014 to September 30, 2014. In July there were 16 to 82 a day with a high count of 130 on July 22, 2014. In August there were from 18 to 78 a day seen with a high count of 126 on August 9, 2014. In September there were from 26 to 142 a day with 163 as a high count on September 22, 2014. The late fall passage ran from October 2, 2014 to December 2, 2014 in October from 26 to 108 a day seen with a high count of 137 on October 14, 2014, then for November 61 to 212 a day seen with 258 as the high count on November 27, 2014. The winter passage followed from December 4, 2014 to January 6, 2015 there were 35 to 127 a day with a high count of 154 on December 9, 2014. The early spring passage ran from January 8, 2015 to February 28, 2015. In January there were from 47 to 117 a day with a high count of 185 on January 19, 2015. In February there were 33 to 151 a day with a high count of 283 on February 17, 2015 this is the highest count for the park. The late spring passage ran from March 2, 2015 to May 2, 2015 in March 46 to 118 a day seen with a high count of 245 on March 2, 2015. Now the counts dropped again so for the April passage there were 17 to 63 a day with a high count of 81 on April 16, 2015. The summer passage ran from May 3, 2015 to July 1, 2015 there were 23 to 74 a day with high counts of 86 on May 9, 2015 and 84 on June 6, 2015. From July the counts were higher again. The early fall passage ran from July 3, 2015 to October 4, 2015 for July 11 to 67 a day seen with a high count of 123 on July 5, 2015. In August there were 11 to 74 a day with a high count of 89 on August 23, 2015. For September there were 21 to 68 a day with a high count of 149 on September 25, 2015. The higher counts continued through the late fall passage this event ran from October 7, 2015 to December 9, 2015 there were in October 44 to 166 a day with a high count of 232 on October 10, 2015. For November there were from 23 to 82 a day with a high count of 131 on November 11, 2015. Finally for the winter passage we are back to the lower counts. This event ran from December 11, 2015 to December 30, 2015 there were nine to 53 a day with a high count of 61 on December 13, 2015.

Turkey Vulture (*Cathartes aura*)

This species also roosted by the bike trail in varying numbers they would leave *en masse* with the thermals; they normally headed out over the St. Johns River marshes. In 2014 the counts were low from April to October and in 2015 the counts were low from April to September. For the late fall passage of 2013 from 13 to 21 a day seen from October 14 to November 28 with a high count of 99 on November 24, 2013. The winter passage ran from December 3, 2013 to January 9, 2014 with a high count of 278 on December 10, 2013. The early spring passage ran from January 11, 2014 to February 26, 2014 with a high count of 483 on January 11, 2014. The late spring passage ran from March 1, 2014 to May 3, 2014 but this passage splits into two. For March there were from 28 to 229 a day with a high count of 268 on March 3, 2014. The counts now fell so for April there were 15 to 57 a day with a high count of 94 on April 3, 2014 that is such a contrast to March. The summer passage in 2014 ran from May 4 to July 1 with three to 67 a day and a high count of 109 on May 19, 2014. The early fall passage ran from July 3, 2014 to September 30, 2014 counts trended lower during this event. For July there were 27 to 78 a day with a high count of 91 on July 22, 2014, in August there were from 14 to 33 a day with a high count of 48 on August 14, 2014; finally for September there were 11 to 29 a day with a high count of 53 on September 22, 2014. The late fall passage was another split event the passage ran from October 2, 2014 to November 25, 2014. For October there were from four to 22 a day with a high count of 63 on October 21, 2014. That ended the period of low counts. November was so very different there were from 15 to 203 a day with a high count of 586 on November 17, 2014. The winter passage ran from November 27, 2014 to January 5, 2015 with 113 to 475 a day and a high count of 766 on December 23, 2014. Counts continued to climb through the early spring passage which ran from January 6, 2015 to February 28, 2015. For January there were from 24 to 409 a day with a high count of 868 on January 22, 2015 and for February there were 57 to 522 a day with a high count of 1,037 on February 23, 2015. The late spring passage was another split event the passage ran from March 2, 2015 to April 27, 2015 for March there were 24 to 296 a day with a very high count of 1,462 on March 2, 2015. Surprisingly that is not the highest count so read on. With April we are back in the lower counts again there were 15 to 58 a day with a high count of 62 on April 18, 2015; that is such a contrast to March. The summer passage in 2015 ran from April 30 to June 28 there were 31 to 89 a day with a high count of 143 on May 27, 2015. The early fall passage ran from July 1, 2015 to October 2, 2015 with 28 to 117 a day and a high count of 165 on September 7, 2015. With the late fall passage numbers rose again this passage ran from October 3, 2015 to December 6, 2015. For October there were from 18 to 77 a day and a high count of 331 on October 23, 2015 then for November there were 75 to 396 a day with a high count of 610 on November 11, 2015. This leaves the winter passage this ran from December 9, 2015 to December 30, 2015 there were 294 to 596 a day with a very high count of 1,930 on

December 23, 2015. In the previous “year” the highest count was in March so just how high would these counts have gone in 2016?

Black-bellied Whistling-Duck (*Dendrocygna autumnalis*)

This has proved to be one of the most important species in the park. There were no records until February 2014 and numbers quickly built to a peak in mid-April counts then gradually fell to mid-May. Lower numbers remained to December, 2014 there were no sightings for January or early February, The pattern for 2015 was similar to 2014 but on a much lower scale. It is possible that a pair nested at the ponds in 2014 but the nest was destroyed by dogs. In 2015 a pair appeared to have a nest in a tree by the bike trail but the young were not seen. Later there was a brood of six in the western pond on October 18 but they were not seen again.

Initially for the early spring passage in 2014 there were 40 on February 11 with 46 on February 15 and 50 on February 17, then 20 seen on February 20. For the main spring passage there were 31 on March 3 with 35 on March 6, 53 on March 8 and 73 on March 10, then 28 seen on March 15 with 13 to April 5. There were 19 on April 7 with 31 on April 10, 36 on April 14, 80 on April 15 and 87 on April 16, then 51 seen on April 17 with 15 on April 19. The count of 87 was the highest count for the park. There were 32 on April 20 with 56 on April 22, then 29 seen on April 24 with 28 on April 27. There were 53 on April 28 with 28 on May 1 and 19 on May 3. That ended the main spring passage. For the summer passage there were 26 on May 4 with 48 on May 8, then 12 seen on May 10 with five on May 12 and three on May 13. That was the end of the heavier passage. This was such a significant event I have shown it in great detail I will only summarize the rest of the influxes. There were six on May 15 with 14 on May 22, then six seen on June 14. There were nine on June 15 with three on June 26 and two on June 30. That closed the summer passage. For the early fall passage in 2014 there were seven on July 1 with nine on July 7, then three seen to July 22. There were four on July 24 with three to July 29. There were six on August 11 with nine on September 1, then six seen on September 9 with two on September 11. There were three on September 13 with 12 on September 15, then seven seen on September 16 with two on September 29. That was the early fall passage so for the late fall passage there were six on October 16 with 19 on October 18, then one seen from October 27 to November 1. There were also four on November 8. That was the extent of the late fall passage. For the winter passage there was one on November 27 with five on December 4 and 15 on December 15, then one seen on December 18. There were no later records. For the early spring passage in 2015 there were two on February 16 that was it. For the main spring passage there were ten on March 2 with later 18 on March 24, 15 to April 4 and five on April 7. There were 11 on April 11 with 12 on April 13, then ten seen on April 17 with two on April 20. There were eight on April 21 with 16 on April 25, then eight seen on May 1 with two on May 2.

That concluded the main spring passage. For the summer passage there were three on May 3 with seven on May 9, then three seen on May 15. There were seven on May 17 with two on May 23. There were five on May 24 with six on May 29, then one seen on June 7. There were three on June 10 with seven on June 12 and June 14, then three seen on June 26. That completed the summer passage. For the early fall passage in 2015 there were four on June 27 with 11 on July 5, then three seen on July 15. There were 12 on July 17 with two on July 22. There were three on July 24 with five on July 26, then four seen on August 5 with one on August 16. There were four on August 19 with one on August 26. There were two on August 28 with five on September 1, this influx ended with one on September 30. For the late fall passage there were ten on October 3 with six on October 6. There were seven on October 11 with eight on October 18, then one seen on October 27. That was the extent of the late fall passage. For the winter passage there were five on December 11 that was it. I have shown this species in great detail because it was so important.

Snow Goose (*Chen caerulescens*)

This was a vagrant with sightings in November 2014 and 2015, On November 3, 2014 one flew over in the dark calling. In 2015 a party of seven adult white morphs flew to the east on November 11. These are late fall records.

Muscovy Duck (*Cairina moschata*)

This is a feral species that can at times be a pest. Initially this was a rarity there was one on December 17, 2013 with two from December 26, 2013 to January 4, 2014 then one seen to January 11, 2014. That was the winter passage. There were no sightings for the spring or summer passages in 2014. For the early fall passage in 2014 there was one on July 14. That was the only record for the early fall passage there were no sightings for the late fall passage in 2014. For the winter passage in 2014 there were two from December 16 to December 21 that was it. For the early spring passage in 2015 there was one from January 3 with two from January 20 to February 24, then one seen on February 26. For the late spring passage in 2015 there were singles from March 14 to April 11 with two on April 14. For the summer passage in 2015 there were singles on April 30, May 16, May 22 and May 30. There were no further sightings until August and the early fall passage. For this passage there were two from August 5 to August 16 with singles to August 28. There were no September records so for the late fall passage in 2015 there were singles on October 4 and October 9. Later there were three on October 24 with five on October 30, then one to two a day seen to November 15. I believe a pair raised two young at the small holding between the park and Doyle Road. There were also

three on November 18 and November 26 with two on November 27. That was the late fall passage. For the winter passage in 2015 there were four present from November 28 to December 30 i.e. the two adults and their two young.

Wood Duck (*Aix sponsa*)

A summer visitor with somewhat lower numbers in the late spring and early fall passages. There were records for all months but the winter passage appeared to be the weakest event. In 2014 a pair bred by the bike trail there were six chicks on May 1. In 2015 a pair bred near the western pond as there were seven small chicks there on April 4. There were no records for the late fall passage in 2013. For the winter passage there were two present from December 10, 2013 to January 9, 2014. For the early spring passage in 2014 there were two present from January 25 to February 17 with four from February 22 to March 1, then two seen on March 3. For the late spring passage there was one on March 14 with four on April 3 and April 26. The summer passage ran from April 29, 2014 to June 30, 2014 there were two to seven a day with a high count of nine on June 15. The early fall passage in 2014 breaks into two parts firstly from July 7 to August 14 one to two a day seen with four on July 26 then from September 6 to October 2 singles seen on scattered dates with three on September 11. Now the records were few and far between. For the late fall passage there was one on October 20 with two on October 23. For the winter passage there were two on November 29 with six on December 9 that was it. For the early spring passage in 2015 there was one on January 3 with six on January 5. Later there were two on January 22 and January 27 with two again on February 12 and February 17. From March to November this species was often to be seen at the ponds or in the marsh. The main spring passage ran from February 28, 2015 to April 25, 2015 with two to seven a day the highest count was that of 15 on April 4. The summer passage ran from April 30, 2015 to June 27, 2015 again there were two to seven a day; the highest counts were those of 11 on May 2, 2015 and ten on June 20, 2015. Now the numbers started to drop so for the early fall passage one to five a day seen from July 3, 2015 to October 2, 2015; the highest count was that of 11 on July 15, 2015. The late fall passage only ran from October 3, 2015 to November 11, 2015 just one to two a day seen with a high count of seven on October 4, 2015. There was just one record for the winter passage there were four on December 13, 2015

Gadwall (*Anas strepera*)

This was a vagrant there were only five records for the two years they were all seen flying over the park. For the late fall passage in 2014 there was one on November 10 with seven

on November 24. For the winter passage there were six on December 2. For the early spring passage in 2015 a flock of 35 flew to the south on January 8. Finally for the late fall passage in 2015 there was one on October 31.

American Wigeon (*Anas americana*)

This was a vagrant for the winter passage in 2014 there was one on December 8 that was it.

Mallard (*Anas platyrhynchos*)

For simplicity I have placed all Mallard/Mottled Duck hybrids under this species. An uncommon duck in that normally no more than one to two a day were seen when they were present. In 2014 there were no sightings from mid-June to early October and in 2015 from May to early July. In 2015 there were also no sightings from late September to the end of the year. The first winter passage ran from December 14, 2013 to January 4, 2014 there were one to two a day with a high count of three on December 17, 2013. The early spring passage ran from January 7, 2014 to February 26, 2014 there were one to two a day. For the late spring passage which ran from March 1, 2014 to May 1, 2014 there was also one to two a day with a high count of four on March 15, 2014. The summer passage only ran from May 3, 2014 to June 14, 2014 only singles seen. There were no further sightings until October so for the late fall passage in 2014 which ran from October 9 to November 1 there were seven on October 9 and October 27 with one on November 1. The winter passage was also noted on just three dates from November 24 to December 8, no more than three a day seen. The early spring passage in 2015 ran from January 15 to February 24 there were two a day. For the late spring passage which ran from February 28, 2015 to April 25, 2015 two a day were seen when present. There were no summer sightings so for the early fall passage there was one on July 5 with three on July 8. For the late fall passage there were eight on September 26, 2015 this is the highest count for the park. There were no later records.

Mottled Duck (*Anas fulvigula*)

An irregular visitor to the park there were few sightings for the early fall passage. There were no records for the late fall passage in 2013. The winter passage ran from December 14, 2013 to January 9, 2014 singles were seen daily with three on December 31, 2013. The early spring passage in 2014 ran from January 11 to February 24 with one to two a day and three on

February 20, 2014. The late spring passage ran from March 1, 2014 to May 1, 2014 singles were seen on most days with two on April 20, 2014. The summer passage ran from May 8, 2014 to July 1, 2014 just one to two a day seen. The only record for the early fall passage relates to one on July 26, 2014. For the late fall passage in 2014 there were three on October 5 with 12 on October 9 (the highest count), then six seen on October 11. Finally there were three on November 24, 2014. There was one winter record there was one on December 23, 2014. The early spring passage in 2015 only ran from February 6 to February 24. There were just six sightings from July 2nd to this point. For this event there was one on February 6 with two on February 9, February 20 and February 24. For the late spring passage there were singles on March 14, April 4 and April 27 with later two on April 25, then one seen on May 2. The summer passage of 2015 was worse there were only four records there were singles on May 16 and May 17 with two on June 7, then one seen later on June 27. For the three month long early fall passage there was just one record there was one on August 30. Finally for the late fall passage in 2015 there were three on October 2 with seven on October 3, then one seen on October 11. There were no winter records. In 2014 this was a regular visitor but in 2015 it was a very irregular visitor.

Blue-winged Teal (*Anas discors*)

Above all a fall passage migrant there were just four spring sightings. For the late fall passage in 2013 there was one on October 29. There were no sightings for the following winter passage. For the early spring passage in 2014 there were 20 on February 4 with five on February 26. For the late spring passage there were three on April 26, 2014. There were no summer records. For the early fall passage in 2014 there was one on July 29. More normally there were three on September 6 with six on September 8, later there was one on September 18. Finally for this passage there were two on September 27 with one on September 29. For the late fall passage in 2014 there were 35 on October 4 with two on October 17. Later there were singles on November 24 and November 27. There were no winter records. For the early spring passage there was one on February 1, 2015 that was it. There was no late spring or summer sightings. For the early fall passage in 2015 there were two on August 21 with six on August 26. Later there was one on September 18 with 55 on September 20 (the highest count), then six seen on September 25. That ended the early fall passage. For the late fall passage there were six on October 11 with later five on November 20 and November 21. Finally for the winter passage in 2015 there were two on December 6. The records here are a mixture of birds at the ponds and of birds flying overhead I did not separate them out.

Northern Shoveler (*Anas clypeata*)

This was a vagrant for the winter passage in 2014 a party of 14 flew south over the ponds on December 9.

Northern Pintail (*Anas acuta*)

There were just seven records from November 2014 to January 2015 i.e. they were all in the first "year". For the late fall passage there were 25 on November 13 and November 15. For the winter passage there were 30 on December 2 with 35 on December 12, then 32 seen on December 16. For the early spring passage there were 28 on January 15 and January 16. These were all flocks that flew to the south in the early morning.

Green-winged Teal (*Anas crecca*)

A late fall passage migrant and in 2014/2015 a winter visitor. For the late fall passage in 2013 there were ten on November 19 with 12 on November 24. For the late fall passage in 2014 there were 15 on October 27 with one on November 1. There were eight on November 3 with 24 on November 4, then six seen on November 11. Later there were seven on November 24 with four to November 27 and one on November 29. For the winter passage there were two on December 1 with three on December 6, then two seen at the western pond through to February 1, 2015. One was present to February 6. They may have left of their own accord but a Red-shouldered Hawk was paying close attention to them. For the late fall passage in 2015 there was one on September 26 with another later on October 11. There were six on October 14 and October 25 with four on November 1. Finally for the winter passage there were two on December 6, 2015.

Ring-necked Duck (*Aythya collaris*)

Small parties were seen flying to the south in the early morning from December, 2013 to February, 2014 and from November, 2014 to December in 2014. For the winter passage there were 40 on December 10, 2013 with 80 on December 31, then 45 seen on January 4, 2014. For the early spring passage there were three on January 11 with 12 on January 23 and 105 on January 25, then 28 seen on February 4 with eight on February 13. For the late fall passage in 2014 there were four on November 15 with 60 on November 27. For the winter passage there

were 43 on December 1 with eight on December 2. There were no records for the late fall or winter passages in 2015.

Lesser Scaup (*Aythya affinis*)

This was a vagrant there were singles on December 6, 2014 and December 23, 2014, both birds were on the largest and deepest pond. These are winter records.

Hooded Merganser (*Lophodytes cucullatus*)

There was a significant invasion in the winter of 2013/2014 but numbers were much lower in the winter of 2014/2015. For December, 2015 there were only two records. The western pond has gradually developed a thicker cover of vegetation and the ponds as a whole may no longer be suitable for this duck. To detail the 2013/2014 records there were five on November 24 with eight on December 10, 18 on December 14, 21 on December 17 and 29 on December 23, then 24 seen to January 4. That was the winter passage. For the early spring passage there were 27 on January 7 with 21 on January 16, 19 on January 23, 14 on January 30, seven on February 8, five on February 17, three on February 22 and one on February 24. For the late spring passage there were six on March 1 with five to March 18, four on March 20, three to March 25, two on March 31 and one on April 1, 2014. To detail the 2014/2015 records there were seven on November 4 with three on November 11 and two on November 15. There were four on November 19 with 13 on November 21, then four seen on November 24 with one on November 25. That was the late fall passage. For the winter passage there were five on November 29 with ten on December 1, then five seen on December 2 with two on December 8. There were seven on December 9 with eight on December 13 and December 21, then five seen on December 30 with four on January 1 and two on January 3. That closed the winter passage so for the early spring passage there were six on January 5 with 11 on January 8, then nine seen on January 10 with two to January 17. There were four on January 19 and January 20 with two on January 27. There were ten on January 29 with five on February 1, four on February 3 and two to February 10. Finally for this event there were four on February 14, February 19 and February 20 with two to March 10. There were just three records for late 2015. For the late fall passage there was one on November 7 and for the winter passage there were singles on December 16 and December 20.

Osprey (*Pandion haliaetus*)

A pair bred in both years in a pine tree just to the west of the property, success not known (nest too hidden). They regularly fished the two open water ponds and they used some of the snags as perches. From mid-August to the end of December counts were very low often in the range of one to three a day. In both 2014 and 2015 the late spring passage was a major event but in 2015 the summer passage was even stronger. For the late fall passage in 2013 there were singles on November 4 and November 28 that was it. The following winter did not produce a single sighting. The early spring passage ran from January 7, 2014 to February 26, 2014 with high counts of seven on February 20 and February 24. The main spring passage in 2014 ran from March 1 to May 4 with high counts of nine on March 3 and April 16. The summer passage ran from May 8 to July 1 with high counts of eight on May 10 and June 12. The first part of the early fall passage in 2014 ran from July 3 to August 18 with a high count of six on July 15 this was the transition influx from the higher to the lower counts. The balance of the early fall passage ran from August 19, 2014 to October 4, 2014 with high counts of four on August 19, August 21 and September 16 otherwise one to two a day seen. The late fall passage in 2014 ran from October 5 to November 27 only one to two a day seen. The winter passage was no different there were one to two a day from November 29, 2014 to January 3, 2015. With the early spring passage in 2015 the numbers edged higher this event ran from January 5 to February 28 with a high count of seven on February 24. The main spring passage ran from March 2 to April 27 with a high count of ten on March 21. Now we come to the main event the 2015 summer passage to detail the records: there were six on April 30 with five to May 13 and three on May 16. There were four on May 17 with five on May 20 and seven on May 22, then six seen to May 27 with five on May 30. There were six on June 3 with ten on June 5, then six seen on June 10 with four on June 12. There were 13 on June 13 with nine on June 20, eight on June 21, six on June 26, five on June 28 and four on July 1. As with 2014 the first influx of the early fall passage was the transition event. This influx ran from July 3 to August 8 with high counts of eight on July 12 and July 22. The balance of the early fall passage in 2015 ran from August 9 to September 26 normally one to three a day seen but there were five on August 14 with six on September 23. The late fall passage ran from October 2 to November 28 normally there were one to three a day with a high count of four on October 7. There was only a trace winter passage in 2015 there being one on December 6 with two on December 21, then one seen on December 23.

Swallow-tailed Kite (*Elanoides forficatus*)

A pair nested in both years in the trees between the ponds and the bike trail, whilst young raised I am not sure how many as there were always other kites around. The highest

numbers in both years were seen in July and the first few days of August. For the late spring passage in 2014 there were one to six a day seen from March 1 to April 27. The summer passage was weaker it ran from April 29 to June 28 with one to four a day. To detail the early fall passage in 2014 there were four on June 30 with 13 on July 4, then eight seen on July 11 with three to July 17. There were ten on July 19 with 15 on July 28 and 19 on July 29, then 14 seen on August 2 with six on August 5, four on August 9, three on August 14 and one to August 25. In 2015 the late spring passage ran from March 3 to May 1 with a high count of eight on April 14. The summer passage ran from May 2 to July 8 with a high count of 19 on May 24. Now to the heaviest passage the early fall passage this ran from July 10 to August 19 in 2015 to detail the records. There were 24 on July 10 with 18 on July 12 and 14 on July 15. There were 37 on July 17 with 39 on July 18 and 50 on July 19, then 29 seen on July 25 with 19 on July 26. There were 36 on July 31 with 40 on August 5, then 12 seen on August 12 with four on August 19.

Bald Eagle (*Haliaeetus leucocephalus*)

Whilst no pairs actually bred in the park there were pairs in the vicinity. The highest numbers for the most part came from the spring passages. It is normal for this species to leave the area during the summer but a pair stayed put through both summers. For the late fall passage in 2013 there were singles on October 22 and October 29. The winter passage ran from December 3, 2013 to January 4, 2014 there were one to three a day with four on December 23, 2013 and December 31, 2013. The early spring passage in 2014 ran from January 9 to February 26 from two to six a day seen with a high count of seven on January 18, 2014 (this was the highest count). The late spring passage ran from March 1, 2014 to April 29, 2014 there were one to five a day with six on April 19, 2014. The summer passage ran from May 1, 2014 to June 28, 2014 only one to two a day seen. The early fall passage ran from July 3, 2014 to October 4, 2014 again only one to two a day seen but there were five on September 13. The late fall passage ran from October 5, 2014 to December 1, 2014 there were one to four a day with a high count of five on November 11, 2014. The winter passage ran from December 2, 2014 to January 6, 2015 just one to four a day seen. In 2015 the early spring passage ran from January 8 to February 26 again one to four a day seen. The late spring passage ran from March 2, 2015 to April 25, 2015 with a high count of six on March 26 otherwise there were one to three a day. The summer passage ran from May 1 to July 3 only one to two a day seen. The early fall passage then ran from July 4, 2015 to October 2, 2015 from one to two a day seen with three on September 30, 2015. Numbers were now a little higher for the late fall passage which ran from October 4 to November 20 there were from one to five a day. Finally for the winter passage one to three a day seen from November 27, 2015 to December 30, 2015.

Northern Harrier (*Circus cyaneus*)

Whilst there were sightings for the fall passages this was above all a spring passage migrant with birds flying to the north. For the early spring passage in 2014 there were singles on seven dates from January 7 to February 4. The late spring passage ran from March 13 to April 16 normally singles noted but there were two on March 29 with four on March 31. For the early fall passage there was an adult male that flew to the south on August 18, 2014. For this species the adults tend to migrate before the juveniles. For the late fall passage there were singles on October 14, 2014, November 1, 2014 and November 13, 2014. There were again no winter sightings. For the early spring passage in 2015 there were singles on January 27 and February 6. For the late spring passage in 2015 there were singles from March 19 to April 11 with six on March 28, three on March 31 and two on April 4. An exceptionally high total of 11 flew to the north on April 18. Later there were singles from April 25 to May 10, 2015 with two on April 30, 2015. That ended this major event. For the late fall passage there were singles on October 24, 2015, October 30, 2015 and November 13, 2015. There were no winter records for 2015.

Sharp-shinned Hawk (*Accipiter striatus*)

Above all this was a late spring and late fall passage migrant; there were sightings from September 25 to April 26. Unlike the last species isolated individuals were noted during the winter. For the late fall passage in 2013 there was one on October 14. For the winter passage there was one on December 3, 2013 with two on December 23, 2013, then singles seen on January 4, 2014 and January 7, 2014. The early spring passage in 2014 ran from January 18 to March 1 normally one to two a day seen when present but there were three on February 2. The late spring passage in 2014 ran from March 10 to April 26 from one to two a day seen with five on March 18, 2014. For the late fall passage there was one on October 5, 2014. The main passage ran from October 21 to November 21 there were one to three a day when present. For the winter passage there were singles on December 2, 2014 and January 5, 2015. For the early spring passage there were also singles on January 8 and February 16. The late spring passage in 2015 was a stronger event the passage ran from March 5 to April 23 there were one to two a day with a high count of six on April 18. Exceptionally for the early fall passage in 2015 there was one on September 25. The late fall passage ran from October 10, 2015 to November 26, 2015 from one to four a day seen with a high count of seven on October 24, 2015. Finally for the winter passage there were singles on December 11, December 21 and December 30, 2015.

Cooper's Hawk (*Accipiter cooperii*)

This was a resident with a pair nesting in the woods by the bike trail, a single juvenile was seen and heard in 2015. These hawks are very secretive but one to two were seen regularly through the two years. The only higher count was that of three on February 24, 2014.

Red-shouldered Hawk (*Buteo lineatus*)

A noisy resident with two competing pairs by the impoundments (one of these pairs also controlled the marsh). East of the marsh juveniles were in residence. Just to confuse the situation a single adult used to fly across the ponds between the two sparring pairs. During the two years from two to six birds seen on most dates i.e. there was little to suggest passage. There were a few higher counts and they fitted into the late spring passage and the early fall passage. I am not sure what they represent. For the late spring passage there were higher counts of seven on March 25, 2014, eight on April 16, 2014 and nine on April 9, 2015. For the early fall passage there were higher counts of eight on July 19, 2014, ten on August 18, 2014, nine on August 21, 2014, ten on September 1, 2014 and seven on July 25, 2015.

Broad-winged Hawk (*Buteo platypterus*)

This was a rare passage migrant, there were eight records for the late fall passage, they were seen from September 25 (2015) to November 8 (2014). All that were aged proved to be juveniles. There were singles juveniles on September 25, 2015 and September 27, 2015. There was one not aged on October 5, 2014. There was a juvenile on October 10, 2015 with two not aged on October 11, 2015. Finally there were single juveniles on October 23, 2015, October 30, 2014 and November 8, 2014.

Short-tailed Hawk (*Buteo brachyurus*)

This is a rare buteo in Florida but it is one that breeds in this part of the State. In 2014 a pair of light morphs was in residence to the west of the park and I assume that they bred. In 2014 single light morphs were seen on occasions from April 1 to October 4 with two on April 16. In 2015 there was a light morph again present on occasions from January 22 to March 12. For the summer there was a light morph present from May 29 to October 3 with two on June 21 so hopefully they again bred. During this period there were two on August 30 one was a light morph and the other was a dark morph. In 2015 there were two winter records there was a

light morph on December 13 and a dark morph on December 16. There have now been records for every month of the year this is perhaps unexpected as they normally move to south Florida for the winter.

Swainson's Hawk (*Buteo swainsoni*)

This was a vagrant there were just two records for the late fall passage. In 2014 there was a dark morph on November 12 and in 2015 there was another dark morph on November 26.

Red-tailed Hawk (*Buteo jamaicensis*)

I believe a pair bred near the park in 2014 but I could not get a view of the possible nesting site. In 2015 they may have nested well to the west. Whilst I did not see this species every day one to two a day were seen regularly. The only extended break occurred in 2014 from September 15 to November 11 during this period the only sightings were of singles on October 5 and October 23. There were higher counts of three on February 2, 2014, February 15, 2014, March 3, 2014, May 17, 2014 and July 1, 2014.

Crested Caracara (*Caracara cheriway*)

In 2014 a pair bred in the Osteen area and in that year individuals flew over the park on a number of occasions. There was a sighting for 2015 so they may have nested locally again. There were singles on February 15, 2014, May 8, 2014, May 13, 2014, November 8, 2014 and March 3, 2015.

American Kestrel (*Falco sparverius*)

A male wintered in the south-western corner of the impoundments migrants also visited the area or just flew overhead. The wintering male was seen from October 14, 2013 (the first day of the survey) to March 31, 2014, from September 22, 2014 to March 24, 2015 and from September 18, 2015. A second bird was present from October 21, 2014 to November 1, 2014 and from October 18, 2015 to November 1, 2015. I believe that the male and second bird were returning each year, the dates are so similar. In 2015 there were two migrants flying to the north there were singles on April 2, 2015 and April 14, 2015.

Merlin (*Falco columbarius*)

In all there were 20 sightings for the two years with one exception it was a spring and fall passage migrant. The exception related to the winter passage as there was one on December 23, 2013. For the early spring passage there were singles on January 13, 2014 and February 24, 2014. The main spring passage was the strongest event. In 2014 this passage ran from March 24 to April 19 with singles on six dates. In 2015 this passage ran from April 17 to May 10 there were singles on four dates with two on May 9, 2015. For the late fall passage in 2014 there was one on October 9 with three on October 21, then one seen on November 13. In 2015 for the early fall passage there were two on September 23 with one on September 25. Finally for the late fall passage in 2015 there was one on November 6.

Peregrine Falcon (*Falco peregrinus*)

In contrast there were only eight sightings of this species for the two years. There were five records for the late spring passage and three for the late fall passage all but two of the records came from 2014. For the late spring passage in 2014 there were singles on March 25, March 29, April 14 and April 15. In 2015 there was one on April 30. For the late fall passage in 2014 there were singles on September 30 and October 5. In 2015 there was one on October 3.

Common Peafowl (*Pavo cristatus*)

There was an adult male that wandered into the park occasionally from someone's collection. On most visits it seemed to be very attached to a female Wild Turkey. This was a stunningly beautiful bird even if it was an exotic. This bird was only seen on March 29, 2014, April 26, 2014, May 22, 2014 and May 2, 2015.

Wild Turkey (*Meleagris gallopavo*)

A resident in the wooded areas they could be seen in the early morning out in the open by the impoundments. For the winter passage of 2013 there were 14 on December 23, there were no January records. The early spring passage in 2014 ran from February 2 to February 26 there were one to three a day with 12 on February 4, 2014. The late spring passage ran from March 3, 2014 to April 29, 2014 however the passage in March was much stronger than that in April. The heaviest passage occurred from March 3 to April 7 with two to seven a day the highest count was that of 16 on March 24. The lighter passage ran from April 10 to April 29 just

one to two a day seen. The summer passage was also a split event again the first half was the stronger passage. From May 1 to May 29 from one to four a day seen with a high count of 12 on May 22, 2014 then from June 2 to June 30 just one to two a day seen with a high count of five on June 12, 2014. The early fall passage was the lightest event of the year this passage ran from July 3, 2014 to September 27, 2014 only singles noted. The late fall passage ran from September 30, 2014 to November 27, 2014 there were one to two a day. Despite those low numbers the highest counts were of 16 on October 23, 2014 and 14 on November 3, 2014. The winter passage ran from December 4, 2014 to January 6, 2015 singles seen with three on December 30, 2014. There was now a significant gap until the early spring passage started. The early spring passage ran from February 1, 2015 to February 24, 2015 only one to two a day seen. Numbers were higher for the late spring passage and the first half of summer passage. For the late spring passage one to four a day seen from March 5, 2015 to April 30, 2015 with a high count of nine on March 18, 2015. The summer passage ran from May 1, 2015 to June 28, 2015 the first part ran from May 1 to June 5 there were two to five a day with a high count of seven on May 23, 2015. The second part ran from June 7 to June 28 just one to two a day noted. The early fall passage also had just one to two a day this passage ran from July 3, 2015 to September 27, 2015. The late fall passage was a little stronger the passage ran from October 17, 2015 to November 29, 2015 there were from one to four a day with five on November 27. Finally the winter passage ran from December 9, 2015 to December 25, 2015 only one to two a day seen. I have shown this species in some detail as it is perhaps unique in that there is no visible pattern, it is just a muddle.

Northern Bobwhite (*Colinus virginianus*)

Unlike the last species there is some correlation here. No pairs actually known to nest on the property but I suspect they did so just to the north. Individuals did occur on the property from time to time. For the early spring passage there were singles on February 17, 2014 and February 12, 2015. I would expect them to call from March to June as that is the breeding season. In 2014 there were two on April 5 with singles on three dates to May 20. In 2015 singles noted regularly from March 21 to June 10 with two on April 23 and April 30. For the early fall there were singles in 2015 on July 8 and July 10. Birds then noted in late September these could be early or late fall records. There was one on September 27, 2014 with two on September 26, 2015. For the late fall passage in 2014 there were singles on October 25 and November 8. In 2015 there were singles on four dates from October 21 to November 15. For the winter passage in 2015 there were two on November 29 with singles on December 6, December 11, December 13 and December 27.

Virginia Rail (*Rallus limicola*)

This was a vagrant for the late fall passage there was one in the vegetated ponds on November 8, 2014.

Sora (*Porzana carolina*)

This has proved to be a winter visitor to the vegetated ponds with the trace of a late spring passage. There was one present from December 7, 2013 to March 4, 2014 with two from December 29, 2013 to January 20, 2014. For the late spring passage there was one from March 29, 2014 to April 20, 2014 with two on April 19, 2014. For the next winter there were singles from November 8, 2014 to March 2, 2015. During this period there were three on November 24, 2014 with two on November 27, 2014; later there were two from January 8, 2015 to February 6, 2015. Again there was a late spring passage as there were singles from April 4, 2015 to April 9, 2015. Exceptionally for the early fall passage there was one on September 23, 2015. For the third winter there was one present from October 10, 2015 to December 25, 2015.

Common Gallinule (*Gallinula galeata*)

A very rare visitor to the park only five individuals were seen. For the late fall passage there was one on October 2, 2014 with another from October 25, 2015 to November 7, 2015. For the winter passage there was one on December 10, 2013. For the spring passages there was a long staying individual from February 12, 2015 to March 21, 2015. Later in 2015 there was one on April 25.

American Coot (*Fulica americana*)

This was a vagrant for the winter passage there were singles on December 15, 2014 and December 11, 2015.

Limpkin (*Aramus guarauna*)

This was also a vagrant that was heard from the park but was not seen in the park.....For the winter passage there was one on December 2, 2014 and January 3, 2015.

Sandhill Crane (*Grus canadensis*)

In 2014 a pair bred at the impoundments raising one young the chick being first seen on April 5. In 2015 a pair bred in the marsh there were two young on February 28 but only one on March 2 this they raised. There was again in 2015 a pair at the impoundments they raised two young which were first seen on March 14. There were at least four other pairs nearby if one pair called the others could well end up joining in. On top of that there were strays and small parties that flew over. In February spring migration could produce flocks migrating to the north so all in all a complicated situation. In 2013 the late fall passage ran from October 14 to November 28 two to four a day were seen. The winter passage ran from December 7, 2013 to January 2, 2014 two to six a day seen with a higher count of eight on December 17, 2013. The early spring passage ran from January 4, 2014 to February 26, 2014 there were four to eight a day with a high count of 68 on February 20, 2014. All or nearly all of the 68 will have been flying to the north. The late spring passage ran from March 1, 2014 to May 3, 2014 with five to ten a day and a high count of 16 on April 12, 2014. With the exception of the late fall passage this was the strongest event in 2014. The summer passage ran from May 4, 2014 to July 3, 2014 there were five to nine a day with a high count of ten on May 4, 2014. The early fall passage ran from July 5, 2014 to September 27, 2014 with a high count of nine on September 1, 2014. The late fall passage ran from September 30, 2014 to December 1, 2014 with four to 15 a day and a high count of 23 on November 11, 2014. The fall migration is in November and December but somehow I failed to see any migrating flocks. The winter passage ran from December 2, 2014 to January 3, 2015 with four to ten a day and a high count of 17 on December 11, 2014. The early spring passage ran from January 5, 2015 to February 26, 2015 there were four to 11 a day with a high count of 127 on February 16, 2015, all or nearly all of the 127 will have been migrating to the north. For the next two passages there were no higher counts. The late spring passage ran from February 28, 2015 to April 27, 2015 there were six to 11 a day. The summer passage ran from April 30, 2015 to June 26, 2015 there were five to 11 a day. The early fall passage ran from June 28, 2015 to October 2, 2015 with six to 11 a day there was a higher count of 15 on September 27, 2015. The late fall passage ran from October 3, 2015 to November 28, 2015 with six to ten a day there was a high count of 21 on November 14, 2015. Finally the winter passage ran from November 29, 2015 to December 30, 2015 there were seven to 13 a day, no higher counts.

Killdeer (*Charadrius vociferus*)

The highest numbers were seen from late November to late February in contrast they were absent during the summer of 2014 (one to two a day noted during the summer of 2015). In 2015 they did not nest in the park but may have done so nearby. Numbers in 2013/2014

were much higher than those in 2014/2015. The late fall passage ran from October 14, 2013 to December 3, 2013 there were two to six a day with 13 on November 28, 2013. The winter passage ran from December 7, 2013 to January 2, 2014 with five to ten a day and a high count of 13 on December 31, 2013. The early spring passage ran from January 4, 2014 to March 1, 2014 this is another of the split passages. From January 4 to February 6 six to 16 a day were seen with a high count of 19 on January 27, 2014. From February 8 to March 1 there were four to eight a day with a high count of ten on February 24, 2014. For the late spring passage just one to two a day were seen from March 3, 2014 to April 26, 2014 with a high count of five on March 6, 2014. The summer passage was no better this ran from April 27, 2014 to June 26, 2014 with one to two a day and a high count of four on May 13, 2014. The situation gets even worse as there were no sightings from June 27 to August 29. For the balance of the early fall passage singles were seen from August 30, 2014 to September 27, 2014 with two on September 25, 2014. The late fall passage was another split event. From October 5, 2014 to November 1, 2014 only singles were seen. From November 3, 2014 to November 29, 2014 from three to eight a day were seen with nine on November 19, 2014. The winter passage ran from December 1, 2014 to January 3, 2015 there were five to 11 a day with a high count of 14 on December 1, 2014. The early spring passage ran from January 5, 2015 to March 12, 2015 with three to seven a day and a high count of nine on January 8, 2015. To the end of the year only low numbers were seen. The late spring passage ran from March 16, 2015 to April 30, 2015 there were one to two a day with four on April 13, 2015. The summer passage ran from May 1, 2015 to July 1, 2015 just one to two a day seen. The early fall passage was even worse there were singles on six dates from July 8, 2015 to September 20, 2015. The late fall passage ran from September 30, 2015 to November 29, 2015 again with one to two a day and a high count of four on November 28, 2015. Finally the winter passage ran from December 9, 2015 to December 30, 2015 there were one to six a day no high counts.

Black-necked Stilt (*Himantopus mexicanus*)

Without areas of mud this and the other shorebirds were infrequent visitors. This was a late spring and summer passage migrant. For the late spring passage in 2014 there was one on March 27 with two on March 29, then one seen on March 31. There were also three on April 1. For the summer passage there were two on May 8, 2014 and May 24, 2014 with six on June 7, 2014 then two seen on June 9, 2014. For 2015 and the late spring passage there was one on April 21. For the summer passage of there was one June 12 both of the 2015 sightings involved birds flying overhead.

Greater Yellowlegs (*Tringa melanoleuca*)

In 2014 this was a regular passage migrant and winter visitor in contrast there were only three records for 2015; the water levels were higher in 2015. For the 2013 winter passage there was one on December 14, 2013. For the early spring passage one to two were seen from January 27, 2014 to March 1, 2014. The late spring passage ran from March 3, 2014 to April 12, 2014 there were two from March 3 to March 18 with singles thereafter. There were also two on April 24, 2014. For the early fall passage there were singles on August 19, 2014 and September 25, 2014. For the late fall passage there were one to two a day from October 20, 2014 to November 29, 2014 with three on November 4, 2014. For the winter passage which ran from December 2, 2014 to December 18, 2014 one to two a day seen with three on December 12, 2014. For the early spring passage in 2015 there was one on February 19. Finally for the late spring passage there were singles on April 4, 2015 and April 16, 2015. There were no 2015 fall sightings.

Lesser Yellowlegs (*Tringa flavipes*)

A far less common migrant this was a spring passage migrant with the trace of a late fall passage; there were no winter records. For the late fall passage in 2013 there was one on October 29. For the early spring passage in 2014 there were singles from January 16 to February 17 with three on February 6, 2014. The late spring passage ran from March 1, 2014 to April 3, 2014 there were singles with two on March 10, 2014. There was also one on May 1, 2014 this is probably a very late spring migrant. For the late fall passage in 2014 there were singles from November 3 to November 15 then two seen on November 19 and November 21. There were just three records for 2015 because of the higher water levels. For the early spring passage there was one on January 12, 2015 with two on February 14, 2015. For the late spring passage there was one on April 23, 2015. Again there were no sightings for the fall passages.

Solitary Sandpiper (*Tringa solitaria*)

An uncommon passage migrant the spring passage was the stronger event. For the early spring passage in 2014 there was one on February 17. The late spring passage ran from April 12, 2014 to May 10, 2014 singles were seen on five dates with four on April 24 and eight on April 26. The early fall passage ran from August 12, 2014 to September 9, 2014 there were singles on three dates with three on August 21 and two on September 9. For the late fall passage there were two on October 2, 2014 and October 4, 2014. For the late spring passage in 2015 there was one on April 2 with later a passage from April 20, 2015 to May 15, 2015. During this event

one to two a day were seen on five dates with three on May 2, 2015 and May 3, 2015. There were only two fall records: for the early fall passage there was one on August 5, 2015 and for the late fall passage there was one on October 11, 2015.

Spotted Sandpiper (*Actitis macularius*)

There were only ten records for the five years, seven for the spring and three for the fall. For the late spring passage in 2014 there was one on April 5 with two on April 10 and April 22, then singles seen on April 24 and April 26. For the early fall passage there was one on September 9. For the late fall passage there was one on October 4, 2014. For the late spring passage in 2015 there were singles on May 1 and May 30. Finally for the early fall passage there was one on August 30.

Semipalmated Sandpiper (*Calidris pusilla*)

This was a vagrant for the late spring passage there was one on May 4, 2014.

Least Sandpiper (*Calidris minutilla*)

There were eight records for the two years. For the late fall passage in 2013 there was one on November 28. There were no records for the following winter passage. For the early spring passage in 2014 there were singles on January 27 and February 17. For the late spring passage there was one on March 8, 2014 with two on March 22, 2014. For the early fall passage there was one on July 14, 2014. There were no spring records for 2015. For the early fall passage in 2015 there were two on July 15 with for the late fall passage one on October 10, 2015.

White-rumped Sandpiper (*Calidris fuscicollis*)

This was a vagrant for the late spring passage there was one on May 17, 2015.

Dunlin (*Calidris alpina*)

This was another vagrant for the late fall passage there was one on November 1, 2014.

Stilt Sandpiper (*Calidris himantopus*)

If only there had been mud the story of all these shorebirds would have been very different. This was another vagrant for the late fall passage there was one on November 4, 2014.

Wilson's Snipe (*Gallinago delicata*)

This was a late fall to early spring passage migrant the numbers seen depending on the water levels in the impoundments the 2014/2015 winter was clearly the best. In 2013 the late fall passage ran from October 29 to November 28 there were one to seven a day with a high count of nine on November 19, 2013. The winter passage ran from December 3, 2013 to January 7, 2014 with seven to 13 a day and a high count of 24 on December 10, 2013. The early spring passage was another split event. The heavier passage ran from January 9, 2014 to February 2, 2014 there were six to 12 a day with a high count of 12 on January 20, 2014. The balance of the early spring passage ran from February 4, 2014 to February 26, 2014 just one to four a day seen. For the late spring passage one to five a day seen from March 1, 2014 to April 12, 2014. For the late fall passage in 2014 there was one on October 5 the passage however ran from October 18 to November 27. This was a split passage the light passage ran from October 18 to October 28 there were only one to two a day seen. The heavier passage ran from November 1 to November 27 with eight to 32 a day and a very high count of 47 on November 10, 2014. The winter passage followed from November 29, 2014 to January 3, 2015 there were six to 13 a day with a high count of 19 on December 9, 2014. This time the early spring passage was not split we drop to the very much lower numbers immediately. The early spring passage ran from January 5, 2015 to February 23, 2015 with one to four a day and a high count of 11 on January 16, 2015. The late spring passage ran from March 2, 2015 to March 21, 2015 there were only one to three a day. For the late fall and winter passages the low numbers continued, the water level was too high. The late fall passage ran from October 9, 2015 to November 21, 2015 with one to five a day and a high count of seven on October 24, 2015. Finally for the winter passage there were one to five a day from November 27, 2015 to December 30, 2015 with a high count of six on November 28, 2015.

American Woodcock (*Scolopax minor*)

This is a nocturnal species that might feed out by the impoundments at night flying into the woods at first light; there are therefore only four records for the two years and these really do not show the true picture. For the late fall passage there was one on November 11, 2014.

There were no sightings for the winter passage but I do not know whether or not this is significant. For the early spring passage there were singles on January 12, 2015, January 13, 2015 and February 16, 2015.

Laughing Gull (*Larus atricilla*)

All the gulls detailed here were flying over none visited the ponds. Most sightings were during the late spring and winter passages an unusual combination. There were no records for the late fall passage in 2013, the 2013/2014 winter passage and the early spring passage of 2014. For the late spring passage in 2014 there were 94 on March 13 with one on March 18. There were six on March 31 and April 3 with 15 on April 5, then two seen on April 7. There were 41 on April 20 with six on April 27. That ended the 2014 late spring passage. For the summer passage in 2014 there were three on May 1 with 47 on May 4. For the early fall passage there were 22 on August 23. The next event the winter passage of 2014/2015 was the heaviest event. There were 221 on November 27 with 244 on December 6, then 38 seen on December 8 with singles to December 18. There were 68 on December 29 with 610 on January 1, then one seen on January 5. That closed the winter passage. For the early spring passage in 2015 there were four on January 24 with eight on February 16, then four seen on February 19. For the late spring passage there were singles on March 2 and March 5 with three on March 12, five on March 14 and 22 on March 16, then singles seen to April 2. There were also seven on April 18 with four on April 21. That completed the late spring passage. For the summer passage in 2015 there were two on May 3 with 120 on May 17. For the early fall passage in 2015 there were 24 on August 7 with 55 on September 5. For the late fall passage there were 70 on October 10. Finally for the winter passage in 2015 there were 100 on November 27 with 118 on December 6. In all for the two years there were 40 records.

Bonaparte's Gull (*Larus philadelphia*)

This was a vagrant there were just three records. There was one on December 29, 2014 with two on January 8, 2015 and 12 on November 26, 2015. These could all be treated as winter records.

Ring-billed Gull (*Larus delawarensis*)

Whereas the Laughing Gull was seen on 40 dates this species was seen on 97. It was above all a winter and early spring passage migrant. For the winter passage in 2013 there were

145 on November 24 with four on November 28. There were 75 on December 7 with 95 on December 17, then five seen on December 26 with two on December 31. That was the winter passage. For the early spring passage in 2014 there were 60 on January 4 with nine on January 7, six on January 9, four on January 13 and one on January 18. There were eight on January 20 with two on January 21. There were four on January 30 with a very high 1,216 on February 2, then 173 seen on February 6 with six on February 13, five on February 20 and one on February 24. That closed the early spring passage so for the late spring passage there were 11 on February 26 with 18 on March 3, then eight seen on March 10. There were 11 on March 13 with 16 on March 8, then singles seen to March 29. There were also five on April 16. That concluded the late spring passage. There were no summer or early fall sightings. For the late fall passage in 2014 there were 28 on November 3 with nine on November 10 and one on November 19. For the winter passage there were 55 on November 27 with singles to December 8. There were five on December 9 with ten on December 23, then five seen on December 29 with one on December 30. That finished the winter passage. For the early spring passage in 2015 there were 13 on January 1 with 137 on January 5, then 18 seen on January 8 with 11 on January 19. There were 180 on January 22 with 26 on February 9 and 15 on February 17. There were 650 on February 19 with 23 on February 24 and one on February 26. That was the early spring passage. For the late spring passage in 2015 there were ten on March 3 with 43 on March 5, then ten seen on March 24 with two on April 6; later there were two on April 30. Again there were no summer, early fall and for this year late fall sightings. For the winter passage there were 110 on November 21 with 270 on November 26, then 260 seen on November 29 with 54 on December 6 and one on December 13. There were 35 on December 21 with 15 on December 23, eight on December 25 and two on December 27.

Herring Gull (*Larus argentatus*)

This was a vagrant there were five sightings for the two years they all related to the winter passage. There was one on December 27, 2013 with two on December 6, 2014 and seven on December 8, 2014, then two seen on January 1, 2015 with one on December 13, 2015.

Caspian Tern (*Hydroprogne caspia*)

This was a vagrant as for the late spring passage there was one on April 7, 2014 with two on May 24, 2015.

Royal Tern (*Thalasseus maxima*)

This was also a vagrant for the early fall passage there was one on August 8, 2015.

Forster's Tern (*Sterna forsteri*)

A rare early spring passage migrant with single records for the late fall and winter passages. Unlike the other gulls and terns these did stop to fish at the impoundments. For the late fall there was one on November 17, 2014 with for the winter passage one on December 25, 2014. For the early spring passage in 2014 there was one on January 4 with two on January 30 and three on February 6, then two seen on February 11. There were also four on February 13. For the early spring passage in 2015 there were singles from February 3 to February 6 and again from February 17 to February 20.

Least Tern (*Sternula antillarum*)

This was a vagrant for the early fall passage there was one on July 3, 2015.

Black Tern (*Chlidonias niger*)

This was another vagrant for the early fall passage there was one on August 26, 2015.

Rock Pigeon (*Columba livia*)

This is a feral species that will have bred locally however flocks of racing pigeons cross the area from time to time and I have tried to exclude those sightings. Whilst there are records for every month bar March the highest counts for the most part are for the early fall passage. It surprises me that even for what should be a resident species there are patterns in the records. For the first winter passage there were singles on December 14, 2013 and January 4, 2014. For the early spring passage there were two on January 25, 2014 with nine on February 15, 2014 that is the highest accepted count. Perhaps strangely there were no further sightings until April 5. For the late spring passage there were singles on April 5 and April 16 with two on April 26, then one seen on May 1. Again there was a month long break until the summer "passage" started. For the summer passage there were three on June 5 and June 23 with one on June 14. For the early fall passage in 2014 there were seven on July 31 with five on August 2. There were

eight on August 14 with seven on August 21 and singles on August 25 and September 1. There were also two on September 8. For the late fall passage there were singles on October 4, October 7 and November 8. For the winter passage there was one on December 30, 2014. For the early spring passage there was one on January 10, 2015 with two on February 1, then one seen on February 4. This time there were no sightings to April 27. For the late spring passage there was one on April 27. Again there was another break until the summer “passage” started on June 10. For that event there were singles on June 10 and June 12 with two on June 28. The early fall passage was again the main event. For this passage there were singles on July 5 and July 24 with two on August 7 and seven on August 8, then four seen on August 9 with singles on August 15 and September 6. There were three on September 18 with singles on September 25 and September 27. For the late fall passage in 2015 there were singles on October 21, November 8 and November 11 with two on November 18. Finally for the winter passage there were singles on November 29 and December 6. I had expected to write this species up in just a few lines but the pattern in both 2014 and 2015 raises a number of questions that I cannot answer with just two years of data.

Eurasian Collared-Dove (*Streptopelia decaocto*)

This was a vagrant for the early fall passage there was one on July 21, 2014 with one on August 9, 2015. For the late fall passage there was one on October 28, 2014.

White-winged Dove (*Zenaida asiatica*)

An uncommon summer and early fall visitor to the park, there were 19 sightings in all. For the summer passage in 2014 there were three on May 3 with singles on June 14 and June 28. There were also three on June 30. For the early fall passage in 2014 there was one on July 7 with two on July 15, three on July 17, four on July 19 and five on July 22, then two seen on July 24 and August 4. For the summer passage in 2015 there were singles on April 25, May 16, June 3 and June 10. For the early fall passage in 2015 there were singles on July 5, August 14 and September 4.

Mourning Dove (*Zenaida macroura*)

A resident in 2014 during the breeding bird survey ten pairs located whilst in 2015 nine pairs located. The lowest numbers were seen during the late fall and winter passages often only one to eight a day located. Counts gradually climbed through the spring and summer passages

to reach a peak in the early fall. This is to be expected with the young joining the population. The highest count for 2014 was that of 19 on June 2, 2014 i.e. during the summer passage however the highest numbers three to 13 a day were seen during the early fall passage. In 2015 the highest count was that of 27 on September 27; during this passage from four to 20 a day were seen. There is nothing to suggest passage.

Common Ground-Dove (*Columbina passerina*)

This is a very secretive species so it will have been under-recorded the best chance of locating them is when they sing in the spring/summer. During the breeding bird survey three pairs located in 2014 with four pairs in 2015. There were no November sightings and no records for the winter passage. There was a minor early spring passage in 2014 this passage ran from January 11, 2014 to March 4, 2014 there were counts of two on four dates from January 11 to February 26 then singles seen to March 4. The late spring passage involved one to two a day with counts of three on April 19, 2014, April 22, 2014 and April 20, 2015. For the summer passage there were just one to two a day seen no higher counts. The early fall passage was similar just one to two a day this passage appeared to continue into the late fall passage as there were singles on October 14, 2013, October 2, 2014 and October 5, 2014 with two on October 2, 2015.

Yellow-billed Cuckoo (*Coccyzus americanus*)

There was a single pair in 2014 but in 2015 it was only a spring passage migrant. In 2014 there was one on April 22 with three on April 24 then singles seen through to June 23. In 2015 there was one on April 11 with two on April 17 and April 18 then singles seen to April 27. For the summer passage in 2015 there was one on June 14. For the early fall passage in 2014 there were singles on scattered dates from July 21 to August 14 with two on August 16, then one seen on August 25 there were no September records. In 2015 there was one on July 26. Back to 2014 for the late fall passage there were two on October 4 with singles on October 16 and October 17, then two seen again on October 18. There were no late fall records for 2015.

Barn Owl (*Tyto alba*)

This was a vagrant there being singles on October 16, 2014 and November 4, 2014 these were both late fall records.



The Impoundments from the picnic table; photographed April 9th, 2015



The marsh from the boardwalk, looking to the Southwest;
Photographed April 9th, 2015



Pied-billed Grebe photographed January 27th, 2015



Great Blue Heron Photographed November 24th, 2014



Snowy Egret photographed March 31st, 2015



Little Blue Heron photographed November 11th, 2014



Cattle Egret photographed April 21st, 2015



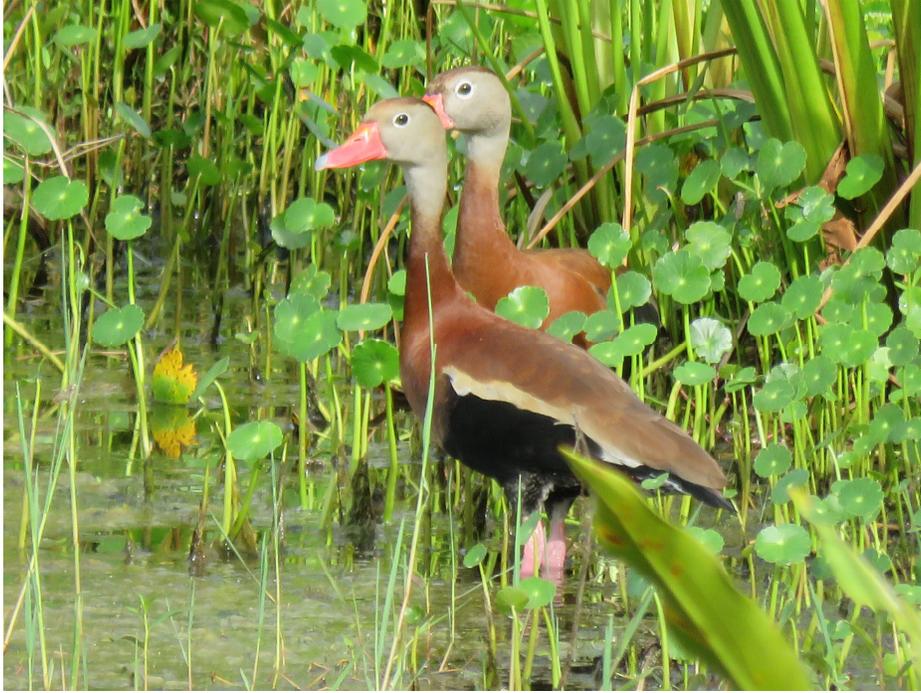
Green Heron photographed November 4th, 2014



Yellow-crowned Night-Heron photographed May 29th 2015



White Ibis juvenile photographed January 15th, 2013



Black-bellied Whistling-Ducks Photographed June 12th, 2015



Red-shouldered Hawk photographed June 10th, 2015



Male Wild Turkey photographed April 4th, 2015



Sandhill Crane chicks photographed March 16th 2015



Mourning Doves photographed November 27th, 2014



Barred Owl photographed February 6th, 2015



Downy Woodpecker photographed January 20th, 2015



Blue Jay photographed June 13th, 2013



Eastern Bluebird photographed January 3rd, 2015



Northern Mockingbird photographed November 15th, 2014



Savannah Sparrow photographed March 10th, 2015



Keith Gardner

Short-tailed Hawk photographed by Keith Gardner



Bobcat photographed March 19th, 2015



White-tailed Deer photographed July 8th, 2015

Eastern Screech-Owl (*Otus asio*)

In all probability this is a resident but with just 12 records for the two years that is not certain. All the records relate to birds heard calling and most were heard by the parking lot. Four of the records came from the summer passage there were singles on April 29, 2014, May 8, 2014 and June 7, 2014 with two on June 20, 2015. These two birds were calling from either end of the parking lot. It is likely that a pair bred in 2014 but not 2015. The rest of the records were scattered from September 27 (2014) to March 18 (2014) which means that there were none found from late June to late September a period of three months. I have no idea why they were “absent” for such a long period in the early fall.

Great Horned Owl (*Bubo virginianus*)

Most of the records came from the wooded area to the north-west of the property they did however fly across the ponds from time to time. I believe that a pair bred each year this species nests in the winter and the bulk of the sightings came from October to February. For the 2013/2014 season there was one on December 31, 2013 with two on January 18, 2014 then singles seen on nine dates to March 8, 2014, The use of the word “seen” here covers both heard and seen. For the 2014/2015 season there were singles on five dates from October 30, 2014 to November 27, 2014 with two on November 29, 2014, then singles seen on three dates to December 15, 2014. Later there were singles on January 12, 2015 and January 17, 2015 with two on February 1, 2015 and February 4, 2015. For the 2015 winter there were two on September 27 with singles on three dates from October 10 to October 17. Later there were singles on five dates from November 15 to November 20. Finally there was one on November 28 with two on November 29 and December 11, then one seen on December 20. Away from the breeding season there were scattered sightings however in 2014 there were no sightings in June and July whilst in 2015 there were no April records.

Barred Owl (*Strix varia*)

A resident whose breeding population was concentrated in the oak woods along the bike trail there were four pairs in 2014 with six in 2015. That is strange as the numbers located in 2014 were much higher than those in 2015. I extracted all counts of five or more looking for patterns. From December 23, 2013 to May 26, 2014 there were six scattered counts of five with a count of six on May 29, 2014. There were no similar high counts in June, 2014. The highest counts were in the early fall perhaps the juveniles were attempting to create territories for themselves. There were eight on July 5, 2014 (joint high count) with six on July 14, July 19 and

July 21 with five on July 31. There were seven on August 2 and August 9 with six on September 1 and September 6. Numbers in October were also high there were eight on October 4 (the other high count) with six on October 11 and October 16, then five seen on October 18 and October 27. That was it counts never reached five again until May 2015 when five seen on the 3rd. For the early fall passage in 2015 there were five on August 1 with seven on September 16. For the late fall passage there were five on October 31 with six on November 1. Clearly July to October is the time to hear these birds call.

Common Nighthawk (*Chordeiles minor*)

When I started this project I had expected this species to be a summer resident, I was wrong! In reality it is a very rare passage migrant nearing vagrant status; in all for the two years there were 11 records. For the summer passage of 2014 there were singles on May 1 and June 23. For the early fall passage there were singles on September 15 and September 16. For the late fall passage there were singles on October 4 and October 5. For the late spring passage in 2015 there was one on April 17 with two on April 25. There were no summer sightings. Finally for the early fall passage in 2015 there were singles on August 26 and September 11 with two on September 13.

Chuck-will's-widow (*Caprimulgus carolinensis*)

Unlike the last species this was a common summer visitor with seemingly birds calling from every direction. In 2014 there were 16 pairs and in 2015 there were 15 pairs. In 2014 there was one on February 22 with two on March 3, three on March 10, five on March 15 and ten on March 20, then nine seen on March 22 with seven on March 29, six on April 1 and four on April 3. That was the spring passage. For some unknown reason the summer passage appeared to be in two waves. There were six on April 5 with seven on April 7, 13 on April 15 and 16 on April 19, then 12 seen on May 10 with ten on May 15, eight on May 17, seven on May 19 and five on May 22. For the second wave there were eight on May 24 with 12 on May 31, then nine seen on June 9 with eight on June 12, seven on June 21, five on June 24, four on June 26, two to July 11 and three on July 14. That decline marks the gradual cessation of song. For the early fall passage there was one on July 28, 2014 with two from August 11 to August 21, then singles seen on September 2 and September 11. I have shown the 2014 passage in full but I will only summarize the 2015 passage. The spring passage ran from March 5 to March 31 with high counts of ten on March 14 and March 20. The summer passage was more broken with a third short-lived influx in the middle. The first wave ran from April 2 to April 17 with high counts of eight on April 4 and April 6. Then 14 were seen on April 21 with eight on April 25 and four on

May 1. Note how the highest counts in both years fit together. For the last wave there were ten from May 3 to June 14 with six on June 20, five on July 3, three on July 12 and one on July 17. The early fall passage in 2015 was very limited. There was one on July 26 and later there was one present from September 6 to September 20.

Eastern Whip-poor-will (*Caprimulgus vociferus*)

Present from the late fall through to the spring normally only singles seen but two located occasionally. The spring passage ran from late February to mid-March. In 2015 the first song was heard on March 3. There was one on December 26, 2013 with another on February 2, 2014. The spring passage ran from February 20, 2014 to March 13, 2014 with high counts of four on March 3 and March 10. The late fall passage ran from September 29 to November 21 singles noted with two on September 30. The winter passage ran from December 2, 2014 to December 25, 2014 only singles noted. The early spring passage ran from January 27, 2015 to February 2 just singles. For the late spring passage in 2015 there were two on March 5 with five on March 10, then one seen on March 1 later there was one on March 26. The high count of five on March 5 links up with the second high count of four in 2014. The late fall passage ran from September 27, 2015 to November 18, 2015 normally singles seen but there were two on October 10 and from October 30 to November 15. Finally for the winter passage there was one present from November 27, 2015 to December 30, 2015.

Chimney Swift (*Chaetura pelagica*)

Seen from late March to late October with the heaviest passage from July to September this species will have bred just to the north in Deltona. The spring passage ran from March 24, 2014 to April 27, 2014 there were one to six a day with a high count of 17 on April 22, 2014. The summer passage was very similar the passage ran from April 29, 2014 to July 3, 2014 with two to six a day and a high count of 16 on May 4, 2014. Now to the stronger events the fall passages for the early fall passage from three to 15 a day were seen from July 5, 2014 to September 27, 2014 with a high count of 43 on August 7, 2014. The late fall passage ran from September 30, 2014 to October 20, 2014 there were two to six a day with the highest count of 65 on September 30, 2014. Numbers in 2015 were lower the spring passage ran from April 2, 2015 to April 27, 2015 with one to two a day and a high count of nine on April 9, 2015. The summer passage ran from April 30, 2015 to June 27, 2015 there were two to six a day with a high count of 11 on June 6, 2015. The early fall passage was the strongest event in 2015 there were two to seven a day from June 28, 2015 to September 30, 2015 with a high count of 58 on July 18,

2015. Finally the late fall passage ran from October 3, 2015 to October 25, 2015 there were one to six a day with a high count of eight on October 3, 2015.

Ruby-throated Hummingbird (*Archilochus colubris*)

There were 16 records for the two years, six in 2014 and ten in 2015. It is possible that a pair bred by the bike trail in 2015 but there is not enough evidence. In 2014 there were singles on February 24, March 8, April 19, June 14, August 25 and September 30. For the spring passage in 2015 there was one on April 17 this links with the April 19 sighting in 2014. For the summer passage there were singles on June 13, June 21 and June 27. The June 13 sighting links with the June 14 sighting in 2014. Now to the main event in 2015 the early fall passage. There were singles on July 11, July 18 and July 19 with two on July 26, then singles seen again on August 16 and September 4.

Belted Kingfisher (*Megaceryle alcyon*)

This was a winter visitor with a few individuals migrating to the south or the north depending on the season. The “resident” bird would try to chase away any interlopers; I say try as it often ended up with one at the marsh and the other at the ponds. There was one present from October 22, 2013 to April 7, 2014 with two on October 29, 2013. There was a late individual on April 20, 2014. In the next year there was one from August 23, 2014 to April 14, 2015 with two on August 30, 2014. Later there were two present from September 13, 2014 to November 29, 2014 with a high count of three on September 16. In the spring of 2015 there were also two from March 14 to April 9. Later in 2015 they were seen from August 5 to December 30 normally singles seen but there were two on September 5, September 19, September 20, October 9, October 24, October 25 and November 18. The “resident” bird did not have to work so hard in 2015.

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

There were 24 sightings for the two years whilst there was a noticeable passage in April this was above all an early fall passage migrant having said that for the winter passage there were singles on December 9, 2013 and December 14, 2013 with for the early spring passage one on January 18, 2014. In 2014 for the late spring passage there were singles on April 15, April 17, April 27 and May 1. For 2015 and the late spring passage there were singles on April 6 and April 23. For the early fall passage in 2014 there were singles on July 17, July 28 and August

23 with for the late fall passage one on October 11. The early fall passage in 2015 was the main event there were singles on July 11, July 25, August 22, August 28, August 30, September 6 and September 7 with two on September 16 and September 20, then one seen on September 27. Finally for the late fall passage in 2015 there was one on October 7.

Red-bellied Woodpecker (*Melanerpes carolinus*)

This was a common resident there were nine pairs in 2014 and 15 pairs in 2015 I do not know why the number of pairs was so much higher in 2015. The highest numbers were seen from July to late October this is as expected with the young of the year joining the population. For most of the year from four to 12 a day were seen. In 2014 for the early fall passage there were nine to 25 a day seen from July 5 to September 30 with a high count of 37 on September 13. For October there were eight to 21 a day from October 2 to October 30 with a high count of 22 on October 4. In 2015 the main event ran from June to September as against July to October in 2014 in both years the event covered four months. So to 2015 in June there were from ten to 16 a day from May 30 to July 1 with a high count of 22 on June 21. The early fall passage ran from July 10 to October 2 there were from 11 to 17 a day with a high count of 25 on August 16, 2015.

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

Present from mid-October to late March or early April normally singles seen. For the late fall passage in 2013 there was one on October 14 with later singles from November 24, 2013 to March 20, 2014. During the spring of 2014 there were two on January 30, February 11 and March 8 with three on March 10. For the following year there were singles from October 21, 2014 to April 4, 2015. During this event there were two on November 27 and December 8 with four on December 12 and five on December 18, then three seen to January 1 with two to January 17. That was a strong winter passage. Later there were two on February 26, March 2, March 5 and March 7. In 2015 the passage ran from October 17 to December 30 normally singles seen but there were two on October 21, October 25, November 4, November 8, November 15, November 26 and November 29. All those sightings occurred during the late fall passage. For the winter passage there were also two on December 30.

Downy Woodpecker (*Picoides pubescens*)

There were five pairs in 2014 and six pairs in 2015 yet the numbers recorded in 2014 were twice those of 2015 perhaps the weather in 2015 cut the amount of calling. The 2013 late fall passage ran from October 14 to November 28 just one to two a day noted. The following winter passage ran from December 3, 2013 to January 7, 2014 there were one to six a day with a high count of seven on December 23. The early spring passage ran from January 9, 2014 to March 1, 2014 with one to five a day and a high count of seven on February 20, 2014. The late spring passage ran from March 3, 2014 to April 27, 2014 there were one to four a day with a high count of seven on March 10, 2014. The summer passage ran from May 1, 2014 to June 30, 2014 there were two to three a day with a high count of eight on May 31, 2014. The early fall passage (with the young) was the strongest event the passage ran from July 1, 2014 to September 29, 2014 there were two to five a day with a high count of nine on September 23, 2014. The late fall passage was a split event the heaviest passage ran from September 30, 2014 to November 4, 2014 with two to five a day and a high count of seven on October 4, 2014. From November through all of 2015 the counts were very much lower. For November from the 6th to the 27th just one to two a day were seen no higher counts; that is such a contrast. The winter passage ran from November 29, 2014 to January 3, 2015 with one to four a day and a high count of six on December 11, 2014. The early spring passage ran from January 5, 2015 to March 3, 2015 there were one to two a day with a high count of five on January 17, 2015. The late spring passage ran from March 5, 2015 to April 23, 2015 there were one to three a day no higher counts. The summer, early fall and late fall passages were identical there were one to three a day with high counts of five on May 1, 2015, September 9, 2015 and October 4, 2015. Finally the winter passage ran from November 28, 2015 to December 30, 2015 just one to two a day seen no higher counts. I have gone into some detail as the two years were so very different.

Hairy Woodpecker (*Picoides villosus*)

This was a vagrant for the summer passage there was one on June 15, 2014. This species does wander as it looks for pine woodlands that have recently had a fire.

Northern Flicker (*Colaptes auratus*)

A single pair thought to breed in both 2014 and 2015. As with the Downy Woodpecker numbers in 2015 were half those of 2014; in 2014 the daily counts were of one to two whereas in 2015 the counts were of singles. During the winter passage of 2013/2014 there were three on December 7 and December 17 with four on December 23, December 26 and January 2, 2014

then three seen on January 14, 2014. During the early spring passage there were five on January 11 with three on January 13, January 25 and February 11. During the late spring passage there were three on April 26. There were no other higher counts for 2014. The only higher counts for 2015 came from the early fall passage as there were three on August 8, 2015 with four on September 27, 2015.

Pileated Woodpecker (*Dryocopus pileatus*)

This woodpecker could be seen throughout the area but the majority were in the oak woodlands along the bike trail. I could not prove it but I believed that they had communal roosts. They were very noisy birds and flew around the park a great deal making it hard to identify the numbers present the following is the best I could do. There appeared to be five pairs in 2014 with six pairs in 2015. The records do show a clear pattern. Numbers were at a low in the late fall of 2013 they then climbed gradually to a peak with the early fall passage of 2014. Counts then fell away to June 2015. The early fall passage in 2015 was again the strongest event the numbers then fell to the end of the year. The only difference was in the spring of 2015 with numbers falling rather than rising as they did in 2014. To show the patterns mentioned above I am showing a selection of the events. The late fall passage in 2013 ran from October 22 to November 24, there were one to four a day with a high count of four on October 22, 2013. The early spring passage ran from January 4, 2014 to March 6, 2014 with two to five a day and a high count of ten on January 25, 2014. The summer passage ran from April 29, 2014 to July 1, 2014 there were three to seven a day with a high count of 12 on June 20, 2014. Now to the strongest passage the early fall passage there were six to ten a day from July 3, 2014 to October 2, 2014 with high counts of 13 on July 28, 2014, August 16, 2014 and September 13, 2014. Counts now fell so for the winter passage there were five to six a day from December 2, 2014 to January 8, 2015 with a high count of ten on December 29, 2014. For the late spring passage there were two to six a day from March 3, 2015 to May 3, 2015 with a high count of seven on March 5, 2015. For the summer passage there were two to five a day from May 8, 2015 to June 27, 2015 with a high count of eight on June 19, 2015. As I said the counts just fell to this point. For the early fall passage in 2015 there were five to seven a day from June 28, 2015 to October 4, 2015 with a high count of ten on August 28, 2015. Numbers now lower the winter passage ran from December 6, 2015 to December 30, 2015 there were four to six a day with a high count of seven on December 27, 2015.

Eastern Wood-Pewee (*Contopus virens*)

An uncommon fall passage migrant there was just one record for the spring passage. For the early fall passage in 2014 there were three on August 2 with two on August 4 and September 1, then singles seen on September 11, September 21 and September 27. For the late fall passage in 2014 there were singles on October 17 and October 18. For the spring passage in 2015 there was one on April 23. For the early fall passage in 2015 there were singles on August 12 and August 19. For the late fall passage there were singles on October 7, October 11, October 14, October 16 and October 17. Each year had eight sightings.

Acadian Flycatcher (*Empidonax virescens*)

Whilst there were 16 records for the Wood-Pewee there were only six records for this species. For the early fall passage in 2014 there were singles on August 4, September 20 and October 4. For the spring passage in 2015 there was one on April 18. For the early fall passage in 2015 there was one on September 16 with for the late fall passage one on October 14.

Least Flycatcher (*Empidonax minimus*)

This was a vagrant for the early fall passage there was one at the marsh on September 22, 2014.

Eastern Phoebe (*Sayornis phoebe*)

This was a late fall passage migrant with declining numbers to late March. In 2013 the late fall passage ran from October 14, 2013 to November 28, 2013 there were six to ten a day with a high count of 11 on November 24, 2013. The winter passage ran from December 3, 2013 to January 7, 2014 with six to 11 a day and a high count of 12 on December 3, 2013. The early spring passage followed from January 9, 2014 to March 1, 2014 counts now falling as there were four to ten a day and a high count of 11 on January 13, 2014. The late spring passage was a remnant event it ran from March 3, 2014 to April 1, 2014 there were one to three a day with a high count of 13 on March 4, 2014, There were no further records until the late fall. This passage ran from October 5, 2014 to November 27, 2014 there were four to ten a day with a high count of 14 on October 23, 2014. Numbers now fell with each passage. For the winter passage there were three to seven a day from November 29, 2014 to January 5, 2015 with a high count of nine on November 29, 2014. The early spring passage ran from January 6, 2015 to

March 3, 2015 with three to five a day and a high count of eight on January 24, 2015. The late spring passage only ran from March 5, 2015 to March 31, 2015 with one to five a day and a high count of seven on March 7, 2015. The late fall passage in 2015 was stronger than that passage in 2014, the passage ran from October 4, 2015 to November 28, 2015 with seven to 16 a day and a high count of 23 on November 1, 2015. Finally the winter passage ran from November 29, 2015 to December 30, 2015 there were four to six a day with a high count of nine on December 16, 2015.

Ash-throated Flycatcher (*Myiarchus cinerascens*)

This was a vagrant with two records for the marsh; there were singles there for the late fall passage on November 18, 2015 and November 27, 2015.

Great Crested Flycatcher (*Myiarchus crinitus*)

This species is only here from late March to early September the spring passage being the heaviest event. For the breeding bird survey six pairs located in 2014 with nine pairs in 2015. For the spring passage in 2014 there were two on March 29 with four on April 3, seven on April 5 and nine on April 16, then seven seen to April 26 with four on April 27 and two on April 29. For the summer passage there appeared to be three separate influxes. For the first there were four on May 1 with seven on May 4 and eight on May 20, then five seen on May 26 with two to June 9. There were five on June 10 with seven on June 14, then six seen on June 17 with four on June 21 and two on June 23. For the third there were six on June 24 with eight on June 26, then one seen on June 28. For the early fall passage in 2014 just one to three a day seen from July 1 to August 9 with high counts of four on July 14 and July 15. There were also three on August 11 with four on August 12, then three seen on August 19 with two on August 21 and singles to September 9. For the spring passage in 2015 there was one on March 26 with two on April 2, five on April 4, six on April 11, nine on April 16, 11 on April 17 and 13 on April 18, then nine seen on April 23 with five on April 27 and four on April 30. There were just two influxes for the summer passage so for the first there were five on May 1 with 12 on May 3, then seven seen on May 10 with four on May 13 and three to May 23. For the second there were four on May 24 and May 27 with three to June 13 and one on June 14. Finally for the early fall passage in 2015 there were four on June 17 with five on June 20, six on July 1, seven on July 5 and eight on July 8, then four seen on July 15 with three on July 17. Only one to two a day was then seen to August 21 with singles to September 5.

Eastern Kingbird (*Tyrannus tyrannus*)

A passage migrant most were seen during the early fall passage. The occasional bird was seen in the area but most were flying to the south or the north. In 2014 for the spring passage there was one on March 29 with four on March 31, three on April 17 and 51 on April 20. There were two events for the early fall passage in 2014. For the first there were eight on August 14 with 56 on August 21 and 138 on August 25, then 13 seen on August 28 with seven on August 30 and one on September 1. There were two on September 4 with 81 on September 6, then 28 seen on September 8 with nine on September 15, six on September 16, three on September 22 and two on September 23. For the spring passage in 2015 there were two on April 23 with eight on April 30, then one seen on May 3. For the following early fall passage there were five on August 19 with 77 on August 22 and 105 on August 23, then 49 seen on August 26 with 46 on August 25, 36 on August 30 and three on September 6.

Loggerhead Shrike (*Lanius ludovicianus*)

This was a vagrant for the early fall passage there was one on July 11, 2014 which perched briefly on top of a tree just to the west of the ponds before leaving to the west.

White-eyed Vireo (*Vireo griseus*)

Present all year but in varying numbers the lowest were from mid-October to early January. Counts then rose to the late spring passage after which they fell again to mid-September. The heaviest passage of the year was from mid-September to mid-October. During the breeding bird survey eight pairs located in 2014 with nine pairs in 2015. The first winter passage ran from November 28, 2013 to January 2, 2014 just one to three a day seen with a high count of four on December 26, 2013. The early spring passage ran from January 4, 2014 to March 1, 2014 with one to five a day and a high count of 14 on February 20, 2014. The late spring passage ran from March 3, 2014 to May 22, 2014 there were two to seven a day with a high count of 13 on April 1, 2014. Unlike 2015 the summer passage was minimal with one to three a day from May 24, 2014 to July 28, 2014. The early fall passage ran from July 29, 2014 to September 16 with somewhat higher counts; for this event two to seven a day seen with a high count of eight on August 12, 2014. Now we come to the main event of the year this ran from September 18, 2014 to October 18, 2014 with seven to 17 a day and a high count of 21 on October 11, 2014. For the late fall and the winter passages just one to five a day were seen with a high count of seven on October 20, 2014. Again numbers climbed to the late spring passage. For the early spring passage there were two to six a day from January 10, 2015 to March 7,

2015 with a high count of nine on March 2, 2015. The late spring passage followed there were three to seven a day from March 10, 2015 to May 3, 2015 with a high count of eight on March 26, 2015. Unlike 2014 when at this point numbers fell very low here they only fell away gradually in 2015. The summer passage ran from May 8, 2015 to June 28, 2015 with three to six a day and a high count of ten on May 8, 2015. The early fall passage ran from July 1, 2015 to September 13, 2015 with two to four a day and a high count of seven on September 9, 2015. The main fall passage ran from September 16, 2015 to October 11, 2015 there were seven to 13 a day with a high count of 25 on September 26, 2015. For the rest of the year from October 14, 2015 to December 30, 2015 just one to three a day were seen, with a high count of six on October 17, 2015.

Yellow-throated Vireo (*Vireo flavifrons*)

This was a rare passage migrant there were four spring and four fall records. For the spring passage there were singles on March 31, 2014, April 10, 2014, March 28, 2015 and March 30, 2015. For the fall passage there were singles on September 9, 2014, September 25, 2014, September 29, 2014 and October 4, 2014. There were no fall records for 2015.

Blue-headed Vireo (*Vireo solitarius*)

For the first “year” they were seen from November 12, 2013 to April 22, 2014 there was one to three a day. For the late fall passage in 2013 there were no higher counts. The higher counts for the other passages were: for the winter passage there were five on December 19, 2013, for the early spring passage there were four on January 16, 2014 and January 30, 2014 and finally for the late spring passage there were four counts of four, two counts of five with six on April 12, 2014. This last passage was by far the heaviest event. For the next year the passage ran from October 27, 2014 to April 20, 2015 with one to two a day. For the winter passage there were higher counts of four on November 29, 2014 and December 2, 2014. There were no higher counts for the other passages. For 2015 one to two a day seen from October 17, 2015 there were no higher counts.

Red-eyed Vireo (*Vireo olivaceus*)

This was a spring and fall passage migrant with one summer sighting. For the spring passage in 2014 just one to three a day seen from March 29, 2014 to May 8, 2014 there were no higher counts. For the summer passage there was one on June 15, 2014. The following fall

passage ran from July 7, 2014 to October 23, 2014. Initially one to two a day seen to August 9 with three on August 11, four on August 12, eight on August 23 and 12 on August 30, then six seen on September 4 with one to three a day to September 18. There were eight on September 19 with 11 on September 27, then four seen on September 29 with three on October 2 and one to two a day to October 23. In the spring of 2015 the passage ran from April 2, 2015 to May 13, 2015 there were five on April 11 with six on April 17 and eight on April 18, then seven seen on April 21 with four on April 27, three on May 2, two on May 10 and one on May 13. The fall passage in 2015 was weak when compared to that in the fall of 2014. The passage ran from July 1 to October 14 there were singles to July 25 with three on August 15, four on August 23, five on September 4 and seven on September 5, then five seen on September 9 with singles to October 14.

Blue Jay (*Cyanocitta cristata*)

A noisy resident and to some extent a passage migrant during the breeding bird survey six pairs located in 2014 with four pairs in 2015, In 2014 on average two to six birds a day seen whilst in 2015 with fewer breeding pairs on average four to six birds seen daily. In both years the early fall passage held the highest numbers which is to be expected with the young of the year joining the population. In 2014 this event ran from July 3 to October 2 there were seven to 11 a day with a high count of 13 on July 28, August 16 and September 9. In 2015 this event ran from July 1 to October 4 with five to seven a day and a high count of ten on August 28. Through the two years there were some other higher counts there were: ten on January 25, 2014, 12 on June 20, 2014, 11 on October 14, 2014, ten on December 29, 2014, nine on January 16, 2015, eight on June 7, 2015 and nine on November 1, 2015,

American Crow (*Corvus brachyrhynchos*)

Seen in the area daily one pair bred in 2015 just to the east there was a second pair further away (out of the area) to the south-east. In 2014 two to six often seen whilst in 2015 this number dropped to two to four a day. In a sea of low counts there were scattered much higher counts this is especially true of the winter passages. For the 2013/2014 winter passage which ran from December 7, 2013 to January 7, 2014 two to seven a day seen with higher counts of 69 on December 7, 2013, 27 on December 19, 2013, 35 on December 29, 2013 and 39 on January 2, 2014. In the 2014/2015 winter there were only two to three a day in the area but 54 seen on December 12, 2014. For the early spring passage in 2014 there were three to eight a day with 24 on January 23 and 26 on February 11, 2014. There were no such higher counts in

2015. The only other passage with higher counts was the late fall passage there were 21 on November 10, 2014 with 44 on September 27, 2015 and 23 on October 17, 2015.

Fish Crow (*Corvus ossifragus*)

A pair bred in the pine trees just to the west of the ponds in both years. This was a major passage migrant with many flocks flying in the morning from the south-east to the north-west; I believe they were coming from a roost by Lake Jessop. For much of the year up to 60 a day seen but for the late fall, winter and early spring passages much higher numbers could be seen. The counts detailed below may well be partial counts as this species was on occasions still moving through when I closed the count for the day. For the late fall passage in 2014 there were higher counts of 2,080 on January 15 with 2,500 on November 21 and 1,450 on November 29. In 2015 the only higher count was that of 770 on November 11. For the winter passage of 2013/2014 there were higher counts of 725 on December 19, 2,050 on December 29 and 254 on January 4. For the winter passage of 2014/2015 there were 423 on December 13 with 900 on December 18, 1,460 on December 21 and 1,625 on December 25. For the winter passage in 2015 there were 812 on December 6 with 845 on December 11 and 1,035 on December 13. For the early spring passage in 2014 there were 3,380 on January 10 with 1,570 on January 13, 1,420 on January 17, 1,180 on January 27, 1,411 on February 1, 2,000 on February 12 and 1,660 on February 14. There were no other major counts.

Purple Martin (*Progne subis*)

They did not breed in the survey area but they will have done so to the north in Deltona they were present all summer from late January to late August or September. In 2014 there was one on January 23 with one to two from February 15 to February 24 that may be the extent of the spring passage. For the summer passage there was one on March 11 with four on March 24 and six on March 31, then five seen on April 5 with four on April 7 and one on April 14. There were five on April 15 with 11 on April 16, then seven seen on April 19 with six on April 20, four on April 29 and one on May 1. That was the extent of the summer passage. For the early fall passage there were three on May 3 with five from May 4 to June 12, then 15 seen on June 20 with six on July 7, three on July 22 and one on July 26. Later there was one on August 19, 2014. In 2015 for the spring passage there were two on January 27 with one on February 9, five on February 12 and five on February 24. For the summer passage there was one on March 20 with six on March 24, then four seen on April 2 with two on April 11 and one on April 13. There were three on April 16 with four on April 18 and 14 on April 21, then two to three seen to May 8. That closed the summer passage so for the early fall passage in 2015 there were four on May 9

with five on May 20 and seven on May 22, then five seen on June 5 with five on June 6. There were four on June 7 with five on June 7, 17 on June 10 and 22 on June 12, then 15 seen on June 17 with 13 on June 19, five on June 21, three on June 28 and one on July 8. Up to this point both 2014 and 2015 had the same pattern of influxes but in 2015 the passage continued. There were two on July 19 with one later on August 12 and August 21. There were two on August 22 and August 26 with singles on September 5 and September 18. This passage went on for an additional month.

Tree Swallow (*Tachycineta bicolor*)

In the years 2013/2014 and 2014/2015 only small numbers seen from November 19, 2013 to April 24, 2014 and from September 25, 2014 to January 5, 2015. It is only with the early spring passage in 2015 that good numbers were seen. Normally in Central Florida this species is above all a spring passage migrant. The numbers vary so much day to day that I cannot identify the average daily counts so all I can show is a selection of the higher counts. The late fall passage in 2013 ran from November 19 to November 24 with a high count of eight on November 19. The winter passage ran from December 3, 2013 to January 2, 2014 with a high count of 80 on December 29, 2013. The early spring passage (the heaviest passage in 2014) ran from January 11, 2014 to March 1, 2014 with a high count of 846 on February 13, 2014. The late spring passage followed and this ran from March 3, 2014 to April 24, 2014 with a high count of 295 on March 29, 2014. For the early fall passage of 2014 there was one on September 25. For the late fall passage which ran from October 28, 2014 to December 1, 2014 there was a high count of 530 on November 29, 2014. The winter passage ran from December 4, 2014 to January 5, 2015 with a high count of 1,020 on December 25, 2014. The early spring passage in 2015 was a total contrast to all that had gone before. This passage ran from January 10, 2015 to February 26, 2015 with higher counts of 6,860 on February 1, 5,570 on February 3, 6,000 on February 16 and 3,550 on February 21. The late spring passage ran from March 2, 2015 to May 1, 2015 with higher counts of 593 on March 3 and 1,410 on April 11. The fall passage ran from October 9, 2015 to December 9, 2015 with a high count of 560 on November 27, 2015. Finally there is the winter passage and this did not behave as expected there being high counts comparable to the 2015 early spring passage. This passage ran from December 11, 2015 to December 30, 2015 with high counts of 5,260 on December 23 and 2,010 on December 30.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

There were just 12 records for the two years and half belonged to the late spring passage so for the late spring passage there were singles on March 15, 2014 and April 16, 2014

with two on April 19 and seven on April 22, then one seen on April 24. In 2015 there was also one on March 26. For the summer passage there was one on June 21, 2014 with two on June 23, 2014. In 2015 there were also two on June 24. For the early fall passage there were singles on August 19, 2014 and July 3, 2015. Finally for the late fall passage there was one on October 17, 2014.

Bank Swallow (*Riparia riparia*)

For this species there were 16 records for the two years and this time ten of the records related to the early fall passage so for this passage in 2014 there were singles on August 11 and August 14 with eight on August 19, then singles seen on August 21, September 6 and September 8. In 2015 there was one on July 26 with four on August 1, then singles seen on August 2 and August 22. For the spring passage in 2014 there were singles on April 17, April 19, April 22 and May 13. In 2015 there was one on April 2 with two on May 1.

Cliff Swallow (*Petrochelidon pyrrhonota*)

This is normally in Central Florida a very uncommon passage migrant so the nine records for the two years is a high total. For the early fall passage in 2014 there were singles on August 9 and August 14 with four on August 19, then singles seen on August 21, August 28 and September 23. In 2015 for this passage there was one on August 12. There were just two records for the spring passage there were two on April 22, 2014 with one on April 18, 2015.

Cave Swallow (*Petrochelidon fulva*)

This is a vagrant anywhere in Central Florida. For the park there was a juvenile on November 29, 2014 this would be best treated as a late fall sighting. It was circling by the ponds with a flock of Tree Swallows.

Barn Swallow (*Hirundo rustica*)

This was an uncommon passage migrant I say that because I had expected to see it in greater numbers on both the spring and fall passages. In 2014 the spring passage ran from March 4, 2014 to May 1, 2014 there were three to 27 a day with a high count of 211 on April 22, 2014. The late spring passage followed from May 3, 2014 to May 17, 2014 there were two

to five a day with a high count of 33 on May 4, 2014. The early fall passage in 2014 ran from July 7 to September 27 with 15 to 36 a day and a high count of 93 on September 8, 2014. Finally for 2014 the late fall passage ran from October 4 to October 7 with 11 on October 4, 2014. There was only a very limited passage in the spring of 2015. The early spring passage ran from March 14 to April 21 only one to four a day seen. The late spring passage ran from April 27 to May 10 with a high count of 22 on May 1. Exceptionally there was a summer passage this ran from May 30 to June 7 with a high count of two on May 30. This species does nest in Central Florida so there may be a colony not too far away. The early fall passage in 2015 ran from June 28 to September 25 with seven to 26 a day and a high count of 233 on September 1, 2015. The late fall passage involved scattered sightings from September 30, 2015 to November 27, 2015 normally just one to three a day seen when present but there were 12 on November 13, 2015.

Carolina Chickadee (*Poecile carolinensis*)

A resident there was just one pair in 2014 with five pairs in 2015. This species was often quiet and elusive which may explain why more individuals were seen in 2014 than in 2015 even though in 2015 there were five not one breeding pairs. I have identified all counts of four or more in an attempt to identify the seasons when more birds seen. There were no higher counts for the late fall passage of 2013 or the winter passage of 2013/2014. For the early spring passage of 2014 there were higher counts of four on January 2 and January 11 with five on January 23, then four seen on February 22. There were no higher counts for the late spring passage. For the summer passage in 2014 there were four on May 29. The main event in 2014 was the early fall passage there were five on July 15 with four on August 19, August 23 and September 6. There were seven on September 9 with six on September 13, then four seen on September 15, September 18 and September 22. Finally for the early fall passage there were five on September 23. For the late fall passage in 2014 there were four on October 4, October 7 and October 13. There were no higher counts for the winter or either of the spring passages. For the summer passage in 2015 there were four on May 29 and May 30. For the early fall passage in 2015 there were four on August 22 with six on September 4. Finally for the late fall passage there were four on October 11 and October 15. To show just how poor 2015 was there were 18 higher counts in 2014 against six in 2015.

Tufted Titmouse (*Baeolophus bicolor*)

This was another resident species there being eight pairs in 2014 and 14 pairs in 2015. It is interesting to see what one finds when one looks at the records of a resident species. In this case the patterns in 2014 and 2015 are the same but the timing of the highest counts is totally

different. In 2014 the highest counts were in the early fall which is what I expect with the young joining the population. However in 2015 the highest counts were in the late spring and summer perhaps caused by interaction between the pairs as there were so many more in 2015. To show you a sample of the passages for the late fall and winter in 2013 from October 14 to December 26 just one to three a day were seen. The late spring passage ran from March 6, 2014 to April 24, 2014 there were four to eight a day with a high count of 12 on April 22, 2014. The summer passage ran from April 26, 2014 to June 30, 2014 there were five to 12 a day and a high count of 17 on May 20, 2014. The early fall passage ran from July 1, 2014 to October 18, 2014 there were six to 15 a day and a high count of 21 on September 22, 2014. The late fall passage ran from October 20, 2014 to November 29, 2014 with four to eight a day and a high count of 11 on October 30, 2014. The winter and early spring passages were the lowest events the combined passage ran from December 1, 2014 to March 3, 2015 with two to seven a day and a high count of 11 on February 24, 2015. Now we come to the start of the main event with the late spring passage this ran from March 5, 2015 to April 27, 2015 with five to eight a day and a high count of 23 on April 14, 2015. The summer passage was the other half of this main event the passage ran from April 30, 2015 to June 27, 2015 there were seven to 11 a day with a high count of 22 on June 20, 2015. The next event only lasted a month it was probably the early fall passage this ran from June 28, 2015 to July 25, 2015 there were seven to nine a day with a high count of 15 on July 19. The balance of what would normally be the early fall passage together with the late fall passage had much lower daily numbers this event ran from July 26, 2015 to November 28, 2015 there were three to eight a day with a high count of 14 on September 23, 2015. The winter passage had just one to five a day.

Brown-headed Nuthatch (*Sitta pusilla*)

There were just 12 records for the two years of this species that probably bred not too far away from the park. Four records were for the late spring passage and four were for the early fall passage. To detail all the records only singles seen. For the early spring passage there was one on February 22, 2014. For the late spring passage in 2014 there was one on March 10. In 2015 singles were seen on March 12, March 14 and March 31. For the summer passage in 2014 there were singles on June 10 and June 14. For the early fall passage in 2014 there was one on July 8 and July 11. In 2015 singles were seen on July 28 and August 14. Finally for the late fall passage in 2014 there was one on October 4.

Carolina Wren (*Thryothorus ludovicianus*)

During the breeding bird survey a total of 34 pairs located in 2014 with 33 pairs in 2015. In the area doing the daily counts the numbers were higher in 2014. The initial late fall and winter passages ran from October 23, 2013 to January 7, 2014 there were 11 to 18 a day with a higher count of 23 on December 26, 2013. The early spring passage ran from January 9, 2014 to March 3, 2014 with 14 to 26 a day and a high count of 35 on February 4, 2014. The late spring passage followed from March 4, 2014 to May 3, 2014 with 18 to 32 a day and a high count of 38 on April 29, 2014. Those two passages had the highest numbers and that was expected (this species tends to hide their young in the early fall). The summer passage ran from May 4, 2014 to June 28, 2014 there were 15 to 25 a day with a high count of 32 on May 4, 2014. The early fall passage ran from June 30, 2014 to October 28, 2014 with 14 to 21 a day and a high count of 28 on August 23, 2014. Counts were now much lower for the late fall and the winter passages this combined event ran from October 30, 2014 to January 8, 2015 there were five to ten a day with a high count of 14 on December 29, 2014. The counts for the early spring passage in 2015 were approximately half those of 2014. This passage ran from January 10, 2015 to March 7, 2015 with six to 15 a day and a high count of 20 on January 17. The late spring passage was the strongest event in 2015 but it was still very low when compared to 2014. This passage ran from March 10, 2015 to April 25, 2015 there were 11 to 25 a day with a high count of 26 on April 12, 2015. The summer passage ran from April 27, 2015 to June 28, 2015 with 11 to 17 a day and a high count of 26 on May 3, 2015. The early fall passage was different in that the numbers suddenly became the same as those for 2014. This event ran from July 1, 2015 to October 18, 2015 there were 14 to 20 a day with a high count of 29 on October 10, 2015. That was it only very low numbers seen to the end of the year. From October 21, 2015 to December 30, 2015 there were from four to eight a day with a high count of 15 on December 27, 2015.

House Wren (*Troglodytes aedon*)

This was a late fall passage migrant with decreasing numbers through to the spring, numbers in April may be a little higher. For the late fall passage in 2013 there were four to eight a day with a high count of 12 on November 12, 2013. The winter passage ran from November 28, 2013 to January 4, 2014 with five to nine a day and a high count of ten on December 3, 2013. The early spring passage ran from January 7, 2014 to March 3, 2014 with three to eight a day and a high count of nine on January 13, 2014. The late spring passage ran from March 4, 2014 to April 26, 2014 there were two to eight a day with a high count of 11 on April 1, 2014. The late fall passage ran from October 4, 2014 to November 29, 2014 with eight to 16 a day and high counts of 21 on October 21, 2014 and October 30, 2014. The numbers now fell for the winter passage which ran from December 1, 2014 to January 6, 2015 there were three to six a

day with a high count of nine on December 1, 2014. For the early spring passage there was one to three a day from January 10, 2015 to March 7, 2015 with a high count of six on February 28, 2015. The late spring passage ran from March 10, 2015 to April 20, 2015 with three to seven a day and a high count of eight on April 6, 2015. Exceptionally there was a record for the early fall passage there was one on September 27, 2015. For the late fall passage which ran from October 7, 2015 to December 6, 2015 there were seven to 13 a day with high counts of 15 on October 17, 2015 and November 11, 2015. Finally for the winter passage there were three to five a day from December 9, 2015 to December 30, 2015 with a high count of seven on December 9, 2015.

Sedge Wren (*Cistothorus platensis*)

The first arrived in the marsh in mid-October and they stayed to early April normally singles seen but there were two on two dates in both of the first two “years”. In the fall of 2015 they also took up residence at the impoundments. Initially there was one from December 31, 2013 to April 14, 2014 with two on January 23, 2014 and February 4, 2014. In the second “season” singles seen from October 18, 2014 to April 7, 2015 with two on October 23, 2014 and January 3, 2015. All of the above were at the marsh. In the third “season” this all changed. There was one on October 16, 2015 with two from October 17, three from October 21 and four from October 24 to the end of the year. Two were in the marsh and the other two were at the impoundments.

Marsh Wren (*Cistothorus palustris*)

An increasing winter visitor perhaps the habitat has developed into something that suits it. In 2013 for the late fall passage there was one on October 14 and for the winter passage there was one on December 3. In the second year there were singles for the late fall passage of 2014 on October 11, October 21, October 23 and November 4. Everything changed with the fall passage of 2015 there was one on October 11 with two on October 17, three on October 31 and four on November 1, then three seen to the end of the year. On November 1 there were two in the marsh with two at the impoundments. After that date one remained at the marsh with two at the impoundments.

Golden-crowned Kinglet (*Regulus satrapa*)

This was a vagrant there was one in the wood just before you get to the marsh on November 20, 2015.

Ruby-crowned Kinglet (*Regulus calendula*)

Seen from October to late April again passage in 2015 was lighter than that in 2014. In 2014 the heaviest passage was in the spring passages whereas in 2015 it was in the winter passage. The late fall passage of 2013 ran from October 29 to November 24 there were just one to two a day with a high count of six on November 12, 2013. The winter passage ran from November 28, 2013 to January 7, 2014 with two to six a day and a high count of eight on December 19, 2013. The early spring and late spring passages were very similar the combined event ran from January 9, 2014 to April 26, 2014 there were three to six a day with a high count of ten on February 17, 2014. The late fall passage ran from October 5, 2014 to November 25, 2014 with two to five a day and a high count of seven on November 4, 2014. The winter passage ran from November 27, 2014 to January 5, 2015 with two to five a day and a high count of 13 on November 29, 2014. Again the spring passages were very similar so the combined event ran from January 8, 2015 to April 17, 2015 there were one to three a day with high counts of four on January 22, 2015 and March 2, 2015. The late fall passage in 2015 ran from October 16, 2015 to November 29, 2015 with two to four a day and a high count of five on October 31, 2015. Finally the winter passage ran from December 9, 2015 to December 30, 2015 there were one to two a day with a high count of four on December 11, 2015.

Blue-gray Gnatcatcher (*Polioptila caerulea*)

A resident with nine pairs in 2014 and 14 pairs in 2015 it also appears to be a spring and fall passage migrant. Initially for the 2013 late fall passage just one to five a day seen. The winter and early spring passages were a bit stronger the combined event ran from December 7, 2013 to February 24, 2014 with two to five a day and high counts of six on January 2, 2014 and 14 on January 23, 2014. The late spring passage ran from February 26, 2014 to May 3, 2014 there were two to six a day with a high count of 19 on March 8, 2014. That count of 19 is so far above the others (two to six) that I believe an element of migration was involved here. The summer passage ran from May 4, 2014 to July 3, 2014 with four to eight a day and a high count of ten on May 8, 2014. That was the high point and from this point to the end of the survey the "average" counts gradually fell. For the early fall passage there were three to six a day from July 12, 2014 to October 2, 2014 with a high count of nine on September 15, 2014. The late fall

passage showed traces of migration this event ran from October 4, 2014 to December 2, 2014 with two to five a day and a high count of 17 on October 17, 2014. The winter and early spring passages were again very similar so the combined event ran from December 4, 2014 to February 28, 2015 with one to five a day and high counts of six on December 12, 2014 and January 16, 2015. The high counts gradually climbed from this point even if the daily counts were falling. The late spring and summer passages were similar so the combined event ran from March 2, 2015 to July 3, 2015 with one to five a day and high counts of seven on March 2, 2015 and 11 on May 2, 2015. From July 5, 2015 to the end of the year just one to four a day were seen with high counts of nine on August 16, 2015 and 12 on October 4, 2015. There was no higher count for the winter passage.

Eastern Bluebird (*Sialia sialis*)

Seen regularly through the year excepting a period in the summer when it was absent there do not appear to be any particular peak(s) to the passages. On the first day of the survey October 14, 2013 nine were seen with eight on October 22. Numbers did not stay at this level counts of one to three were more normal. For the winter passage there were two on December 13, 2013 with four on December 23, then one seen to January 4, 2014. For the early spring passage in 2014 there were two on January 9 with 12 on January 11 (that is the highest count), then three seen on January 18 with two on January 23 and one on January 25. There were four on January 27 and February 13 with two on February 20 and one on February 22. That was the early spring passage. For the late spring passage there was one on March 4 with four on March 6, then one seen on March 18. Finally for the late spring passage there was one present from April 19 to May 4, 2014. In 2014 there were no sightings for the summer passage. For the early fall passage there were five on July 7 with two on July 11 and one on July 14. There were seven on July 19 with two to July 28. There were three on August 14 with one on August 18. That closed the early fall passage of 2014. There were no further sightings until October 13 when three seen with one on October 14. There was one on November 13 with three on November 21 and six on November 24, then one seen on December 1. That was the 2014 late fall passage. For the winter passage there was one on December 8, 2014 with two from December 13 to December 18, then singles seen to January 3, 2015. For the early spring passage there was one on January 10, 2015 with two from January 15 to February 3, then three seen on February 14 and February 20 with two on February 26. For the late spring passage there were two on March 7 so basically for 2015 there was no passage in both the late spring and summer passages. For the early fall passage in 2015 there was one on June 24 with three on July 1, then one seen on July 4. Now there were scattered sightings with two on July 12, one on August 8 and three on August 29. There was one on September 9 with six on September 12, then two seen on

September 13. That was the early end of the early fall passage. There were now no records to mid-November a two month period. For the late fall passage in 2015 there were singles from November 13 to November 20 with six on November 21, then five seen on November 29 with three on December 6 and two on December 9. Finally for the 2015 winter passage there were three on December 21 with two on December 27. I have shown this species this way because of the variable breaks in its presence in the park.

Veery (*Catharus fuscescens*)

This was a rare passage migrant there were ten sightings for the two years. For the spring passage there were singles on April 26, 2014, April 21, 2015 and May 2, 2015. For the early fall passage there were singles on September 23, 2014, September 29, 2014, October 2, 2014, September 6, 2015, September 9, 2015, September 13, 2015 and October 7, 2015. All the migrant thrushes were seen in the wooded areas.

Gray-cheeked Thrush (*Catharus minimus*)

This was also a vagrant there were six records for the fall passage there were singles on September 27, 2014 and October 4, 2014 with two on October 5, 2014 and October 7, 2014. There were also singles on September 13, 2015 and October 9, 2015.

Swainson's Thrush (*Catharus ustulatus*)

This is the commonest of these three thrushes there were 13 records for the fall passage in 2014 and 2015. For the fall passage in 2014 there were singles on September 18 and September 23 with two on October 2 and October 4, then singles seen on October 7 and October 16. There were three on October 17 with two on October 18. For the fall passage in 2015 there were singles on September 19, September 20, September 23, September 26 and October 10.

Hermit Thrush (*Catharus guttatus*)

Unlike the last three species this is a winter visitor in very low numbers to the same wooded habitat. For the first winter there was one from December 10, 2013 to February 22, 2014 with stragglers on March 18 and March 27. For the 2014/2015 year there was one on

November 3, 2014 with two on November 21, three on November 25 and four on November 27, then two seen to December 13 with one to December 18. There was now a gap until singles seen on January 13, 2015 and January 15, 2015. There were three on January 20 with two on February 1 and one to February 23. Finally for the third winter there was one from October 24, 2015 to November 29, 2015 then two seen from December 6 to December 23; one was present to December 30.

American Robin (*Turdus migratorius*)

This is another wintering thrush but it belongs to a different family it could be seen in the woods or out on the grass. The greatest numbers were seen in flight overhead. Only low numbers seen in 2014 (575 is a low number!). In this case I cannot identify average counts the numbers are just so very variable. The late fall passage of 2013 ran from November 4 to December 3 with a high count of 173 on November 28. The winter passage ran from December 7, 2013 to January 13, 2014 with a high count of 575 on December 31, 2013. The early spring passage ran from January 16, 2014 to February 26, 2014 with a high count of 86 on February 15, 2014. The late spring passage ran from March 1, 2014 to March 21, 2014 with a high count of 84 on March 10, 2014. A single individual remained under the oaks by the impoundments to April 17 I am not sure that it managed to leave. The late fall passage ran from November 3, 2014 to November 29, 2014 with a high count of 16 on November 11, 2014. Now with the winter passage everything changed. This event ran from December 1, 2014 to January 10, 2015 with high counts of 2,040 on December 30, 2014, 5,360 on January 1, 2015 and 1,330 on January 5. The early spring passage followed from January 12, 2015 to March 7, 2015 with high counts of 1,095 on January 13, 3,600 on January 19, 8,420 on January 20, 2,910 on January 22, 2015 and 1,070 on February 3. There was no late spring passage this year. The late fall passage ran from November 11, 2015 to November 27, 2015 with a high count of 740 on November 13, 2015. Finally the winter passage ran from November 28, 2015 to December 30, 2015 with a high count of 1,170 on November 28, 2015. I have detailed every count of 1,000 or more.

Gray Catbird (*Dumetella carolinensis*)

A quite common passage migrant and winter visitor they could be found in the scrub and the woods. For the late fall passage in 2013 there were two to five a day with a high count of 21 on October 22, 2013. The winter passage ran from December 3, 2013 to January 2, 2014 with two to nine a day and a high count of 17 on December 7, 2013. The early spring passage ran from January 4, 2014 to February 26, 2014 there were two to ten a day with a high count of 18 on January 13, 2014. The late spring passage is in two parts the first ran from March 1, 2014

to April 8, 2014 with five to nine a day and a high count of 11 on April 1, 2014. For this year only there was a strong event at the end of the passage this ran from April 10, 2014 to May 10, 2014 there were ten to 18 a day with a high count of 36 on April 24, 2014. Exceptionally there were two summer sightings this does happen from time to time there were singles on June 19, 2014 and June 20, 2014. The late fall passage in 2014 ran from September 23 to December 2 with 22 to 45 a day and a high count of 50 on October 23, 2014. The winter passage ran from December 4, 2014 to January 5, 2015 there were six to 12 a day with a high count of 18 on December 26. It is the "average" counts that will show you whether numbers are climbing or falling here they are falling with each passage. The early spring passage ran from January 6, 2015 to March 3, 2015 there were three to ten a day with a high count of 13 on January 6, 2015. The late spring passage ran from March 5, 2015 to May 9, 2015 with three to eight a day and a high count of 15 on April 14, 2015. As you can see there was no major influx at the end of this event. For the early fall passage there were singles on three dates from September 7, 2015 to September 19, 2015. For the late fall passage there were ten to 31 a day from September 25, 2015 to November 29, 2015 with a very high count of 77 on October 17, 2015. Finally for the winter passage there were eight to 15 a day from December 6, 2015 to December 30, 2015 with a high count of 15 on December 12, 2015.

Northern Mockingbird (*Mimus polyglottos*)

A resident there just might be some passage in October. There were seven pairs in 2014 but only four pairs located in 2015. This is a difficult species as for much of the year it hides away in the cover, the city mockingbirds behave very differently. The late fall passage in 2013 ran from October 14 to December 3 there were two to three a day and a high count of 15 on October 22, 2013. The winter passage ran from December 7, 2013 to January 7, 2014 with four to nine a day and a high count of ten on December 10, 2013. The early spring passage ran from January 9, 2014 to March 4, 2014 there were five to 11 a day with a high count of 15 on January 27, 2014. The late spring passage ran from March 6, 2014 to May 1, 2014 with three to six a day and a high count of ten on March 17, 2014. To my surprise only one to two a day were seen for the summer passage which ran from May 4, 2014 to July 1, 2014. For this species and a handful of others the fall passage breaks down into three not two events so for the early fall passage which ran from July 5, 2014 to September 2, 2014 just one to three a day seen. Next we come to the potential fall passage this ran from September 4, 2014 to October 27, 2014 there were eight to 14 a day with a high count of 18 on September 27, 2014. This is the highest count for the park. The late fall passage ran from October 28 to December 1, 2014 (counts now fell all the way through to late August, 2015!) with three to seven a day there were no high counts. The next two events were similar so for the combined winter and early spring passages from

December 2, 2014 to March 10, 2015 there were three to five a day with high counts of eight on December 2, 2014 and seven on March 3, 2015. For the late spring passage, the summer passage and the first part of the fall passage just one to two a day seen with a high count of six on July 5, 2015. The main fall passage ran from August 28, 2015 to October 10, 2015 with three to five a day and a high count of 14 on October 7, 2015. The late fall passage ran from October 11, 2015 to November 26, 2015 with four to eight a day and a high count of nine on October 21, 2015. Finally the winter passage ran from November 27, 2015 to December 30, 2015 with four to six a day and a high count of seven on November 29, 2015. In 2015 it was the late spring passage that was a minimal event.

Brown Thrasher (*Toxostoma rufum*)

During the breeding bird survey two pairs located in 2014 with three pairs in 2015. That being said this was an uncommon and very secretive species. In the following text I refer to "then one seen to" in this instance it is likely that I am referring to singles seen on widely scattered dates. For the late fall passage in 2013 there were three on October 22. There were no winter sightings. For the early spring passage in 2014 there were singles on January 13, February 20 and February 24. For the late spring passage in 2014 there was one on March 8 with later one on March 18, two on March 20 and three on March 22 then singles seen to April 27. For the summer passage in 2014 there were singles from May 4 to June 5 with two on June 10 and June 30, then one seen on July 1. The fall passage in 2014 again breaks into three parts the first part ran from July 5 to September 2 as with the summer passage only singles seen apart for two on July 8, 2014. For the main fall passage there were four on September 6 with five on September 13 and six on September 18, then four seen to October 9 with three on October 2 and one on October 4. There were two on October 5 with four on October 9 and eight on October 11, then five seen on October 18 with three on October 20 and one to November 1. That completed the main fall passage. There was no late fall passage and for the winter the only record was that of one on December 23, 2014. For the early spring passage and the late spring passage singles were seen from January 17, 2015 to April 25, 2015 on scattered dates with two on March 24, 2015. In fact this pattern continues to the end of the year. There were singles on scattered dates from May 1, 2015 to December 30, 2015 with counts of two on May 1, May 2, June 12, July 10, July 12, September 9, September 12, September 23 and October 4.

European Starling (*Sturnus vulgaris*)

This was a vagrant and that surprised me as I had expected a passage in late May and June after the young fledged instead there were a total of six records for the two years. For the early fall passage in 2014 there were three on July 28 with in 2015 four on July 1, one on July 10, two on July 25, two on August 30 and four on September 1.

American Pipit (*Anthus rubescens*)

This was a rare passage migrant and winter visitor all were heard flying overhead. For the initial winter passage there were two on November 28, 2013 and December 19, 2013 with one on January 4, 2014. For the late fall passage in 2014 there was one on November 21. For the winter passage there was one on November 27, 2014 with two on December 4, then one seen on December 9. For the early spring passage there was one on January 16, 2015 with for the late spring passage one on March 2, 2015. For the late fall passage in 2015 there was one on November 6. Finally for the winter passage there was one on December 12, 2015.

Cedar Waxwing (*Bombycilla cedrorum*)

This was a late fall to late spring passage migrant most were seen along the woods to the south of the impoundments. It was not possible to identify “average” counts the numbers were too variable. The initial winter passage ran from December 3, 2013 to January 9, 2014 with a high count of 395 on December 14, 2013. This was the highest count for the park. The early spring passage ran from January 11, 2014 to March 1, 2014 with a high count of 226 on February 6, 2014. The late spring passage ran from March 3, 2014 to April 27, 2014 with a high count of 87 on March 31, 2014. In the counts detailed above the high counts fell from the winter to the late spring passage but in the second year the pattern was reversed with the counts climbing to the late spring passage they were still however much lower than the earlier year. The winter passage ran from December 4, 2014 to January 3, 2015 with a high count of 61 on December 23, 2014. The early spring passage ran from January 8, 2015 to March 2, 2015 with a high count of 89 on February 26, 2015. The late spring passage ran from March 3, 2015 to April 20, 2015 with a high count of 187 on March 5, 2015. The late fall passage in 2015 ran from November 13 to November 27 with a high count of 24 on November 13. The winter passage ran from November 29 to December 30 with a high count of 63 on December 21, 2015.

Blue-winged Warbler (*Vermivora pinus*)

This was a vagrant there were only three early fall records for the two years. There were singles on September 19, 2014 and October 4, 2014 with one on September 27, 2015.

Tennessee Warbler (*Vermivora peregrina*)

This was an uncommon passage migrant there were three sightings for the spring and 11 for the fall, 14 in all. For the spring passage there were singles on April 20, 2014, May 1, 2014 and May 10, 2015. For the early fall passage there were singles on September 21, 2014, September 23, 2014, September 25, 2014 and September 16, 2015. Finally for the late fall passage there were singles on October 14, 2013, October 5, 2014, October 9, 2014, October 14, 2014, October 17, 2014, October 21, 2014 and October 14, 2015.

Orange-crowned Warbler (*Vermivora celata*)

Present from early November to late March in very low numbers. For the late fall passage in 2013 there were singles on November 12 and November 14. For the winter passage there was one on December 10, 2013 with two on December 19 and January 2, then singles seen to January 7. For the early spring passage there was one on January 11, 2014 with two from January 13 to February 17. For the late spring passage there was one on March 15, 2014 that was it. For the late fall passage in 2014 there was one present from November 11 to November 29. For the winter passage there were two on December 1, 2014 with three on December 8, then two seen to December 18, later there was one on December 29. For the early spring passage in 2015 there was one from January 3 to March 2. For the late spring passage there were singles on March 20 and March 21, 2015. For the late fall passage in 2015 there was one on November 4 with another on November 15 and November 18. There were also two on November 21 and November 27. Finally for the winter passage in 2015 there were singles on December 13, December 20 and December 23.

Northern Parula (*Parula americana*)

This was a summer visitor to the park there were nine pairs in 2014 and 15 pairs in 2015. It is normal for the number of pairs to vary with these summer visitors. The early spring passage in 2014 ran from February 20, 2014 to April 3, 2014 there were five to nine a day with a high count of 19 on March 18, 2014 this is the highest count for the park. The summer passage

appears to be an extended event from April 5, 2014 to July 1, 2014 with a high count of 12 on April 10, 2014. During this event the “average” numbers kept falling there were four to seven a day in April, two to six a day in May and one to three a day in June. The early fall passage ran from July 5, 2014 to September 30, 2014 there were one to four a day with a high count of six on September 9, 2014. The late fall passage ran from October 4, 2014 to December 1, 2014 there were singles seen from October 4 to October 21 with three on October 9 and October 17. After October 21 a single bird stayed to December 1. There were no winter records. For the early spring passage there was one on January 24, 2015. The late spring passage ran from February 28, 2015 to April 6, 2015 there were two to six a day with a high count of nine on March 28, 2015. Again the summer passage was an extended event it ran from April 7, 2015 to July 4, 2015 with a high count of 12 on May 3, 2015. During this event the “average” counts gradually declined. In April there were four to eight a day, in May three to seven a day and in June one to four a day. The early fall passage ran from July 5, 2015 to September 26, 2015 with one to two a day and a high count of five on July 19, 2015. Finally for the late fall passage there were singles on scattered dates from October 2, 2015 to November 7, 2015.

Yellow Warbler (*Dendroica petechia*)

There were ten records for the early fall passage for the two years. There were singles on August 4, 2014, August 18, 2014, August 19, 2014, August 21 and August 28, 2014. In 2015 there were two on July 11 with singles on August 7, August 12, August 21 and August 26.

Chestnut-sided Warbler (*Dendroica pensylvanica*)

There were three records for the early fall passage and four for the late fall passage. For the early fall passage there were singles on September 22, 2014, September 25, 2014 and September 16, 2015. For the late fall passage there were two on October 5, 2014 with singles on October 9, 2015, October 17, 2015 and October 18, 2015.

Magnolia Warbler (*Dendroica magnolia*)

For this warbler there were two records for the late spring passage and four for the late fall passage. For the late spring passage there were singles on May 1, 2014 and May 4, 2014. For the late fall passage there were singles on October 4, 2014 and October 5, 2014 with two on October 16, 2014 and October 17, 2014. There were no 2015 sightings.

Cape May Warbler (*Dendroica tigrina*)

Unlike the other warblers this was a spring passage migrant there were six records. For the late spring passage there was one on April 24, 2014 with three on April 26, 2014, then one seen on May 4, 2014. There was also one on April 9, 2015 with two on April 21, 2015 then one seen on May 2, 2015.

Black-throated Blue Warbler (*Dendroica caerulescens*)

For this species there were 11 late spring records and just two for the late fall passage. For the late spring passage there were singles on March 13, 2014, April 10, 2014, April 19, 2014, April 20, 2014 and April 22, 2014. On April 26, 2014 a very high total of 12 were seen by the marsh; later there were singles on April 27, 2014, May 3, 2014 and May 4, 2014. In 2015 there were singles on April 20, 2015 and May 2, 2015. Finally for the late fall passage there were singles on October 16, 2014, October 17, 2014 and October 14, 2015.

Yellow-rumped Warbler (*Dendroica coronata*)

The commonest warbler being seen from late October to early April the highest numbers were often in the winter passage. The highest numbers were seen in and around the marsh. I have not been able to identify "average" counts. The late fall passage in 2013 ran from October 29 to December 7 with a high count of 80 on December 3, 2013. The winter passage ran from December 10, 2013 to January 9, 2014 with a high count of 130 on December 23, 2013. The early spring passage ran from January 11, 2014 to March 6, 2014 with a high count of 171 on January 30, 2014. The late spring passage ran from March 8, 2014 to April 5, 2014 with a high count of 67 on March 10, 2014. There were two later records there being singles on April 10, 2014 and April 19, 2014. To start again the late fall passage ran from October 21, 2014 to December 6, 2014 with a high count of 173 on November 19, 2014. The winter passage followed from December 8, 2014 to January 12, 2015 with a high count of 219 on December 8, 2014 that was the highest count for the park. The early spring passage ran from January 13, 2015 to February 28, 2015 with a high count of 66 on February 10, 2015. The late spring passage ran from March 2, 2015 to March 31, 2015 with a high count of 83 on March 2, 2015. The late fall passage in 2015 ran from October 17, 2015 to November 29, 2015 with a high count of 119 on October 31, 2015. Finally in 2015 the winter passage ran from December 6, 2015 to December 30, 2015 with a high count of 90 on December 9, 2015.

Black-throated Green Warbler (*Dendroica virens*)

This was a vagrant for the late fall passage there was a single individual on both October 27, 2014 and October 28, 2014.

Blackburnian Warbler (*Dendroica fusca*)

This was another vagrant there were just three records for the two years. For the late fall passage there were singles on October 17, 2014, October 4, 2015 and October 11, 2015.

Yellow-throated Warbler (*Dendroica dominica*)

Whilst this species could be seen from October to March the bulk of the sightings were from the fall passages. They can be seen in a variety of trees but most often they were located in pine trees. For the late fall passage in 2013 there were singles on November 12 and November 28. There were no records for the following winter passage. For the early spring passage there were singles on February 4, 2014, February 6, 2014 and February 26, 2014. For the late spring passage there were singles on March 27, 2014 and March 31, 2014. Now to the main events the 2014 fall passages. For the early fall passage there was one on July 22 with singles from August 25 to September 11, then two seen on September 16 with three on September 18 and four from September 21 to September 23. Counts then lower with two on September 25 and one to September 29. For the late fall passage there were three on September 30 and October 5 with two to October 18. There were three again on October 21 with singles to November 6. There was also one on November 27. For the winter passage there were singles on December 12, 2014 and December 16, 2014. For the early spring passage in 2015 there were two on January 16 with singles on January 24 and January 29. There was no late spring passage this year. In 2015 for the early fall passage there were singles seen from July 25 to August 15 and from August 30 to October 3. As with other species there were gaps in the sightings. Finally for the late fall passage there were two on October 10, 2015 and October 16, 2015 with one staying to October 21. There were no winter records.

Pine Warbler (*Dendroica pinus*)

Present from September to early April with the highest counts from late November to mid-February. Whilst there were few late spring or early fall records it was present during the summer with a pair nesting in pines by the impoundments. For the late fall passage in 2013

there was one on October 14 with 11 on November 12. The winter passage ran from November 28, 2013 to January 4, 2014 there were two to six a day with a high count of 16 on December 23, 2013. The early spring passage ran from January 11, 2014 to March 3, 2014 with one to two a day and a high count of 14 on February 13, 2014. The late spring passage ran from March 4, 2014 to April 12, 2014 there were one to two a day with a high count of 12 on March 31, 2014. There was now a break in the sightings until May 3, 2014 after which singles seen to July 19, 2014. There was now another break until August 19, 2014 from which date singles seen to September 23, 2014; that was an abbreviated early fall passage. The late fall passage ran from September 29, 2014 to December 1, 2014 with one to seven a day and a very high count of 32 on November 25, 2014. The winter passage ran from December 2, 2014 to January 6, 2015 with one to three a day and a high count of seven on December 2, 2014. The early spring passage ran from January 13, 2015 to February 20, 2015 there were two to three a day with a high count of 13 on January 15, 2015, for the rest of the year there were no high counts. The late spring passage ran from March 2, 2015 to April 6, 2015 with one to three a day. There was now a break in the sightings. The summer passage ran from May 8, 2015 to June 14, 2015 there were one to two a day. From June 14 to September 1 there were no sightings apart for one on July 4. For the early fall passage there were singles for the very short period September 1, 2015 to September 9, 2015. The late fall passage ran from September 27, 2015 to November 26, 2015 there were one to two a day. Finally the winter passage ran from December 9, 2015 to December 25, 2015 again there were one to two a day.

Prairie Warbler (*Dendroica discolor*)

Seen in every month bar June with the strongest passage during the late spring and early fall passages. There were no records for the late fall passage in 2013 and the following winter passage. The only record for the early spring passage relates to one on February 26, 2014. For the late spring passage in 2014 there was one on March 20 then singles seen from March 29 to May 8 with two on April 1 and three on April 10. For the summer passage there was one on May 26, 2014. For the early fall passage there was one on August 5 with singles from September 4, 2014 to October 5, 2014. There were some higher counts during this period there were four on September 9 with five on September 15, then three seen on September 21 with two to October 2. The late fall passage ran from October 7, 2014 to November 6, 2014 again singles seen with four on October 9 and two to October 18. There was also one later on November 24, 2014. The winter passage ran from December 1, 2014 to December 12, 2014 there were singles seen apart for two on December 18. For the early spring passage in 2015 there were singles on January 17, February 4 and February 17. For the late spring passage there was one on March 10 with later singles from March 28 to March 31 with three on April 2, then

singles seen to April 18. For the summer passage there were singles on April 30, 2015 and May 8, 2015. For the early fall passage there was one on July 24 with later singles from August 9, 2015 to September 23, 2015 there were higher counts of two on August 15, five on August 23 and two on September 6. For the late fall passage there were two on September 30, 2015 with one on October 31. Finally for the winter passage there was one on December 25, 2015.

Palm Warbler (*Dendroica palmarum*)

Seen in varying numbers from late September to late April the pattern of occurrence varied each year in the 2013/2014 year the numbers built to the high count in late January. In the 2014/2015 year the highest count was in October with decreasing numbers to January the exact opposite. In the 2015 part year only small numbers seen but the "highest" count was in October....They were seen in the open areas, the parking lot, the marsh and around the impoundments. The late fall passage in 2013 ran from October 14 to November 12 there were one to four a day with a high count of 19 on October 22, 2013. The winter passage ran from November 24, 2013 to December 29, 2013 with seven to 20 a day and a high count of 27 on December 19, 2013. The early spring passage ran from December 31, 2013 to February 2, 2014 there were eight to 22 a day with a high count of 33 on January 27, 2014. The second half of the early spring passage ran from February 4, 2014 to March 6, 2014 numbers now very low there were three to eight a day and there was no high count. The late spring passage ran from March 8, 2014 to April 20, 2014 with two to six a day and a high count of 11 on March 11, 2014. The late fall passage in 2014 ran from September 22 to November 24 with nine to 22 a day and a high count of 32 on October 18, 2014. That was so nearly the highest count. Numbers now fell as the winter passage ran from November 25, 2014 to January 6, 2015 there were three to five a day and a high count of 11 on December 15, 2014. The early spring passage in 2015 ran from January 8 to March 5 with two to six a day and a high count of 16 on January 19. The late spring passage was a minimal event the passage ran from March 7 to April 21 just one to three a day seen there was no high count. The late fall passage in 2015 ran from September 23 to November 28 with two to four a day and a high count of nine on October 23, 2014. That date fits in with the other years just not the numbers. Finally the winter passage ran from December 6, 2015 to December 30, 2015 with one to three a day there was no high count.

Bay-breasted Warbler (*Dendroica castanea*)

This was a vagrant there were only records for the late fall passage in 2014. There was one on October 16 with four on October 17, then one seen on November 6. The count of four is a very high count for anywhere in Florida.

Blackpoll Warbler (*Dendroica striata*)

The late spring passage is when this species can be seen. For this passage in 2014 there were three on April 20 with five on April 24, then two seen on April 26 with one on April 29. Later there were seven on May 4. For this passage in 2015 there were singles on April 23 and April 30.

Cerulean Warbler (*Dendroica cerulea*)

This was a vagrant in 2014 for the late spring passage there was one on April 20 and for the early fall passage there was one on August 14. There were no 2015 sightings.

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

They could be seen occasionally from August to May. There were no sightings until January, 2014. For the early spring passage in 2014 there were singles seen from January 2 to February 17 the sightings were for this and all the other passages intermittent. For the late spring passage there were singles from March 4, 2014 to March 25, 2014 with two on March 8, 2014. There were two on March 31 and April 1 with singles to April 19. There were two on April 20 with four on April 22 and six on April 26, then singles seen to May 4, 2014. For the early fall passage in 2014 there were singles seen from August 16 to September 19. For the late fall passage in 2014 there was one on September 30 with two on October 4, then singles seen to October 16. There were eight on October 17 with two on October 21 and November 6, then singles seen to November 29. For the winter passage there were singles on December 12, 2014, January 3, 2015 and January 5, 2015. For the early spring passage there were singles from January 13, 2015 to February 16, 2015. For the late spring passage there were also singles from March 30, 2015 to May 2, 2015. As I said earlier these will be scattered sightings. For the early fall passage in 2015 there were two on August 15 with singles on August 22 and later September 20. For the late fall passage in 2015 there were singles on October 10, October 16, November 15, November 21 and November 26. Finally for the winter passage there were singles on December 25, 2015 and December 30, 2015.

American Redstart (*Setophaga ruticilla*)

This was a quite common passage migrant with similar number in both the spring and fall passages. For the late fall passage in 2013 there were two on October 22. For the late spring

passage in 2014 there was one from April 10 to April 24 with 18 on April 26 then six seen on April 27 with four on May 1 and three on May 3. There were seven on May 4 with one on May 8. There was also an exceptionally late individual on May 29. For the early fall passage in 2014 there was one on August 4 with later singles from August 23 to September 15. There were two from September 16 to September 21 with three on September 23, then two seen on September 27 with one on September 30. For the late fall passage in 2014 there were two on October 2 with three on October 4, four on October 5 and five on October 16, then three seen on October 17 with singles to October 30. For the late spring passage in 2015 there was one on March 31 with singles later from April 17 to April 20, then four seen on April 23 with three to May 10 and one on May 13. For the early fall passage in 2015 there were singles from August 7 to August 16 with two on August 23, three on August 27 and five on September 5, then three seen on September 6 with two to September 16 and one on September 20. There were eight on September 23 with two on September 25 and one to October 1. These two influxes comprised the early fall passage. For the late fall passage in 2015 there were two on October 3 with three on October 10 and six on October 11, then two seen on October 21 with singles to October 27.

Prothonotary Warbler (*Protonotaria citrea*)

This was a vagrant for the late spring passage there were two at the swamp on March 31, 2014 with for the early fall passage one at the swamp on August 28, 2015.

Worm-eating Warbler (*Helmitheros vermivora*)

A slightly commoner species there were sightings on eight days. For the late spring passage there was one individual on April 17, 2014, April 19, 2014, April 20, 2014 and April 22, 2014. In 2015 there was another on April 21 and April 23. It is possible that the 2015 bird was the same bird as that seen in 2014 the sites were not far apart. For the early fall passage there were singles on September 23, 2014 and September 18, 2015.

Ovenbird (*Seiurus aurocapilla*)

A fall passage migrant with a few records for other seasons these warblers could be found in the wooded areas. For the winter passage there was one on December 7, 2013. For the early spring passage there was one on January 11, 2014. For the late spring passage in 2014 there were singles on March 8, April 10 and May 4. For the early fall passage in 2014 there were singles on August 25 and August 28 with two from September 15 to September 25 and four on

September 27. For the late fall passage in 2014 there was one on October 2 with four on October 4, then two seen on October 11 with one on October 14. For the late spring passage in 2015 there were singles on April 2 and May 1. For the early fall passage there was one on September 5 with three from September 9 to September 23 and six on September 26, then two seen on September 27. For the late fall passage in 2015 there were three on September 30 with four on October 2 and October 4, then three seen on October 10 with singles to October 21. Finally there was one on November 7, 2015.

Northern Waterthrush (*Seiurus noveboracensis*)

A quite common fall passage migrant with lower numbers during the late spring passage both waterthrush species were seen or heard at the marsh and the swamp. For the late fall passage in 2013 there was one on October 22. For the late spring passage in 2014 there were singles from March 20 to April 1 with two on April 5, then singles seen to April 22. There were two from April 24 to April 29 with one on May 1. That completed the late spring passage for 2014. For the early fall passage in 2014 there were singles on August 16 and August 25 with two on September 2 and three on September 11, then two seen on September 18 with singles to September 27. For the late fall passage in 2014 there was one on September 30 with two on October 2 and October 4, then singles seen to October 11. For the late spring passage in 2015 there was one on April 23 with two on April 27 and April 30, then one seen on May 1. For the early fall passage in 2015 there was one on August 8 with singles later from August 21 to September 7, then two seen on September 9 with three on September 11 and five on September 18. Later there were two on September 25 with one on September 26. Finally for the late fall passage there were two on October 7.

Louisiana Waterthrush (*Seiurus motacilla*)

This was a less common warbler the passage in the spring and the fall starting somewhat earlier. They used the same habitat. In 2014 for the spring passage there were singles on February 24, March 1, March 3 and March 6. Later there were singles on March 18, March 20, April 20 and April 24. For the early fall passage in 2014 there was one on August 12 with two on August 14, then singles seen on August 16 and September 4. For the spring passage in 2015 there were singles on March 7, March 10 and March 30. For the early fall passage in 2015 there were singles on July 19, August 1 and August 5 with two on August 8 and three on August 16, then one seen on August 19.

Kentucky Warbler (*Oporornis formosus*)

This was a vagrant in 2014 there was one by the parking lot on April 16 and April 17.

Common Yellowthroat (*Geothlypis trichas*)

Present from September to early May most were found at the marsh and at the impoundments. For both the late fall passage and the winter passage just one to four a day seen from October 22, 2013 to January 7, 2014. The early spring passage which ran from January 9, 2014 to March 3, 2014 was only marginally better there were two to four a day. The late spring passage in 2014 ran from March 4 to May 10 with a late individual on May 26 there were two to five a day with a high count of ten on March 18. The early fall passage in 2014 ran from August 28 to October 2 there were three to six a day with a high count of eight on September 23, 2014. The late fall passage ran from October 4, 2014 to November 29, 2014 with three to eight a day and a high count of 11 on October 20, 2014. Counts now lower the winter passage ran from December 1, 2014 to January 6, 2015 there were two to five a day with a high count of nine on December 11, 2014. The early spring passage in 2015 ran from January 10 to March 3 with two to five a day there was no high count. The late spring passage ran from March 5, 2015 to May 10, 2015 with two to five a day and a high count of ten on March 17, 2015. The early fall passage in 2015 ran from September 5, 2015 to September 26, 2015 with one to four a day and a high count of nine on September 23, 2015. Now to the strongest event of the two years the 2015 late fall passage this ran from September 27 to November 27 with six to 11 a day and a high count of 18 on November 1, 2015. Finally for the winter passage five to seven a day were seen from November 28, 2015 to December 30, 2015 with a high count of ten on December 16, 2015.

Hooded Warbler (*Wilsonia citrina*)

There were nine sightings for the two years and eight of them were for the fall passages so for the spring passage there was one on April 20, 2014. For the early fall passage in 2015 there were singles on August 5, August 16, August 28 and August 29. For the late fall passage there were singles on September 29, 2014. October 16, 2014, October 2, 2015 and October 14, 2015.

Summer Tanager (*Piranga rubra*)

There were only four records with one for the late spring, one for the summer and two for the early fall passages. For the late spring passage there was one on April 19, 2014. For the summer passage there was one on June 9, 2014. For the early fall passage there were singles on September 4, 2014 and August 29, 2015.

Scarlet Tanager (*Piranga olivacea*)

Again there were four records this time one was for the early fall and three were for the late fall passage. For the early fall passage there was one on August 28, 2015. For the late fall passage there were two on October 16, 2014 with singles on October 17, 2014 and October 21, 2015.

Eastern Towhee (*Pipilo erythrophthalmus*)

There were three pairs in both 2014 and 2015. There were different patterns in both years the highest numbers were seen during the late spring passage in 2014 and the summer passage in 2015. For the first winter passage there were singles on November 28, 2013, December 26, 2013 and January 2, 2014. For the early spring passage in 2014 there were singles on January 11 and January 27 with two on February 2, three on February 4 and five on February 22, then singles seen to February 26. For the late spring passage there were two from March 1 to March 20 with six on March 22, then four seen to April 5 with three on April 13, two on April 14 and one to May 4. For the summer passage in 2014 there were two on May 8 with singles to June 3. Later there were singles on June 26 and July 1. For the early fall passage in 2014 there were four on July 8 with three on July 19 and singles to July 26. Later there were singles on scattered dates from August 8 to September 23. For the late fall passage in 2014 there were singles on October 11 and October 17. There were no winter sightings. For the early spring passage in 2015 there were singles from January 24 to February 10 with two from February 14 to February 28, then one seen on March 2. There was just one record for the late spring passage in 2015 there being one on April 13. For the summer passage in 2015 there was one on May 1 with two on May 3 and three on May 8, then two seen on May 10 with singles to May 22. There was also one from June 7 to June 12 with isolated singles on June 24 and July 1. For the early fall passage in 2015 there was one on July 19 with singles later on August 7, August 9 and September 7. For the late fall passage there were singles on October 2, October 16 and October 31 with two on November 1, then singles seen to November 11. For the third year there were no winter records.

Bachman's Sparrow (*Aimophila aestivalis*)

I am not sure what to make of these records. There was a male on territory by the woodland trail on February 24, 2014, February 26, 2014, March 1, 2014 and September 4, 2014.

Chipping Sparrow (*Spizella passerina*)

In the winter of 2013 and the early spring of 2014 this was a strong passage migrant however in the fall of 2014 and the spring of 2015 there were very few sightings. Most were seen around the impoundments. For the winter passage of 2013 there were six on December 17 with four on December 26 and two on December 29. For the early spring passage of 2014 there were 44 on January 2 (the highest count) with 12 on January 4 and seven on January 7. There were 13 on January 13 with five on January 16 and four on January 18. There were 13 on January 23 with six on February 6 and three on February 13. That was the early spring passage. For the late fall passage in 2014 there were singles from November 17 to November 27. For the winter passage there were two on December 1, 2014 with three on December 6, 2014. Then for the early spring passage in 2015 there were singles seen on January 13 and January 19. A year later for the late fall passage in 2015 there was one on October 30 with two on November 4.

Vesper Sparrow (*Pooecetes gramineus*)

This was a vagrant for the early spring passage there was one by the impoundments on February 12, 2015.

Savannah Sparrow (*Passerculus sandwichensis*)

This was the commonest sparrow nearly all were seen by the impoundments. For the 2013 winter passage there was one on December 3. For the early spring passage in 2014 there were singles from January 9 to January 18 with three on January 27 and five on February 4, then singles seen to February 24. For the late spring passage there were three on February 26 and March 1 with four on March 3, then three seen on March 18 with one on March 22. There were five on March 27 with three from March 29 to April 17. That was it. For the late fall passage in 2014 there were two on November 4 with three on November 8, then one seen to November 29. For the winter passage there were two on December 11 with three on December 13, then two seen to December 25. For the early spring passage in 2015 there were two on January 3 with nine on January 13, then five seen to January 24 with two on January 27. There

were six on January 29 with seven on February 2 and February 19, then four seen on February 20 with one on February 23. There were five on February 24 with ten on February 28, then nine seen on March 3 with four on March 5 and three on March 10. That completed the early spring passage. For the late spring passage in 2015 there were six on March 12 and March 14 with four to March 24, two on March 26 and singles on four dates to April 20. For the late fall passage in 2015 there was one on October 18 with two on October 30 and three on November 4, then two seen on November 12 and November 21. For the winter passage in 2015 there were three on November 29 with singles on December 23 and December 25. There were also two on December 27 with one on December 30.

Song Sparrow (*Melospiza melodia*)

This was a vagrant there were six records of four birds for the two years. For the late spring passage there was one on April 29, 2014 and May 1, 2014. For the late fall passage there was one on October 31, 2015 and November 1, 2015. For the winter passage there was one on December 12, 2014. Finally for the early spring passage there was one on January 11, 2014.

Lincoln's Sparrow (*Melospiza lincolnii*)

This was a vagrant for the late fall passage in 2015 there was one at the marsh on October 31.

Swamp Sparrow (*Melospiza georgiana*)

These sparrows could be found at the marsh and at the impoundments. For the late fall passage in 2013 there were singles on four dates from October 29 to November 24. The winter passage ran from December 3, 2013 to January 2, 2014 there were one to two a day to December 29 then three seen on December 31 with one on January 2. The early spring passage ran from January 9, 2014 to March 4, 2014 with one to two a day except for three on February 4, February 20 and February 26. The late spring passage in 2014 ran from March 6 to April 5 again there were one to two a day there were no higher counts. The late fall passage in 2014 ran from October 20 to November 24 there were one to two a day with a high count of four on November 11, 2014. The winter passage ran from December 1, 2014 to January 5, 2015 there were one to two a day seen apart from the following influx. There were four on December 6 and December 8 with five on December 9, then three seen on December 11. The early spring passage in 2015 ran from January 10 to March 2 with one to three a day and high counts of

seven on January 22 and February 17. The late spring passage in 2015 ran from March 5 to April 27 there were one to two a day with a high count of three on March 10. The late fall passage in 2015 ran from October 18 to December 6 with one to four a day and a high count of six on November 11, 2015. Finally the winter passage ran from December 9 to December 30 with one to three a day and a higher count of four on December 16, 2015.

White-crowned Sparrow (*Zonotrichia leucophrys*)

This was a vagrant there were singles by the impoundments on January 2, 2014 and February 4, 2014.

Northern Cardinal (*Cardinalis cardinalis*)

This was a common resident throughout the area. During the breeding bird survey 30 pairs located in 2014 with 42 pairs in 2015 these figures do not show in the counts. For the late fall passage in 2015 two to seven a day seen from October 14 to November 28 with a high count of 12 on October 22. The winter passage ran from December 3, 2013 to January 7, 2014 with one to nine a day and a high count of 13 on January 4, 2014. Now there was a big jump in the numbers this was caused by the local population starting to sing rather than any migration. The early spring passage in 2014 ran from January 9 to March 6 with nine to 35 a day and a high count of 42 on February 22, 2014. The late spring passage in 2014 ran from March 8 to May 4 there were 12 to 36 a day with a high count of 47 on May 4, 2014. Counts now gradually fell to the winter passage. The summer passage ran from May 8 to July 7 there were 16 to 26 a day with a high count of 29 on May 8, 2014. The early fall passage ran from July 8 to September 30 with 17 to 24 a day and a high count of 30 on July 11, 2014. The late fall passage in 2014 ran from October 2 to November 29 with nine to 20 a day and high counts of 24 on two dates. The winter passage ran from December 1, 2014 to January 8, 2015 with six to ten a day and a high count of 14 on January 3, 2015. As in 2014 counts now climbed to a summer peak before dropping down again for the early spring passage in 2015 there were 11 to 23 a day from January 10 to March 7 with a high count of 30 on March 3. The late spring passage ran from March 10 to May 10 with 18 to 27 a day and a high count of 38 on April 11. The summer passage ran from May 13 to July 12 with 15 to 24 a day and a very high count of 60 on June 19, 2015. The early fall passage ran from July 15 to September 27 with eight to 14 a day and a high count of 19 on August 7. The late fall passage in 2015 ran from September 30 to December 6 there were seven to 14 a day with a high count of 16 on October 2. Finally we come to the winter passage of 2015 this ran from December 9 to December 30 with five to eight a day and a high count of ten on December 27.

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant there were five records for the two years. For the late spring passage there was one on May 8, 2015. For the late fall passage there were singles on October 22, 2013 and October 2, 2014 with two on October 17, 2014, then one seen on October 7, 2015.

Blue Grosbeak (*Guiraca caerulea*)

There were only six records for a species that should be so much commoner than the Rose-breasted Grosbeak. For the late spring passage there was one on May 22, 2015. For the early fall passage there was one on September 18, 2015. All the other sightings relate to the late fall passage there were two on October 22, 2013 with singles on October 2, 2014, October 23, 2014 and October 30, 2015.

Indigo Bunting (*Passerina cyanea*)

There were 11 records for this species five were in the late spring, five in the late fall and one in the winter passage. For the late spring passage there were two on April 20, 2014, May 17, 2014, March 2, 2015, March 7, 2015 and April 23, 2015. For the late fall passage there were two on October 22, 2013 with singles on October 4, 2014, October 5, 2014, October 9, 2014 and October 10, 2015. Finally for the winter passage there was one on December 2, 2014.

Painted Bunting (*Passerina ciris*)

For this species there were 12 records. I would have expected the order to start with Blue Grosbeak then Indigo Bunting and finally Painted Bunting the rarest; the reality is the total opposite! There were four records for the early spring passage, one for the late spring, four for the late fall and three for the winter passage. For the early spring passage there were singles on January 13, 2014, January 16, 2014, January 18, 2014 and February 23, 2015. For the late spring passage there was one on April 20, 2014. For the late fall passage there were singles on October 5, 2014, November 4, 2014, October 7, 2015 and November 13, 2015. Finally for the winter passage there were singles on December 6, 2014, December 8, 2014 and December 12, 2014.

Bobolink (*Dolichonyx oryzivorus*)

This was a quite common passage migrant all the sightings relate to birds flying overhead. For the late spring passage in 2014 there were 11 on April 16 with ten on April 19 and four on April 24. There were 44 on April 26 with one on May 10. Later there were 12 on May 19. For the early fall passage in 2014 there were five on August 30 with 24 on September 6 and 305 on September 8, then 14 seen on September 13 with four on September 15 and two on September 22. There were 29 on September 23 with two on September 25 and one on October 2. For the late spring passage in 2015 there were five on April 23 with 35 on April 30, then three seen to May 8. For the early fall passage in 2015 there were two on August 23 with four on September 1, then three seen on September 6 with one to September 9. There were nine on September 11 with 208 on September 12, then 22 seen on September 20 with three on September 30 and one on October 3. There were five on October 7 with one on October 10. That completed the 2015 early fall passage.

Red-winged Blackbird (*Agelaius phoeniceus*)

A common passage migrant and winter visitor with much lower numbers from April to at least July the highest numbers were in the late fall and winter passages. One pair is believed to have bred in the marsh in 2014. The late fall passage of 2013 ran from October 22, 2013 to December 3, 2013 with 32 to 70 a day and a high count of 85 on November 28, 2013. The winter passage ran from December 7, 2013 to January 7, 2014 there were 24 to 31 a day and a high count of 31 on December 7, 2013. The early spring passage in 2014 ran from January 9 to March 3 with seven to 31 a day and a high count of 62 on January 30, 2014. The late spring passage ran from March 4 to April 1 there were 26 to 48 a day with a high count of 135 on March 4, 2014. Numbers were now very low from April to mid-September this covered the period from April 3, 2014 to September 13, 2014 there were two to six a day and a high count of 22 on July 29, 2014. The late fall passage in 2014 ran from September 29 to November 29 with seven to 19 a day and a high count of 327 on November 25; this was the highest count for the park. The winter passage ran from December 1, 2014 to January 3, 2015 there were 11 to 42 a day with a high count of 88 on December 16, 2014. The early spring passage in 2015 ran from January 5 to February 26 there were three to six a day with a high count of 19 on February 14. The late spring passage ran from February 28 to March 28 there were five to seven a day and a high count of 63 on February 28. The extended summer passage ran from March 30 to July 1 with two to seven a day there were no higher counts. The early fall passage in 2015 ran from July 3 to September 26 with three to eight a day and a high count of 30 on August 30, 2015. The late fall passage ran from September 30 to November 28 with two to eight a day and

a high count of 189 on October 27, 2015. Finally the winter passage in 2015 ran from November 29 to December 30 there were eight to 36 a day with a high count of 61 on December 12, 2015.

Eastern Meadowlark (*Sturnella magna*)

This was a vagrant one flew to the east at the impoundments on July 5, 2014 this is an early fall record.

Common Grackle (*Quiscalus quiscula*)

This species did not breed in the survey area but will have done so somewhere to the south-west. They were normally seen in very low numbers but there were scattered higher counts - this is a characteristic of this species. For the late fall passage in 2013 there were one to five a day from October 14 to November 28 with a high count of 109 on November 4. The winter passage ran from December 7, 2013 to January 7, 2014 with one to three a day and a high count of 18 on January 4, 2014. The early and late spring passages in 2014 were identical the combined event ran from January 9 to May 1 there were one to three a day with high counts of 80 on January 9 and 83 on March 4. The same is true for the summer and early fall passages the combined event ran from May 3 to September 27 with one to five a day and a high count of 11 on September 23. Now everything changed. The late fall passage in 2014 ran from September 29 to November 29 with 12 to 23 a day and a high count of 117 on October 27. The winter passage ran from December 1, 2014 to January 6, 2015 there were 23 to 48 a day with a high count of 545 on January 1, 2015. The early spring passage in 2015 ran from January 8, 2015 to March 2, 2015 with six to 25 a day and a high count of 585 on January 13, 2015. The late spring, the summer and the first part of the early fall passage in 2015 ran from March 3 to August 26 with two to seven a day and a high count of 20 on June 12, 2015. For both years counts through an extended summer passage were very low. The next passage was a hybrid event covering parts of the early and late fall passages. This event ran from August 28 to November 8 there were 32 to 56 a day and a high count of 236 on October 21, 2015. Finally the winter passage ran from November 11, 2015 to December 30, 2015 with just two to eight a day and a high count of 42 on December 23, 2015.

Boat-tailed Grackle (*Quiscalus major*)

This species also did not breed in the survey area but it will have done so to the north of Doyle Road. The 2013 late fall passage ran from October 14 to November 24 with two to six a

day and a high count of 19 on October 29. The winter passage ran from November 28, 2013 to January 7, 2014 with three to six a day and a high count of 22 on December 19, 2013. The early and late spring passages in 2014 were very similar the combined event ran from January 9 to April 27 with two to six a day and a high count of 27 on March 4. The summer passage ran from April 29 to June 30 with three to seven a day and a high count of 21 on June 2. The early fall passage ran from July 1 to October 5 with two to five a day and a high count of 13 on July 17, 2014. The late fall passage in 2014 ran from October 7 to November 27 with two to six a day and a high count of 56 on November 3, 2014. The winter passage in 2014 ran from November 29 to December 30 there were four to seven a day and a high count of 119 on December 23, 2014. The early spring passage in 2015 ran from January 1 to March 3 with three to nine a day and a high count of 70 on February 16. The late spring passage of 2015 was the weakest event of the two years this passage ran from March 5 to April 27 with one to five a day. The summer passage ran from April 30 in 2015 to July 17 with two to seven a day and a high count of 23 on June 21. The early fall passage ran from July 18 to September 7 with two to 13 a day and a high count of 80 on August 29, 2015. The late fall passage ran from September 9 to November 26 there were five to seven a day with a high count of 84 on November 15. Finally the winter passage ran from November 28 to December 30 with four to eight a day and a high count of 29 on December 21, 2015.

Brown-headed Cowbird (*Molothrus ater*)

This was a late spring and late fall passage migrant, there were no sightings from June to September. For the late fall passage in 2013 there were five on October 22. For the winter passage in 2013 there were nine on December 19. For the early spring passage in 2014 there were four on January 27 with eight on February 2 and February 6, then five seen on February 17. For the late spring passage there were singles on March 4 and March 10 with 380 on March 20, then singles seen on April 1, April 10, April 14, April 22 and May 1. For the late fall passage in 2014 there were 120 on October 4 with 12 on October 7. There were 29 on October 11 with ten on October 17. Finally there were ten on October 30. For the winter passage there were 38 on December 2, 2014. For the late spring passage in 2015 there were 50 on March 7 and March 16. Finally for the late fall passage in 2015 there were 90 on October 16 with 15 on October 18. Later there were 20 on October 27 with 11 on November 8.

Orchard Oriole (*Icterus spurius*)

This was a vagrant there were three records for the two years. For the late spring passage there was one on March 31, 2014. For the early fall passage there were two on July 14, 2014 with one on July 28, 2015.

Baltimore oriole (*Icterus galbula*)

This was another vagrant with three records for the two years. For the early spring passage there was one on January 9, 2014. For the late spring passage there was one on April 5, 2014. Finally for the late fall passage there was one on November 4, 2015.

House Finch (*Carpodacus mexicanus*)

There were a total of 15 records for the two years. With the exception of one sighting at the end of May there were no records from mid-March to mid-July i.e. no summer sightings. There was another gap from August 8 to November 10. For the early spring passage there were singles on January 9, 2014, February 6, 2015 and February 26, 2015. For the late spring passage there was one on March 13. The isolated summer record relates to two on May 29, 2015. For the early fall passage there were singles on July 24, 2014, August 7, 2014 and July 10, 2015 with four on July 11, 2015, then three seen on July 15, 2015 and August 5, 2015. For the late fall passage there were three on November 4, 2013 with two on November 15, 2014 and one on November 18, 2015. Finally for the winter passage there were two on December 16, 2014.

Pine Siskin (*Spinus pinus*)

This was a vagrant there was one with a flock of American Goldfinches at the impoundments on January 17, 2015 an early spring record.

American Goldfinch (*Spinus tristis*)

Seen from mid-November to early April the marsh was the favored area. For the late fall passage in 2013 there was one on November 19 with nine on November 28 and 14 on December 3, then seven seen to December 10. For the winter passage there were 46 on December 14, 2013 with 13 on December 17, ten on December 23, seven on December 26, five

on December 31 and two on January 2, 2014. For the early spring passage in 2014 there were nine on January 4 with one on January 7. There were three on January 9 with six on January 11 and seven on January 13, then five seen on January 16 with four to January 27 and one on January 30. There were 50 on February 2 with six on February 8 and two to February 24. That was the early spring passage so for the late spring passage there were three on February 26 with five on March 1, then two seen to March 6. There were three on March 8 with two to March 22. There were five on March 24 with three on April 1, two on April 7 and singles to April 12. That ended the late spring passage. For the late fall passage in 2014 there was one on November 11 with two on November 13, six to November 21 and 31 on November 25, then six seen on November 29 with four on December 1. For the winter passage there were six on December 2 with 13 on December 4 and 23 on December 8, then 16 seen on December 12 with six to December 25 and two on December 29. For the early spring passage in 2015 there were three on December 30 with 22 on January 1 and 64 on January 8, then 39 seen on January 15 with 25 on January 17 and three on January 19. There were 105 on January 20 with 113 on January 24, then 90 seen on January 24 with 33 on January 26, 21 on January 29, 16 on February 1, three to February 14 and two on February 16. There were 22 on February 17 with 26 on February 24, then five seen on February 28 with one on March 2. That closed the early spring passage. For the late spring passage in 2015 there were five on March 2 and March 14 with nine on March 16, then five seen on March 17 with three on March 24, two on March 28 and one on March 30. Finally for this event there were four on April 5 with one to April 7. For the late fall passage in 2015 there were two on November 15 with 24 on November 18, then nine seen on November 26 with eight on November 28 and six on November 29. Finally for the winter passage there were 16 on December 6 with 50 on December 9, then 34 seen on December 13 with 21 on December 20. There were 31 on December 21 with 348 on December 23, then 14 seen on December 27 with six on December 30. The count of 348 is a massive count on that day flocks were flying to the south.

APPENDIX A

MONTHLY SPECIES AND SURVEY COUNTS et al.

This appendix covers the number of species seen each month and the number of surveys that they were seen in. Also included is the annual total of species seen.

Species 2013:	100	Total Species to 12.31.2013:	110
Species 2014:	199	Additions 2014:	89
Species 2015:	187	Additions 2015:	9
Running Total:	208		

Monthly Species counts:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2013:											57	63	81
2014:	97	104	115	129	92	71	75	83	97	124	108	105	
2015:	99	97	103	109	91	66	78	91	98	118	104	89	

Monthly no. of surveys:

	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Dec	Total	Cum. Tot.	
2013:										3	5	10	18	
2014:	13	12	17	18	17	18	18	16	20	18	16	17	200	
2015:	18	17	17	17	18	16	18	18	18	18	16	12	203	421

APPENDIX B

BREEDING BIRD SURVEY

I carried out a breeding bird survey of the park and its environs in both 2014 and 2015. I made for each year a set of maps covering sections of the park and I used these maps to plot where I heard males singing or where I saw them on territory. I kept refining these maps in late May and early June to the point where I thought I had every pair located. The table below shows the results.

Breeding Bird Survey	2013	2014	2015
Yellow-crowned Night-Heron			1
Black-bellied Whistling-Duck		1	2
Wood Duck		1	1
Osprey		1	1
Swallow-tailed Kite		1	1
Cooper's Hawk		1	1
Red-shouldered Hawk		2	2
Short-tailed Hawk		1	1
Red-tailed Hawk		1	
Wild Turkey		1	3
Northern Bobwhite		1	2
Sandhill Crane		1	2
Killdeer			1
Mourning Dove		10	9
Common Ground-Dove		3	4
Yellow-billed Cuckoo		1	
Eastern Screech-Owl		1	
Great Horned Owl		1	1
Barred Owl		4	6
Chuck-will's-widow		16	15
Red-bellied Woodpecker		9	15

Downy Woodpecker		5	6
Northern Flicker		1	1
Pileated Woodpecker		5	6
Great Crested Flycatcher		6	9
White-eyed Vireo		8	9
Blue Jay		6	4
American Crow			1
Fish Crow		1	1
Carolina Chickadee		1	5
Tufted Titmouse		8	14
Carolina Wren		34	33
Blue-gray Gnatcatcher		9	14
Northern Mockingbird		7	4
Brown Thrasher		2	3
Northern Parula		9	15
Pine Warbler		1	2
Eastern Towhee		3	3
Northern Cardinal		30	42
Red-winged Blackbird		1	

Notes	
Swallow-tailed Kite	one flying young 5.8.14
Wood Duck	four tiny chicks 6.9.14
Wild Turkey	six chicks 5.1.14
Sandhill Crane	one chick from 4.5.14 first flight 6.5.14
Sandhill Crane	two chicks the marsh 2.28.15
Sandhill Crane	two chicks the ponds 3.14.15
Wood Duck	brood of seven pond by bike trail 4.4.15

APPENDIX C

BUTTERFLIES

During late 2013 and all of 2014 and 2015 I noted the first date in each year that I saw each species of butterfly. There are not many flowering plants in the park so the list is shorter than I had expected.

Year	2013	2014	2015
Polydamus Swallowtail		7.11.14	
Zebra Swallowtail		3.8.14	4.2.15
Black Swallowtail	12.7.13	2.4.14	3.14.15
Giant Swallowtail		2.20.14	3.5.15
Eastern Tiger Swallowtail	10.22.13	3.3.14	1.22.15
Spicebush Swallowtail		3.4.14	4.4.15
Palamedes Swallowtail	10.29.13	2.11.14	3.5.15
Checkered White		4.24.14	4.18.15
Great Southern White		4.10.14	4.11.15
Southern Dogface		3.3.14	8.26.15
Cloudless Sulphur	12.10.13	1.2.14	1.3.15
Large Orange Sulphur		8.9.14	6.26.15
Barred Yellow	11.4.13	1.13.14	1.22.15
Little Sulphur	10.22.13	1.2.14	11.6.15
Sleepy Orange	12.23.13	2.4.14	2.23.15
Dainty Sulphur		8.4.14	4.6.15
Banded Hairstreak			4.4.15
Red-banded Hairstreak		4.17.14	4.4.15
Cassius Blue			5.10.15
Ceraunus Blue		6.15.14	4.13.15
Gulf Fritillary	10.29.13	3.18.14	4.7.15

Zebra Heliconian	11.12.13	1.27.14	1.16.15
Phaon Crescent			12.20.15
Pearl Crescent			8.19.15
American Lady		3.10.14	
Red Admiral		3.1.14	1.24.15
Common Buckeye	12.3.13	2.11.14	1.13.15
White Peacock	12.3.13	7.15.14	1.3.15
Red-spotted Purple		10.20.14	6.3.15
Viceroy		5.17.14	5.20.15
Hackberry Emperor		9.13.14	4.21.15
Tawny Emperor		4.12.14	4.14.15
Southern Pearly-Eye		7.8.14	
Carolina Satyr	10.22.13	1.2.14	1.1.15
Monarch		3.1.14	4.4.15
Queen		2.17.14	4.14.15
Silver-spotted Skipper		4.10.14	5.10.15
Long-tailed Skipper	11.12.13	1.9.14	1.26.15
Dorantes Skipper	11.12.13	1.11.14	5.22.15
Southern Cloudywing			4.13.15
Northern Cloudywing		3.29.14	
Confused Cloudywing		6.30.14	
Horace's Duskywing		7.26.14	2.23.15
Zarucco Duskywing		3.25.14	3.14.15
Common Checkered-Skipper	12.31.13	2.17.14	
Tropical Checkered-Skipper		3.15.14	6.28.15
Swarthy Skipper		7.7.14	3.14.15
Neamathla Skipper		7.3.14	
Least Skipper			5.16.15
Southern Skipperling		6.30.14	5.10.15
Fiery Skipper	12.10.13	1.13.14	
Whirlabout	12.19.13	6.19.14	5.6.15
Southern Broken-Dash		6.20.14	
Northern Broken-Dash		5.22.14	

Delaware Skipper		6.23.14	4.23.15
Byssus Skipper		7.31.14	
Dun Skipper	11.12.13	4.24.14	
Monk Skipper		4.1.14	7.1.15

APPENDIX D

DAMSELFLIES and DRAGONFLIES

I made a note of the first date in each year that I saw these insects. I never systematically searched for them so this will be only a partial list.

Damselflies

Citrine Forktail		8.12.14	3.3.15
Fragile Forktail		4.12.14	
Furtive Forktail		10.11.14	1.16.15
Rambur's Forktail	12.7.13	4.12.14	3.14.15
Southern Sprite		6.20.14	

Dragonflies

Comet Darner		4.7.14	3.2.15
Common Green Darner	10.22.13	1.2.14	3.3.15
Regal Darner		3.15.14	3.16.15
Swamp Darner		4.1.14	5.13.15
Harlequin Darner		1.2.14	
Twilight Darner	10.22.13	1.2.14	3.12.15
Cyrano Darner		3.31.14	4.6.15
Phantom Darner	12.29.13	1.2.14	9.18.15
Two-striped Forceptail		8.18.14	
Gray-green Clubtail		4.3.14	3.26.15
Cypress Clubtail			5.9.15
Russet-tipped Clubtail		6.20.14	
Prince Baskettail		4.1.14	3.30.15
Common Baskettail		3.3.14	
Four-spotted Pennant		4.12.14	3.31.15
Halloween Pennant		4.22.14	3.14.15
Banded Pennant		9.23.14	3.17.15

Scarlet Skimmer		4.22.14	
Eastern Pondhawk	10.22.13	3.3.14	3.3.15
Great Pondhawk	10.29.13	11.6.14	
Little Blue Dragonlet		5.1.14	5.1.15
Band-winged Dragonlet	10.29.13	10.30.14	
Blue Corporal		3.3.14	3.26.15
Golden-winged Skimmer		4.26.14	5.13.15
Bar-winged Skimmer		5.26.14	4.11.15
Slaty Skimmer		4.5.14	4.11.15
Needham's Skimmer		5.8.14	4.25.15
Great Blue Skimmer		4.7.14	4.4.15
Hyacinth Glider		3.20.14	10.9.15
Roseate Skimmer	12.7.13	1.2.14	1.12.15
Blue Dasher	10.22.13	3.1.14	3.3.15
Wandering Glider		8.9.14	
Spot-winged Glider		10.27.14	
Eastern Amberwing		4.10.14	5.13.15
Carolina Saddlebags	11.12.13	1.2.14	3.10.15
Black Saddlebags		8.16.14	7.11.15
Red Saddlebags		5.8.14	4.27.15

APPENDIX E

MAMMALS

I noted the first date on which I saw each species of mammal in each year the details are below.

Virginia Opossum		9.9.14	5.10.15
Eastern Mole			6.19.15
Nine-banded Armadillo		3.31.14	6.19.15
Eastern Cottontail	12.17.13	2.8.14	3.2.15
Marsh Rabbit		2.15.14	4.14.15
Gray Squirrel	10.22.13	1.2.14	1.1.15
Southern Flying Squirrel		7.1.14	8.12.15
Coyote		5.4.14	3.21.15
Raccoon		1.4.14	1.16.15
River Otter			2.10.15
Bobcat		1.18.14	1.3.15
White-tailed Deer		1.2.14	1.10.15

APPENDIX F

AMPHIBIANS and REPTILES

Detailed below are the amphibians and reptiles that I saw together with the first date on which I saw them in each year.

Southern Toad	12.23.13	1.2.14	1.3.15
Oak Toad		1.9.14	1.3.15
Greenhouse Frog	12.23.13	1.9.14	4.2.15
Southern Cricket Frog		7.7.14	6.10.15
Green Treefrog		2.20.14	3.21.15
Barking Treefrog		3.29.14	3.10.15
Pinewoods Treefrog		1.11.14	1.16.15
Squirrel Treefrog		2.4.14	3.5.15
Cope's Gray Treefrog	12.7.13	1.2.14	1.3.15
Cuban Treefrog		5.4.14	3.26.15
Southern Chorus Frog		1.11.14	2.3.15
Ornate Chorus Frog		2.4.14	2.3.15
Little Grass Frog	12.7.13	1.2.14	1.3.15
Eastern Narrowmouth Toad		5.3.14	6.26.15
Bull Frog	12.31.13	2.8.14	3.12.15
Pig Frog	12.7.13	1.2.14	3.2.15
Bronze Frog		4.7.14	4.14.15
Southern Leopard Frog	12.7.13	1.2.14	1.1.15
Crawfish Frog		7.12.14	5.8.15
American Alligator	10.29.13	1.2.14	1.13.15
Common Snapping Turtle		1.11.14	5.25.15
Striped Mud Turtle			5.9.15
Eastern Box Turtle		5.8.14	
Red-eared Slider		3.13.14	4.14.15

Florida Cooter	12.19.13	1.2.14	1.1.15
Florida Redbelly Turtle	12.19.13	1.2.14	1.1.15
Chicken Turtle		4.14.14	
Gopher Tortoise		9.27.14	
Florida Softshell		1.2.14	1.13.15
Green Anole	10.29.13	2.4.14	1.5.15
Brown Anole	11.12.13	1.2.14	1.3.15
Eastern Fence Lizard		2.20.14	
Six-lined Racerunner		4.5.14	4.2.15
Ground Skink		5.12.14	6.16.15
South-eastern Five-lined Skink		4.22.14	4.6.15
Eastern Glass Lizard		5.31.14	
Banded Water Snake			3.4.15
Garter Snake			4.25.15
Ringneck Snake			6.29.15
Florida Black Racer		4.29.14	3.14.15
Yellow Rat Snake		4.5.14	8.26.15
Cottonmouth			3.18.15
Pygmy Rattlesnake		3.10.14	3.2.15

APPENDIX G

GRASSHOPPERS

I am still learning how to identify the grasshoppers. I am detailing the first date for each year on which I saw these insects.

Elegant Grasshopper			5.20.15
Southern Yellowwinged Grasshopper		2.2.14	3.12.15
Clippedwing Grasshopper		8.7.14	
Orangewinged Grasshopper		2.2.14	5.6.15
Olivegreen Swamp Grasshopper		10.17.14	4.27.15
Obscure Birdwing Grasshopper	12.10.13	8.2.14	9.1.15
Marbled Grasshopper		5.10.14	9.1.15
American Grasshopper		3.8.14	4.9.15
Glassywinged Toothpick Grasshopper		6.3.14	3.14.15
Lubber Grasshopper		5.4.14	4.23.15

APPENDIX H

FISH

As reported by fishermen

Yellow Bullhead			3.2.15
Largemouth Bass		5.3.14	2.23.15
Bluegill			5.23.15