



# **The 7<sup>th</sup> Zellwood Bird Report**

**August 15, 2004 to August 14, 2005**

**By**

**Harry Robinson**

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**Bird Usage of Lake Apopka North Shore Restoration Area**

**Specifically**

**The former Zellwood Drainage and Water Control District's Units 1 and 2  
together with the Zellwin Sand Farm Property all at Zellwood, Orange  
County, Florida**

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## INTRODUCTION

This is the seventh report on the birds that visited the Zellwood Drainage and Water Control District's Units One and Two together with the Zellwin Sand Farm. Also now included is the W.F.R.Foliage Company property that abuts the Sand Farm, the property is known as "the Nursery". All are located in Orange County, Florida.

This detailed summary covers the period August 15, 2004 to August 14, 2005; the survey as at February, 2013 is ongoing. At the end of this survey year a total of 703 surveys (counts) had been completed involving at least 8,888 hours of field work.

Table C gives details of the days the site visited; the hours spent doing the field work and the number of species/individuals seen. During this year a total of 1,261 hours were spent on field work spread over 94 visits. I missed 12 surveys this year and nine of them were from May 1 to June 26, there were health issues with a family member. There were no surveys from May 2 to May 14. During this year the surveys were normally conducted on Wednesdays and Sundays.

The survey started on August 15, 1998 as there was an urgent need for detailed information on the birds that visited the then flooded fields of Unit Two. After the fields were drained in February, 1999 the area continued to be a major draw for birds. In all seasons this area continues to surprise with many species setting new records for the State of Florida.

During the year Lake Apopka and the Sand Farm Cattail Marsh were the main areas of permanent water; the lake level was high. In the fall three hurricanes crossed the area flooding the fields for a period of three months. Hurricane Charley crossed the area on August 13 and deposited between five and eight inches of rain. Hurricane Frances crossed the area on September 5 and this dropped between six and eight and a half inches of rain. Hurricane Ivan missed us on September 13 but Hurricane Jeanne did not. This crossed on September 26 and deposited some four and a half to six inches of rain.

After the passage of the hurricanes the water district wanted to drain the fields quickly but they were unable to do so as there was initially too much water in Lake Apopka. It was only after the lake level fell that they could start to drain the fields. The fields in all took three months to drain.

The St. Johns River Water Management District was held up in its efforts to mow or roller-chop the fields by the flooding that occurred after these hurricanes. Not only did the fields have to be drained but the water table had to drop sufficiently for them to get the equipment into the fields. In early 2005, the District established several mowing refugia that were allowed to grow throughout the summer to provide habitat for birds and other wildlife. The refugia were at Bass Sod Farm and the areas north of Interceptor Road, at the south end of what would become Phase 1, in the fields along Pole Road and at the very south-east corner of the property. Most of Unit One was mowed early in 2005 with the exception of areas on both sides of Laughlin Road north of Interceptor Road and at the Bass Sod Farm. These particular fields were not mowed from January through April to accommodate the Northern Harriers that were roosting there. Mowing was also delayed in the summer in the fields on the east side of Laughlin Road south of the McDonald Canal together with the area south of Lust Road and east of Airport Road to allow the Dickcissel to finish nesting. In July 2005 Bass Sod Farm was mowed to provide potential habitat for migrating shorebirds.

The cattail marsh at the Sand Farm took a hard hit from the hurricanes. The cattails were flattened and pushed back creating extensive areas of open water. We lost the icterid roost and habitat for the bitterns and rails but gained an area for wildfowl. The vegetation and water courses bordering the canal that runs to the west from the Sand Farm Bridge were unchanged with willows, elderberry and ludwigia. The rest of the Sand Farm is on sandy soils with slower growing plants. It was not mowed during this year.

The water district has purchased a nursery in an open piece of oak woodland; the wood is surrounded by the Sand Farm. Much of the northern half of this wood tends to flood and the water was especially deep after the hurricanes. The hurricanes did a lot of damage to the trees with either limbs breaking off or the trees themselves falling down. In the following spring there was much new growth where the branches had snapped off but the debris on the ground made it difficult to get around the wood. Even so having access to the interior of a wood was a great improvement.

The habitat along the borders varied from scrub to woodland on the northern and eastern borders. To the west (excluding the Sand Farm) there was the Lake Level Canal and Lake Apopka. The three most important areas of woodland are the woods between Lust and Hooper Farms Road, the wood that stretches south from the Workshops to the eastern end of Interceptor Road and the Nursery. The wood that used to lie between the Lake Level Canal and Lake Apopka has gone. It is likely that the very long term high water level in Lake Apopka weakened the trees and a virus then took them out.

The aim of this report is to record what I saw during the twelve months. I concentrate on the individual influxes and try to describe their shape and duration. The actual pattern of migration at Zellwood is very different from the generalized ideas that are out there. Hopefully I

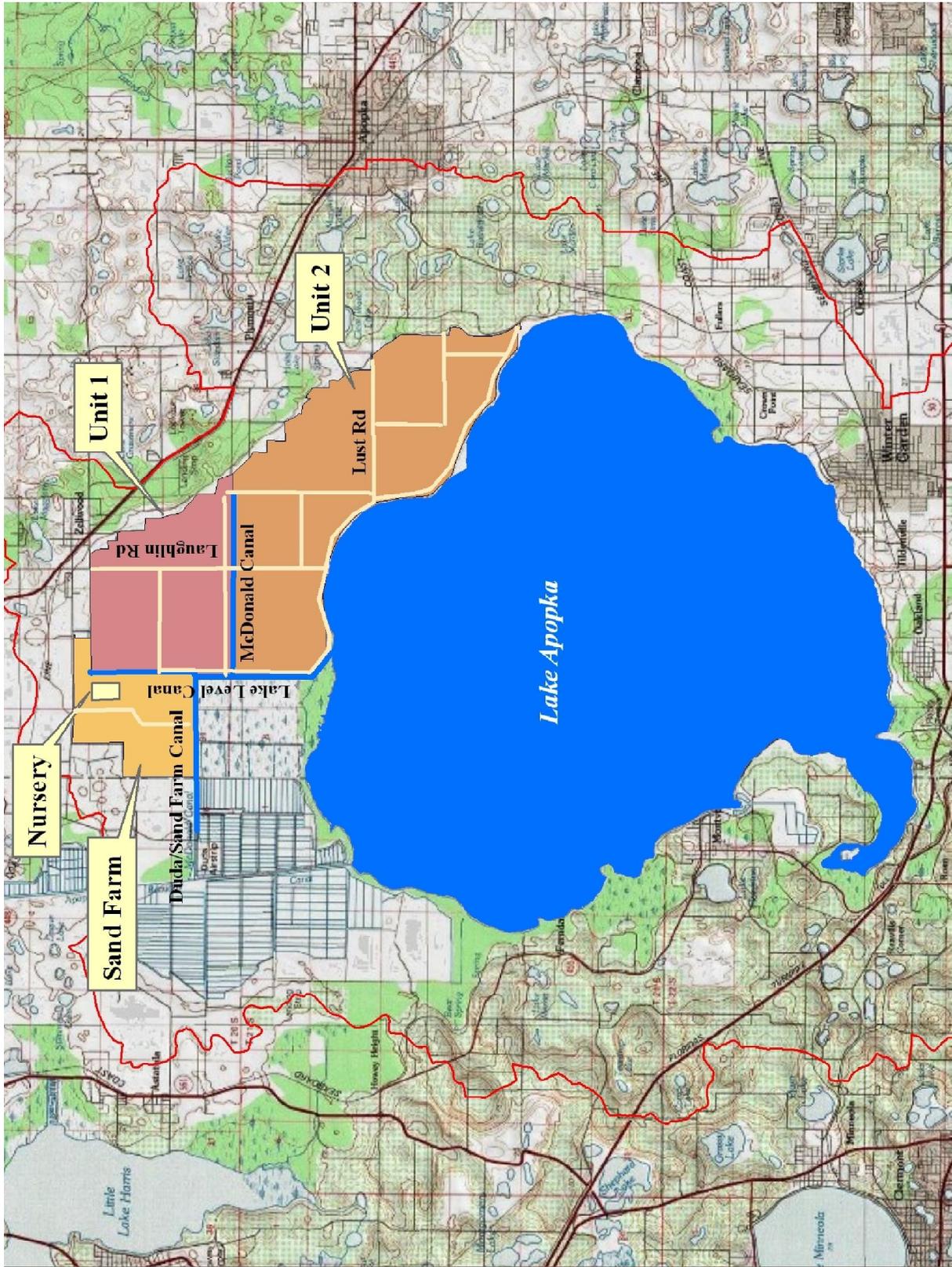
will show you for instance that the winter “visitors” are in fact winter passage migrants. One thing is very clear bird migration follows a very strict timetable.

In all I survey some 10,200 acres, this total includes 2,800 acres of Unit One, 6,000 acres of Unit Two, 1,200 acres of the Sand Farm and 200 acres of the Nursery. The whole of the Lake Apopka property comprises some 20,000 acres. The District has given the whole area the name Lake Apopka North Shore Restoration Area or LANSRA for short. This is the name used by the American Birding Association in its reports. As I am only covering the eastern half of the property I am using the old ornithological name “Zellwood” in an attempt to avoid later confusion.

I have tried to identify all butterflies, dragonflies, damselflies, amphibians, reptiles and mammals that I came across. I have listed all the species seen during the seven years but have only shown the first dates for the years 2001 to 2005.

There is also a list of all bird species seen during the seven years together with the highest daily count for each species. I am also including the highest daily counts to August 14, 2012 to give a more up to date picture. There were seven additions to the list this year. These were Sooty Shearwater, Sooty Tern, Olive-sided Flycatcher, Yellow-bellied Flycatcher, Common Myna, Bachman’s Sparrow and House Finch. There are descriptions of Sooty Shearwater, Olive-sided Flycatcher and Yellow-bellied Flycatcher in Appendix B.

The spreadsheet for the year is included (Table A) together with a simple analysis (Table B) which aims to give an idea of the numbers using specific habitats on a daily basis.



This map shows most of the Lake Apopka watershed together with Unit One and Two, the Sand Farm and the Nursery. This map was kindly provided by Pam Bowen of St. Johns River Water Management District.

## **ACKNOWLEDGEMENTS**

As always I wish to thank the staff of the St. Johns River Water Management District for their help, they made this project possible. Special thanks go to Gian Basili, Roxanne Conrow, Pam Bowen, Jim Peterson and Harold Weatherman for their support.

Kacy Ray has again made it possible for you to hold this document. It is no mean feat to cut up an excel spreadsheet and paste it into this work. Then there is the pivot table, the front cover etc. Her world is exceptionally busy so I really appreciate her finding the time to do this work for me, thank you.

Rachel Gerker has come to my aid and prepared this P.D.F. version for Orange Audubon Society, thanks Rachel.

**Front cover:** this Least Flycatcher was photographed by Paul Hueber by the Lust Road gate on November 5, 2011. Thanks Paul for your permission to use this picture.

## THE SURVEY ROUTE

I would enter the property in the dark at the Laughlin Road gate drive south to Interceptor Road where I would turn to the west and drive to the Lake Level Canal. I would then drive south to the Sand Farm Bridge where I would count any rails, bitterns etc. From late March to June I would vary this route by turning north up the side of Potter's Farm to Canal Road. At Canal Road I would turn to the west and follow the road to Interceptor Road. At Canal road I would be checking for Chuck-will's-widows etc. In order to identify better where I actually saw birds I am using the name Canal Road from Jones Avenue to Interceptor Road and the name Lake Level Canal from Interceptor Road to the lake.

After the birds left their roosts at dawn I would at sunrise walk to the west alongside the canal for a distance of at least one mile. I might return directly to my car or complete a circuit by returning by the Bald Eagle's nest. I would then drive to the Nursery where I would do a circuit inside the wood. After this the route varied depending on the weather conditions and the time of the year. I tried to ensure that I visited all the various habitat types each day even if the site varied. I would make sure that I checked all the utility wires and that I drove along the side of Lake Apopka stopping to scan the lake from time to time.

When there were special events such as the fall "Swallow-tailed Kite season" I would vary the route so that I could get the most complete count of these birds. After the hurricanes I varied the end point to the shore of Lake Apopka to the west of the Laughlin Road extension in order to count the herons, egrets and ibis going to roost. My aim was twofold to get a comparative count of as many passerines as possible by the morning walk and selective visits to sites later in the day and secondly to get as complete a count as I could of the more visible species.

# AN ANNOTATED CHECKLIST OF THE BIRDS OF

## ZELLWOOD

### AUGUST 15, 2004 to AUGUST 14, 2005

This checklist covers the 7<sup>th</sup> year of the survey. I hope in the future to make available printed reports for the years one to six. The survey covered Units One and Two, the Sand Farm and the Nursery, in all some 10,200 acres were surveyed two times a week. During the year I carried out 94 surveys and spent 1,261 hours on the field work.

A brief description is given of each species indicating its Zellwood status for this particular year. The descriptions in earlier and later reports may differ due to changes in the habitat. In the text I attempt to show the ebb and flow of passage by identifying each influx and by describing their shape.

This report covers the period August 15, 2004 to August 14, 2005 but the fall passage and any post-breeding gatherings do not recognize such dates. I am therefore providing records from earlier in 2004 when this helps to provide a better picture. The same situation could arise in August, 2005 in which case I will describe records proper to the following report. **These entries are all in italic to show that they do not belong to this survey year.**

### Pied-billed Grebe (*Podilymbus podiceps*)

A resident species with five pairs nesting at the Sand Farm Cattail Marsh; there were broods of five, three (x3) and two. The broods were first seen from March 20 (the brood of two) and June 5 (the brood of five). Early fall records: *there were three on June 28 with five on July 2, then two seen on July 4 with one on July 7. There were singles on July 21 and July 24 with two on July 29, then singles seen to August 11.* For this year there were singles on August 16 and August 22 with two on August 26, then singles seen to September 1. There were two on September 8 and September 9 with three to September 19, five on September 22, eight on September 28, 14 on October 3 and 20 on October 11, then 12 seen on October 13 with five to October 21 and three to October 27. There were five on October 31 with one on November 3. There were four on November 7 with seven on November 10 and November 17, then five seen on November 21. That was the end of the fall passage. For the winter passage there were seven on November 23 with eight on November 28, nine on December 1 and 16 on December 7, then 13 seen on December 12 with ten on December 16 and eight to December 22. There were nine on December 27 with ten on December 30, then eight seen on January 2 with seven on January 9 and five on January 16. That completed the winter passage. For the early spring passage there were seven on January 19 with nine on January 24 and 15 on January 26, then three seen on January 30. There were seven on February 2 with 11 on February 6 and 15 on February 13, then 13 seen on February 16 with 12 on February 20. There were 14 on February 23 with 18 on February 28, then 16 seen on March 2. That closed the early spring passage. For the main spring passage well in this case the early starting summer passage there were 18 on March 6 with 23 on March 10, then 18 seen on March 13. There were 19 on March 16 with 20 on March 18, 23 on March 24 and 25 on March 30, then 19 seen to April 6. There were 26 on April 10 with 25 on April 17, 21 on April 20, 17 on April 26 and 13 on April 30. There were 20 on May 15 with 11 on May 22 and seven on May 29. There were 16 on June 5 with 17 on June 12, then ten seen to June 26 with nine on July 1 and seven to July 6. That finished the summer passage. For the early fall passage there were nine on July 11 with 11 on July 14, then seven seen on July 17 with four on July 20. There were 11 on July 23 with eight on July 31 and August 7, then three seen on August 10.

### Eared Grebe (*Podiceps nigricollis*)

This was a vagrant. For the winter passage there was one on December 1 on Lake Apopka.

### Sooty Shearwater (*Puffinus griseus*)

This was a vagrant. For the early fall passage there was one on Lake Apopka on August 15 after Hurricane Charley. There is a description in Appendix B.

### American White Pelican (*Pelecanus erythrorhynchos*)

For this year this was a winter and spring passage migrant; numbers were low. For the winter passage there were 67 on November 28 with one on December 1. There were eight on December 5 with 16 on December 22, then 15 seen on January 2 with 14 on January 9. That completed the winter passage. For the early spring passage there were singles on January 30 and February 2 with 14 on February 6, then 13 seen on February 8 with one on February 13. There were 15 on February 16 with six on February 23, four on February 28 and one on March 2. That closed the early spring passage. For the main spring passage there were ten on March 6 with two on March 10. There were four on March 13 and March 16 with 14 on March 20, 19 on March 24, 80 on March 27 and 124 on March 30, then 95 seen on April 6 with 38 to April 14 and 36 on April 17. There were 60 on April 20 with 49 on April 24, 39 on April 30 and three on May 1. That was the main spring passage. For the summer passage there were six on May 15 with two on May 22. Finally there were five on May 29 with one on June 5.

### Brown Pelican (*Pelecanus occidentalis*)

There were many more sightings in the spring this year. For the early spring passage there was one on January 6 with an immature on January 30. There were three (not aged) on February 8 with one on February 13. There were two immatures on February 16 with single immatures on February 20 and February 23. These immatures were roosting with Double-crested Cormorants on the island south of the Hooper Farms Road extension. That completed the early spring passage. For the main spring passage there was an immature on March 20 with singles (not aged) on April 6 and April 10. There was also an immature on April 14. None of the later sightings were aged. There were singles on April 17 and April 20 with two on April 26, then six seen on April 30 and May 1. There were no later records. The counts of six are still (2013) the highest counts for Zellwood.

### Double-crested Cormorant (*Phalacrocorax auritus*)

A common winter visitor and spring passage migrant; there were only low numbers seen during the other seasons. Early fall records: *there were 28 on July 4 with 16 on July 7. There were 27 on July 11 with 28 to July 18 and 29 on July 21, then 20 seen to July 29. There were 35*

on August 1 with 33 on August 4, 28 on August 9, 20 on August 11 and four on August 15. There were 36 on August 16 with 40 on August 19 and August 26, then 39 seen on August 29 with 13 on September 1. There were 31 on September 9 with 35 on September 12, then 23 seen on September 16 with 22 on September 22, 19 on September 28, 17 on October 3 and 15 on October 6. That was the early fall passage. For the main fall passage there were 31 on October 11 with 36 on October 13, then ten seen on October 17 with one on October 21. There were 17 on October 24 with 43 on October 31, 58 on November 3, 76 on November 7, 136 on November 10, 154 on November 14 and 370 on November 21, then 216 seen on November 28 with 156 on December 1 and 153 on December 5. That closed the main fall passage. For the winter passage there were 246 on December 7 with 322 on December 16, then 248 seen on December 22 with 179 on December 27. There were 440 on December 30 with 500 on January 2, then 350 seen on January 6 with 238 on January 9 and 120 on January 16. That completed the winter passage. For the early spring passage there were 380 on January 19 with 460 on January 24, then 323 seen on January 26 with 149 on January 30. There were 540 on February 2 with 385 on February 6, 370 on February 8 and 260 on February 13. There were 506 on February 16 with 424 on February 20, 357 on February 28, 360 on March 6 and 332 on March 10. That concluded the early spring passage. For the late spring passage there were 534 on March 13 with 380 on March 16 and 215 on March 18. There were 236 on March 20 with 520 on March 24, then 310 seen on March 27 with 253 on March 30, 250 on April 3, 224 on April 6 and 211 on April 10. There were 279 on April 14 with 117 on April 17, 108 on April 20, 80 on April 24 and 51 on April 26. There were 99 on April 30 with 100 on May 1, then 55 seen on May 15 with 41 on May 22, 17 on May 29 and 16 on June 5. That was the late spring passage. In some years this passage appeared to end in April but this year it was in June. Counts now much lower for the summer passage there were 28 on June 12 with 17 on June 26 and 12 on July 1. There were 35 on July 3 with 28 on July 11, 22 on July 14 and 21 on July 17. There were 32 on July 20 with 35 on July 23, then 24 seen on July 28 with 20 on July 31. There were 24 on August 3 with 29 on August 7, then 23 seen on August 15 with 19 on August 21 and nine on August 25. I kept a record of all flocks migrating to the south in the fall and to the north in the spring. For the fall passage flying to the south there were three on October 31, three on November 7, 29 on November 10, 36 on November 28 and 13 on December 1. For the late spring passage there were flying to the north seven on February 28, eight on March 10, 94 on March 13, ten on March 18, six on March 20, 60 on March 27, three on March 30, 24 on April 3, six on April 10, 171 on April 14, 12 on April 20, five on April 24, 15 on April 30 and 23 on May 15. These totals are included in the totals given earlier.

#### Anhinga (*Anhinga anhinga*)

Present in good numbers through the year there were somewhat higher numbers in the early fall and the early spring passages. There were three nests by Lake Apopka this year,

success not known. There was a nest on the island south of the Hooper Farms Road extension, another was on a small island to the north of the Lust Road pump house and the third was near the end of the Lake Level Canal. Early fall records: *for the post-breeding gathering there were 29 on June 13 with 31 on June 16, 32 on June 20, 42 on June 23 and 45 on June 28, then 61 seen on July 2 and July 4 with 58 on July 11 and 47 on July 14. There were 82 on July 18 with 68 on July 24 and 56 on July 29. There were 98 on August 1 with 138 on August 4, then 98 seen on August 9 with 84 on August 11 and 32 on August 15. There were 55 on August 16 with 71 on August 19, then 65 seen on August 22 with 50 on August 26. There were 80 on August 29 with 143 on September 1, then 102 seen to September 12 with 59 on September 16, 48 on September 19, 42 on September 22, 41 on September 28 and six on October 3. That closed the post-breeding gathering. For the late fall passage there were 21 on October 6 with 25 on October 11, then 22 seen on October 13 with 20 on October 17 and three on October 21. There were 22 on October 24 with 36 on October 31, then 32 seen on November 7 with 14 on November 10. There were 42 on November 14 with 34 on November 17 and 24 on November 21. There were 39 on November 23 with 43 on November 28, then 39 seen to December 5. That concluded the late fall passage. For the winter passage there were 60 on December 7 with 51 on December 12 and 43 on December 16. There were 44 on December 19 with 47 on December 22 and 58 on December 30, then 56 seen on January 2. That completed the winter passage. For the early spring passage there were 57 on January 6 with 79 on January 9, then 70 seen on January 19 with 63 on January 26 and 50 on January 30. There were 99 on February 2 with 74 on February 6 and 68 on February 8. There were 94 on February 13 with 111 on February 20 and 148 on February 23, then 81 seen on February 28. That closed the early spring passage. For the late spring passage there were 84 on March 2 with 93 on March 6, then 75 seen on March 13 with 74 on March 18, 69 on March 24, 40 on March 27 and 24 on March 30. This one influx was all that existed of the late spring passage as this species nests so early. For the summer passage there were 59 on April 3 with 40 on April 6 and 39 on April 10. There were 74 on April 14 with 93 on April 17 and 97 on April 20, then 66 seen on April 24 with 56 on April 26. There were 70 on April 30 with 49 on May 1 and 29 on May 15. There were 39 on May 22 with 41 on May 29, then 35 seen on June 5. That was the summer passage. For the post-breeding gathering there were 51 on June 12 with 58 on June 19, 59 on July 1, 61 to July 14, 68 to July 23, 70 on July 28, 71 on July 31 and 76 on August 7, then 68 seen on August 10 with 67 on August 15.*

#### American Bittern (*Botaurus lentiginosus*)

A winter visitor and passage migrant; numbers were lower this year due to the damage to the Sand Farm Cattail Marsh. Early fall records: *in the spring of 2004 there had been exceptional numbers peaking at 60 on March 24. This culminated with a pair breeding at the Sand Farm Cattail Marsh; they raised one young. The family group was seen from June 20 to August 1.* For this year there were two on August 16 with singles on August 22, August 29,

September 1 and September 9. That was the end of the summer passage. For the fall passage there were four on September 12 with one on September 19. The adult and juvenile were last seen together on September 12. There were two on September 22 and September 28 with four on October 3 and five on October 11, then six seen on October 13 and October 17 with five to October 24 and two on October 27. There were nine on October 31 with eight on November 3 and two on November 7. There were 17 on November 10 with 19 on November 14, then 15 seen on November 21 with 12 on November 28 and nine on December 1. That was the fall passage. For the winter passage there were 12 on December 5 with seven on December 7. There were ten on December 12 with 15 to December 19, 17 on December 22, 18 on December 27 and 26 on December 30, then 13 seen to January 9 with 11 on January 16. That completed the winter passage. For the early spring passage there were 15 on January 19 with 12 on January 26, eight on January 30 and seven on February 2. There were 11 on February 6 and February 8 with ten on February 13, seven on February 20 and four on February 23. There were eight on February 28 with three on March 2. That concluded the early spring passage. For the late spring passage there were seven on March 6 with eight on March 10 and nine on March 13, then four seen on March 16 with two on March 18. There were ten on March 20 with seven on March 24, six on March 27 and four to April 3. There were seven on April 6 and April 10 with six on April 17 and two to April 26. This species is said not to “sing” much in Florida. I noted the following in song: one on March 6, four on March 20 and two on March 24.

#### Least Bittern (*Ixobrychus exilis*)

A summer visitor: I have no information on the number of pairs but there was a short-lived but significant post-breeding gathering. Early fall records: *for the post-breeding gathering there were two on June 13 with eight on June 16, then seven seen to June 23. There were eight on June 28 with ten on July 2, 15 on July 4 and 23 on July 7, then 11 seen on July 11 with eight on July 14, five on July 18, three on July 21 and singles to August 9.* That was the post-breeding gathering. For the fall passage there were singles on August 16, August 19, September 1 and September 12, that was it. There were no further sightings until the spring. For the spring passage there was one on March 20 with four on April 6, then singles seen on April 10, April 14, April 17 and April 20. There were four on April 24 and April 30. That closed the spring passage. There were however no records for the next month. For the summer passage there were five on May 22 and May 29 with seven on June 5, then six seen on June 12. That closed the summer passage. For the post-breeding gathering there were 16 on June 19 and July 1 with 28 on July 3, then 13 seen on July 11 with four on July 14, two to July 20 and one on July 23. That closed the post-breeding gathering. For the early fall passage there were four on July 28 with three on August 3 and singles to August 10.

### Great Blue Heron (*Ardea herodias*)

Resident; numbers remained quite constant through the year. There was a pair that raised one young (first seen on April 14) but I did not note the location of the nest. Early fall records: *there were 12 on June 20 with 15 on June 23, 17 on June 28 and 19 on July 4, then 16 seen on July 7 with eight on July 11. There were 12 on July 14 with 15 on July 18 and 16 on July 21, then 14 seen on July 24 with 13 on July 29. There were 20 on August 1 with 19 on August 9, 15 on August 16 and 11 on August 19. There were 13 on August 22 with 15 on August 26, 16 on September 1, 19 on September 9 and 32 on September 12, then 22 seen on September 19 with 13 on September 22. There were 27 on September 28 with 12 on October 3. That was the early fall passage. For the main fall passage there were 16 on October 6 with 22 on October 11 and 23 on October 17, then 14 seen on October 24 with 12 on October 27. There were 29 on October 31 with 44 on November 7, then 14 seen on November 10. There were 28 on November 14 with 33 on November 17 and 38 on November 23, then 35 seen on November 28 with 32 on December 1. That closed the main fall passage. For the winter passage there were 34 on December 5 with 46 on December 12 and 69 on December 16, then 52 seen to December 27 with 23 on December 30. There were 35 on January 2 with 36 on January 6 and January 9, then 31 seen on January 16. That completed the winter passage. For the early spring passage there were 33 on January 19 with 41 on January 24, then 25 seen on January 26. There were 36 on January 30 with 40 on February 2, 47 on February 8 and 53 on February 13, then 42 seen on February 16 with 40 on February 20. There were 46 on February 23 with 39 to March 2. That concluded the early spring passage. For the main spring passage there were 54 on March 6 with 59 on March 10 and 76 on March 16, then 71 seen on March 18 with 61 on March 20, 47 on March 27 and 45 on March 30. There were 48 on April 3 with 57 on April 10, then 33 seen on April 14. That was the end of a very short main spring passage. For the summer passage there were 36 on April 17 with 52 on April 20, then 47 seen on April 26 with 46 on April 30, 43 on May 1, 38 on May 15 and 27 on May 22. There were 42 on May 29 with 43 on June 5, then 31 seen on June 19 with 24 on July 1, 23 on July 3 and 15 on July 6. That was the summer passage. For the early fall passage there were 19 on July 11 with 25 on July 14 and 35 on July 17, then 26 seen on July 23 with 20 to July 31. There were 24 on August 3 with 32 on August 7, *then 24 seen on August 15 with 13 on August 17 and ten on August 21.**

### Great White Heron (*Ardea occidentalis*)

This appears to be coming a regular spring and summer visitor. Summer and early fall records: *there was an immature at the Sand Farm on May 30 and June 2 with one on the southern border on July 2.* There were no further sightings until the following spring. There was an immature by the Lake Level Canal on March 27 with two there on March 30. On the 30<sup>th</sup> a third individual flew to the north over Lake Apopka towards the canal. I checked the canal but

could only find the two birds. This count of three is a joint high count for Zellwood; there were also three on June 22, 2008. On April 3 and April 6 there was an immature by the Lake Level Canal. There was then a short gap until an immature seen there on April 26, April 30 and May 1. There were no later records.

#### Great Egret (*Ardea alba*)

Present all year in quite low numbers however after the three hurricanes there was a major invasion. If the fields had not been drained one wonders just how high the count would have gone. Early fall records: *there were 12 on June 20 with 16 on June 23, 17 on June 28, 19 on July 2 and 21 on July 4, then 20 seen on July 11 with 17 on July 14. There were 31 on July 18 with 27 to August 1, 20 on August 9 and 18 on August 11.* There were 34 on August 15 with 21 on August 16 and seven on August 19. There were 24 on August 22 with six on August 26. There were ten on August 29 with 14 on September 1 and 19 on September 9, then 12 seen on September 12 with seven on September 16. There were 29 on September 19 with 25 on September 22. That was the early fall passage. For the main fall passage there were 27 on September 28 with 30 on October 3, 36 on October 6, 42 on October 11, 126 on October 13, 168 on October 17, 180 on October 24, 410 on October 27, 800 on October 31 and 915 on November 7, then 695 seen on November 14 with 335 on November 17. Whilst the increase that started on September 28 had to be hurricane related the real invasion starts here. There were 1,155 on November 21 with 1,480 on November 23, 1,755 on November 28 and 2,390 on December 5, then 1,705 seen on December 7 with 783 on December 16, 227 on December 19, 225 on December 27, 186 on January 2, 35 on January 6, 30 on January 9 and 14 on January 16. This fall influx took over the whole of the winter passage. The count of 2,390 is still (2013) the highest count for Zellwood. For the early spring passage there were 92 on January 19 with 26 on January 24 and 23 on January 26. There were 72 on January 30 with 41 on February 2, 40 on February 8, 15 on February 16, 11 to February 23 and four to March 2. That concluded the early spring passage. For the main spring passage there were eight on March 6 with 14 on March 10, 16 on March 13 and 17 on March 16, then five seen on March 18. There were seven on March 20 with ten on March 24, 41 on March 30 and 50 on April 6, then 13 seen on April 10. There were 23 on April 14 and April 17 with 128 on April 20, then 15 seen on April 24. That concluded the main spring passage. For the summer passage there were 35 on April 26 and April 30 with 52 on May 1, then 32 seen on May 15 with 15 on May 22. There were 24 on May 29 with 35 on June 5, then 17 seen on June 12. That was the summer passage so for the early fall passage there were 23 on June 19 with 33 on June 26 and 62 on July 1, then 25 seen on July 3 with 22 on July 11, 21 on July 14, ten on July 17 and eight on July 20. There were 14 on July 23 and July 28 with 12 on July 31 and six on August 3. There were 16 on August 7 *with 18 on August 15, then eight seen on August 21 with six on August 25.* After the text for the Glossy Ibis there is a special section on the three hurricanes.

## Snowy Egret (*Egretta thula*)

A common resident, there was also a major invasion after the three hurricanes. There were six breeding pairs this year; there were three nests on a small island by the Lust Road pump house with another three pairs further north. Early fall records: *there were five on June 28 with 14 on July 2 and 28 on July 4, then 20 seen on July 7 with 18 on July 11. There were 62 on July 14 with 60 on July 18, 57 on July 21, 30 on July 24 and 20 on July 29. There were 30 on August 1 with 38 on August 4 and 51 on August 11, then 42 seen on August 16 with nine on August 19. There were 54 on August 22 with 106 on August 26, then 71 seen on August 29 with 39 on September 9, 34 on September 16 and 14 on September 19. By default that was the end of the early fall passage. For the main fall passage and the aftermath of the hurricanes there were 111 on September 22 with 221 on October 3, 572 on October 6 and 806 on October 11, then 570 seen on October 13. There were 675 on October 17 with 825 on October 21, 865 on October 24, 1,025 on October 27, 2,260 on October 31 and 2,585 on November 7, then 2,160 seen on November 10. The count of 2,585 is still (2013) the highest count for Zellwood. There were 2,225 on November 14 with 2,510 on November 17, then 2,005 seen on November 23 with 1,560 on November 28 and 1,365 on December 1. There were 2,145 on December 5 with 1,320 on December 7, 735 on December 16, 417 on December 22, 385 on December 27 and 330 on December 30. There were 449 on January 2 with 204 on January 9 and 100 on January 16. Again the major invasion after the hurricanes took over the whole of the main fall and the winter passages. There were 26 counts higher than the previous high count for Zellwood (there had been 322 on June 12, 2002). For the early spring passage there were 137 on January 19 with 104 on January 24 and 59 on January 26. There were 151 on January 30 with 192 on February 6, then 102 seen to February 13 with 53 on February 16, 18 on February 20, 16 on February 23, five on February 28 and two on March 2. That closed the early spring passage. For the late spring passage there were seven on March 6 with eight on March 10 and 25 on March 13, then 15 seen on March 16 with four on March 18 and two on March 20. There were four on March 24 with six on March 27 and 35 on March 30, then eight seen on April 3. There were 29 on April 6 with 31 on April 10, 43 on April 14 and 109 on April 20, then 70 seen on April 26 with 26 on April 30 and 24 on May 1. That was the late spring passage. For the summer passage there were nine on May 22 and six on May 29. There were 11 on June 5 with 19 on June 12, then 16 seen on June 19. There were 17 on June 26 with 186 on July 1, then 185 seen on July 3 with 160 on July 6, 32 on July 11 and nine on July 14. That finished the summer passage. For the early fall passage there were ten on July 17 with 12 on July 20 and 25 on July 23, then 16 seen on July 28. There were 19 on July 31 with 24 on August 3, then 17 seen on August 7. There were 20 on August 10 with 41 on August 15, then 28 seen to August 21. After the text for the Glossy Ibis there is a special section on the three hurricanes.*

## Little Blue Heron (*Egretta caerulea*)

The population was comparatively constant through the year with the exception of the much higher numbers after the three hurricanes. Two pairs nested on an island by the Lust Road pump house and a further 12 pairs nested further north. Very exceptionally there was what appeared to be a hybrid between this species and the Cattle Egret by Fish Ponds Road on July 31, August 3 and August 7. Early fall records: *there were 41 on July 11 with 46 on July 14, 53 on July 21, 59 on July 24 and 100 on July 29, then 80 seen on August 4 with 79 on August 11 and 35 on August 15. There were 98 on August 16 with 38 on August 19. There were 42 on August 22 with 95 on August 26, then 50 seen on August 29 with 40 on September 1 and 37 on September 9. There were 91 on September 12 with 106 on September 16, then 80 seen on September 22 with 43 on September 28. That was the early fall passage. For the main fall passage and the invasion after the three hurricanes there were 64 on October 3 with 90 on October 6 and 230 on October 13, then 169 seen on October 17 with 75 on October 21. There were 130 on October 24 with 320 on October 27, 405 on October 31 and 445 on November 7, then 366 seen on November 14 with 310 on November 17. There were 375 on November 21 with 500 on November 23, 520 on November 28 and 735 on December 1, then 685 seen on December 7 with 237 on December 12, 220 on December 16, 173 on December 19 and 77 on December 22. There were 184 on December 27 with 180 on December 30, 175 on January 2, 84 on January 6, 64 on January 9 and 53 on January 16. That completed the main fall passage. The old high count for Zellwood was that of 163 on October 24, 2001 whilst the highest count is still (2013) that of 735 on December 1. There were 21 counts this year that were higher than the old high count. Again this event covered both the main fall and the winter passages. For the early spring passage there were 77 on January 19 with 68 on January 24 and 43 on January 26. There were 78 on January 30 with 92 on February 6, then 90 seen on February 13 with 70 on February 20, 47 on February 23 and 40 on February 28. That concluded the early spring passage. For the late spring passage there were 63 on March 2 with 77 on March 6, then 69 seen on March 10. There were 73 on March 13 with 90 on March 16, then 68 seen on March 20 with 53 on March 24. There were 55 on March 27 with 57 on March 30 and 58 on April 3, then 50 seen on April 6 with 25 to April 14. There were 38 on April 17 with 47 on April 20, then 21 seen on April 24. That closed the late spring passage. For the summer passage there were 35 on April 26 with 45 on April 30, then 31 seen on May 1 with 27 on May 15. There were 36 on May 22 with 47 on May 29 and 54 on June 5, then 46 seen on June 12 with 30 on June 19. There were 37 on June 26 with 54 on July 1, then 23 seen on July 3. That finished the summer passage. For the early fall passage there were 34 on July 6 with 55 on July 11 and 76 on July 17, then 72 seen on July 23 with 47 on July 28 and 30 on July 31. There were 53 on August 3 with 41 on August 10, 32 on August 15 and 26 on August 17. After the text for Glossy Ibis there is a feature on the three hurricanes.*

### Tricolored Heron (*Egretta tricolor*)

This was the rarest of these herons but there was still an invasion after the three hurricanes. A pair nested on an island by the Lust Road pump house and there were also two pairs further north. Early fall records: *there were eight on June 13 with nine on June 16, ten on June 20, 12 on June 23, 13 on June 28, 15 on July 4, 16 on July 7, 17 on July 11, 22 on July 18 and 25 on July 24, then 19 seen to August 1. There were 17 on August 9 and August 11 with 18 on August 16 and 34 on August 22, then 19 seen on August 26 with nine on August 29. There were 12 on September 1 and September 9 with 17 on September 12, then eight seen on September 16 with five on September 19. There were nine on September 22 with six to October 3. That was the early fall passage. For the main fall passage and the hurricane invasion there were ten on October 6 with 17 on October 11, 18 on October 13, 36 on October 21, 116 on October 24 and 292 on October 31, then 290 seen on November 7 with 235 on November 10. There were 368 on November 14 with 385 on November 17, then 355 seen on November 21 with 347 on November 23, 315 to December 1, 261 on December 5, 194 on December 7, 103 to December 16, 36 on December 19 and 23 on December 22. There were 44 on December 27 with 38 on December 30, 31 on January 2, 25 on January 6, 15 on January 9, 11 on January 16 and eight on January 19. Again this event covered both the main fall and the winter passages. The highest count prior to this year was that of 93 on July 19, 2003. The high count rose to 385 on November 17. There were 16 counts higher than the old high count. Unlike the other herons there is now (2013) a new high count for this species as there were 466 on July 13, 2011. For the early spring passage there were 17 on January 24 with 29 on January 30, then 27 seen on February 6 with 15 on February 8 and 12 on February 13. There were 19 on February 16 with 13 on February 20 and five on February 23. That concluded the early spring passage. For the late spring passage there were six on February 28 with eight on March 2, 15 on March 6 and 20 on March 13, then 18 seen on March 16 with eight on March 18. There were 20 on March 20 with 15 on March 24, seven on March 27 and five on March 30. There were 11 on April 3, April 6 and April 14 with 25 on April 17 and 59 on April 20, then 14 seen on April 24 with 13 on April 26, 11 on May 1, ten on May 15 and five on May 22. That was the late spring passage. For the summer passage there were nine on May 29 and June 5 with 21 on June 12, then 11 seen on June 19 with eight to July 1. There were 14 on July 3 with 11 on July 11 and nine to July 17. There were 11 on July 20 with 14 on July 23 and July 31, then eight seen on August 3. There were ten on August 7 with 16 on August 10, *then 13 seen to August 17 with nine on August 21.* There is a paper dealing with the three hurricanes after the text for the Glossy Ibis.*

### Cattle Egret (*Bubulcus ibis*)

Seen in good numbers through the year; there was a marked post-breeding gathering. This species was also affected by the hurricanes. There were four pairs that nested on a small

island near the end of Lust Road. The main colony was to the south of the survey area. The first immatures were seen out in the fields on July 11. Early fall records: *for the post-breeding gathering there were 345 on June 6 with 1,510 on June 9 and 1,650 on June 16, then 1,440 seen on June 23 with 1,150 on June 28. There were 1,415 on July 2 with 1,810 on July 4, 1,825 on July 11 and 2,490 on July 14, then 1,710 seen on July 18. There were 1,750 on July 21 with 1,900 on July 24, then 600 seen on July 29. There were 700 on August 1 with 1,230 on August 4, then 1,005 seen on August 11 with 130 on August 15. There were 1,530 on August 16 with 705 on August 19. That was the post-breeding gathering. For the early fall passage there were 1,045 on August 22 with 1,130 on August 26, then 1,110 seen on August 29 with 835 on September 1, 650 on September 9 and 510 on September 12. There were 6,400 on September 16 with 3,200 on September 22 and 1,690 on September 28. The count of 6,400 is still (2013) the highest count for Zellwood. The previous high count was that of 5,375 on October 13, 2002. That closed the early fall passage. For the late fall passage there were 4,150 on October 3 with 3,500 on October 6, 1,050 on October 13, 520 on October 21 and 405 on October 24. There were 850 on October 27 with 620 on November 3 and 385 on November 7. There were 670 on November 10 with 885 on November 14, then 430 seen on November 17 with 205 on November 21. There were 280 on November 23 with 345 on November 28 and 360 on December 1, then 130 seen on December 5. That was the end of the late fall passage. For the winter passage there were 235 on December 7 and December 16 with 575 on December 22, then 235 seen on December 27 with 162 on December 30. There were 290 on January 2 with 310 on January 9, then 66 seen on January 16. That closed the winter passage. For the early spring passage there were 310 on January 19 with 330 on January 26 and 535 on February 2, then 215 seen on February 6 with 185 on February 8 and 80 on February 13. There were 153 on February 16 with 295 on February 20 and 530 on February 23, then 335 seen on March 2 with 105 on March 6. That concluded the early spring passage. For the late spring passage there were 140 on March 10 with 385 on March 16, then 205 seen on March 18 with 140 on March 20. There were 630 on March 24 with 365 on March 30 and 170 on April 3. There were 185 on April 6 with 260 on April 10, then 245 seen on April 14 with 225 on April 17 and 220 on April 20. That ended the late spring passage so for the summer passage there were 235 on April 24 with 230 on April 26, 85 on April 30 and 55 on May 1. There were 75 on May 15 with 100 on May 22, 125 on May 29, 145 on June 5 and 520 on June 12, then 500 seen on June 19. That was the end of the summer passage. For the post-breeding gathering there were 860 on June 26 with 845 on July 3 and 790 on July 6. There were 925 on July 11 with 1,165 on July 14, 1,330 on July 17, 1,590 on July 20, 1,915 on July 23, 2,025 on July 31 and 2,100 on August 3, then 1,305 seen on August 7. There were 1,405 on August 10 with 1,420 on August 15, then 965 seen on August 21 with 850 on August 25. There were 1,220 on August 28 with 935 on September 4, 685 on September 7, 580 on September 19 and 300 on September 22. That was the post-breeding gathering.*

Green Heron (*Butorides virescens*)

Present in good numbers this year; there was a one day invasion after Hurricane Charley and there was a strong post-breeding gathering. I have no information as to the size of the breeding population this year. Early fall records: *for the post-breeding gathering there were 35 on June 6 with 78 on June 9, 82 on June 16 and 83 on June 23, then 79 seen on July 2 with 66 on July 4, 41 on July 11 and 38 on July 14. There were 50 on July 18 with 30 on July 24, 19 on July 29, 18 on August 1 and 17 on August 4. There were 26 on August 9 with 14 on August 11 and ten on August 15. That was the post-breeding gathering. For the fall passage there were 236 on August 16. Hurricane Charley crossed the area on August 13 and that was the result. This count of 236 was the high count for Zellwood; however the high count now (2013) stands at 242 on August 23, 2008. Counts then lower with 51 on August 22, 29 on August 26 and six on September 1. There were 16 on September 9 with 40 on September 12, then 15 seen on September 16. There were 16 on September 19 with 21 on September 22, then 16 seen on September 28 with 12 on October 3, eight on October 11, six on October 13 and five on October 17. There were six on October 21 with eight on October 24, nine on October 27, 12 on October 31 and 14 on November 7, then 11 seen on November 14 with nine on November 17. There were 13 on November 21 with 12 on November 28 and ten on December 1. That closed the fall passage. For the winter passage there were 11 on December 5 with 13 on December 7, 16 on December 12 and 19 on December 16, then 11 seen on December 19 with nine on December 22. There were ten on December 27 and December 30 with 11 on January 2 and 17 on January 6, then 16 seen on January 9 with ten on January 16. That completed the winter passage. For the early spring passage there were 13 on January 19 and January 24 with 15 on January 26 and 20 on January 30, then 19 seen on February 2 with 14 on February 6. There were 20 on February 8 with 16 on February 13 and 14 on February 16. There were 20 on February 20 with 33 on February 23, then 13 seen on February 28. That concluded the early spring passage. As the breeding season for this species starts so very early we go straight to the summer passage. There were 20 on March 2 with 30 on March 6 and 39 on March 13, then 31 seen on March 16 with 21 on March 18. There were 47 on March 20 with 28 on March 24 and 26 on March 27. There were 33 on March 30 with 27 on April 3 and 15 on April 6. There were 16 on April 10 with 21 on April 14, 25 on April 17 and 28 on April 20, then 19 seen on April 24. There were 20 on April 26 with 35 on April 30, then 15 seen on May 1. That was the end of the summer passage. For the post-breeding gathering there were 22 on May 15 with 28 on May 22, 32 on May 29, 56 on June 5, 68 on June 12 and 131 on June 19, then 123 seen on June 26 with 77 to July 3 and 64 on July 6. There were 85 on July 11 with 83 on July 17, 70 on July 23, 68 on July 28 and 66 on July 31. There were 72 on August 3 with 45 on August 7, 32 on August 10 and 26 on August 15. That was the end of the post-breeding gathering.*

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

A common fall passage migrant and winter visitor; there were sightings through the summer but breeding not proved. Early fall records: *there were singles on June 28, July 2 and July 4 with four from July 7 to July 14, then seven seen on July 21 with six to August 1, three on August 9, two on August 19 and singles to September 12.* There were two on September 16 with five on September 22 and 16 on September 28, then 15 seen on October 3. That was the early fall passage. For the main fall passage there were 16 on October 6 with 63 on October 11 and 208 on October 13, then eight seen on October 17 with four on October 21. The count of 208 was the highest count for Zellwood but the highest count is now (2013) that of 241 on March 20, 2011. Perhaps this event relates to the passage of Hurricane Jeanne. There were five on October 24 with ten to November 3, 34 on November 10, 71 on November 14, 83 on November 17, 88 on November 21 and 124 on November 28, then 85 seen on December 1 with 62 on December 5, 59 on December 7, 50 on December 12, 37 on December 19 and 20 on December 22. This influx lasted two months and took out most of the winter passage. That was still the end of the main fall passage. For the remnant of the winter passage there were 67 on December 27 with 35 on January 2, 15 on January 9 and one on January 16. That completed the winter passage. For the early spring passage there were six on January 19 with 13 on January 26, then seven seen on January 30 with six on February 6 and five on February 8. There were 20 on February 13 and February 20 with eight on February 23 and two on February 28. That concluded the early spring passage. For the late spring passage there were six on March 2 with three on March 6. There were five on March 10 with 12 on March 13, 19 on March 16, 20 on March 20, 23 on March 24, 31 on March 30 and 44 on April 6, then 42 seen on April 14 with 27 on April 20, 15 to April 26, 11 on April 30 and eight to May 15. That was the late spring passage. For the summer passage there were nine on May 22 with five on May 29, three to June 12 and two on June 19. There were three on June 26 and July 1 with seven from July 3 to July 11, then two seen on July 14. There were three on July 17 with four on July 20, then two seen to August 10 *with singles to August 17.*

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

An uncommon summer visitor and passage migrant, there was nothing to suggest that it bred in the survey area. Early fall records: *there were two on June 23 with four on June 28, then two seen on July 2 with singles on July 4 and July 7. There were two on July 11 and July 18 with three on July 21 and five on August 4, then two seen on August 9 with one on August 11 and August 15.* There were two on August 16 with one later on August 26. There were six on September 9 with later one on September 22. That was the early fall passage. For the late fall passage there were singles on September 28, October 3 and October 6 with three on October 11, then singles seen on six dates to November 3. That closed the late fall passage. There were

no further sightings until the spring. For the spring passage there were singles on April 3 and April 6 with two on April 10 and April 14, then one seen on April 17. There were two on April 20 with three on April 24, then singles seen to April 30. There were two on May 1. That closed the spring passage. For the summer passage there was one on June 5 with two on June 12. For the early fall passage there were singles on June 26, July 1, July 3 and July 6 with two on July 11 and July 14, then three seen on July 20 with two to July 28 and singles to August 3. There were two on August 7 with one on August 10.

#### White Ibis (*Eudocimus albus*)

Numbers very variable during the year but there were very strong main fall and main spring passages. I do not know whether or not this species bred in the survey area this year. Early fall records: *there were 200 on July 14 with 110 on July 18, 105 on July 21, 68 on July 29 and 17 on August 1. There were 38 on August 4 with 46 on August 9 and 760 on August 15, then 450 seen on August 16 with 24 on August 19 and ten on August 22. There were 63 on August 26 with 60 on August 29 and 48 on September 1. There were 250 on September 9 with 257 on September 12 and 790 on September 16, then 320 seen on September 22 with 210 to October 3. That closed the early fall passage. For the main fall passage there were 545 on October 6 with 570 on October 11, 865 on October 17, 980 on October 24 and 2,400 on October 27, then 1,620 seen on October 31 with 890 on November 3. There were 1,925 on November 7 with 2,110 on November 10, 3,775 on November 14 and 5,650 on November 17, then 4,295 seen on November 21 with 4,250 on November 23 and 3,080 on November 28. This influx involved birds in first-winter plumage. That was the main fall passage. For the winter passage there were 3,435 on December 1 with 4,020 on December 5 and 5,730 on December 7, then 1,420 seen on December 12 with 695 on December 16 and 142 on December 19. This time this influx involved adults not immatures. The count of 5,730 was the highest count for Zellwood but see March 30. With the fields finally drained the numbers fell dramatically. There were 163 on December 22 with 168 on December 27, then 156 seen on January 2 with 85 on January 9 and 63 on January 16. That completed the winter passage. For the early spring passage there were 80 on January 19 with 113 on January 26 and 180 on February 2, then 83 seen on February 6 with 60 on February 8 and 43 on February 13. There were 49 on February 16 with 52 on February 20, then 105 seen on February 28 and March 2 with 88 on March 6 and 78 on March 10. That concluded the early spring passage. For the main spring passage there were 143 on March 13 with 750 on March 16, 980 on March 20, 1,320 on March 24, 2,510 on March 27 and 5,970 on March 30, then 330 seen on April 3 with 260 on April 10, 130 on April 17, 110 on April 20 and 33 on April 24. The count of 5,970 was the highest count for Zellwood but in 2011 this count rose to 11,210 on June 17. Just where would such a number come from during the breeding season? That was also the end of the main spring passage so for the summer passage there were 49 on April 26 with 67 on April 30 and 100 on May 1, then ten seen on May 15 with five on May 22. There*

were 11 on May 29 with 37 on June 5, 58 on June 19, 325 to July 3 and 545 on July 6, then 144 seen on July 11. That was the end of the summer passage. For the early fall passage there were 235 on July 14 with 700 on July 17 and 1,035 on July 20, then 107 seen on July 23 with 92 on July 31 and 80 on August 3. There were 215 on August 7 with 370 on August 10, *then six seen on August 15 with three on August 17.*

#### Glossy Ibis (*Plegadis falcinellus*)

Numbers were much lower than those of the last species although there was a significant event in the late fall and early winter. A total of two pairs nested on an island by the Lust Road pump house and four pairs nested further north. At least two pairs raised two young each. Early fall records: *there were nine on June 28 with 16 on July 2 and 21 on July 4, then 18 seen to July 18 with 17 on July 21 and 16 on July 24. There were 21 on July 29 with 36 on August 1, then 17 seen on August 4. There were 32 on August 9 with 39 on August 11, 90 on August 15, 110 on August 16, 480 on August 19 and 560 on August 26, then 75 seen on August 29 with five on September 1. There were 160 on September 9 with 420 on September 12 and 610 on September 16, then 450 seen on September 19 with 445 on September 22 and 90 on September 28. That was the early fall passage. For the main fall passage there were 460 on October 3 with 1,360 on October 6, then 340 seen on October 13 with 140 on October 17. There were 240 on October 21 with 340 on October 24, 770 on October 31, 780 on November 3, 815 on November 10, 1,605 on November 17, 1,695 on November 21, 2,910 on November 23 and 3,825 on December 1, then 3,360 seen on December 5 with 2,635 on December 7, 335 on December 12, 240 on December 16, 234 on December 19, 128 on December 27 and 73 on December 30. The count of 3,825 is still (2013) the highest count for Zellwood. Once again because of the flooding after the hurricanes the winter passage disappeared inside a fall influx. For the early spring passage there were 115 on January 2 with 124 on January 6 and 144 on January 16, then 102 seen to January 24 with 90 on January 26. There were 119 on January 30 with 163 on February 2, 167 on February 6 and 235 on February 13, then 153 seen on February 16 with 79 on February 20. There were 227 on February 23 with 177 on February 28 and 115 on March 2. That concluded the early spring passage. For the late spring passage there were 128 on March 6 with 150 on March 10, 158 on March 13 and 475 on March 16, then 193 seen on March 18 with 153 on March 20 and 95 on March 24. There were 330 on March 27 with 430 on March 30, then 41 seen on April 3. There were 61 on April 6 with 75 on April 10, 79 on April 14, 97 on April 17 and 310 on April 20, then 83 seen on April 24 with 69 on April 30 and nine on May 1. That was the late spring passage. For the summer passage there were 83 on May 15 with 52 on May 22 and 38 on May 29. There were 71 on June 5 with 310 on June 12 and 482 on June 26, then 190 seen on July 1 with 125 on July 6, 110 on July 14 and 95 on July 17. There were 395 on July 20 with 72 on July 23, 37 on July 31 and 13 on August 3. There were 52 on August 7 with 28 on August 10 *and 23 on August 15.**

## THE HURRICANES OF 2004

In the fall of 2004 three hurricanes crossed the area. The first was Hurricane Charley, on August 13 it crossed the area depositing between five and eight inches of rain, the amount of rainfall varying from site to site in the North Shore Restoration Area. It is not possible to identify how much fell in the fields but the topography suggests that the fields more likely received the eight inches rather than the five inches.

Nearly a month later on September 5 Hurricane Frances crossed the area. This storm deposited between six and eight 1/2 inches of rain. With the higher ground to the north-east and the east it is likely that the higher total probably relates to the fields.

Hurricane Ivan missed us on September 13 but Hurricane Jeanne did not. It crossed the area on September 26. This hurricane deposited some four 1/2 to over six inches of rain.

Just these three storms deposited between 15 1/2 and 22 1/2 inches of rainfall on the fields of Units One and Two. This was also the rainy season so there will have been afternoon and or evening thunderstorms. At a minimum these storms probably added another ten inches.

No wonder it took so long to drain the fields. Unit One is drained into the Lake Level Canal at Interceptor Road and Unit Two is drained directly into Lake Apopka by the Lust Road Pump House. Initially no pumping was possible at either site as the water level in Lake Apopka was too high. The water level in the lake had to drop before pumping could commence. It took until the end of December to drain all the fields.

I have prepared a table of all the involved species from August 15, 2004 to January 6, 2005. The highest counts for each species are indicated in bold type.

Following the table I take a look at the individual species and relate their arrival to the various hurricanes.

Date	Great Egret	Snowy Egret	Little Blue Heron	Tri-colored Heron	Cattle Egret	Green Heron	Black-crowned Night-heron	White Ibis	Glossy Ibis	Daily totals
8.15	34	30	35	15	130	10		760	90	1,104
8.16	21	42	98	18	1,530	<b>236</b>		450	110	2,505
8.19	7	9	38	9	705	42	2	24	480	1,316
8.22	24	54	42	34	1,045	51	1	10	300	1,561

Date	Great Egret	Snowy Egret	Little Blue Heron	Tri-colored Heron	Cattle Egret	Green Heron	Black-crowned Night-heron	White Ibis	Glossy Ibis	Daily totals
8.26	6	106	95	19	1,130	29		63	560	2,008
8.29	10	71	50	9	1,110	6		60	75	1,391
9.1	14	22	40	12	835	6		48	5	982
9.9	19	39	37	12	650	16	1	250	160	1,184
9.12	12	33	91	17	510	40	1	257	420	1,381
9.16	7	34	106	8	<b>6,400</b>	15	2	790	610	7,972
9.19	29	14	78	5	1,200	16	1	280	450	2,073
9.22	25	111	80	9	3,200	21	5	320	445	4,216
9.28	27	33	43	6	1,690	16	16	210	90	2,131
10.3	30	221	64	6	4,150	12	15	210	460	5,168
10.6	36	572	90	10	3,500	8	16	545	1,360	6,137
10.11	42	806	52	17	285	8	63	570	290	2,133
10.13	126	570	230	18	1,050	6	<b>208</b>	175	340	2,723
10.17	168	675	169	13	340	5	8	865	140	2,383
10.21	125	825	75	36	520	6	4	460	240	2,291
10.24	180	865	130	116	405	8	5	980	340	3,029
10.27	410	1,025	320	100	850	9		2,400	107	5,221
10.31	800	2,260	405	292	550	12	10	1,620	770	6,719
11.3	700	1,555	245	250	620	8	10	890	780	5,058
11.7	915	<b>2,585</b>	445	290	385	14	9	1,925	470	7,038
11.10	520	2,160	285	235	670	11	34	2,110	815	6,840
11.14	695	2,225	366	368	885	11	71	3,775	580	8,476
11.17	335	2,510	310	<b>385</b>	430	9	83	5,650	1,605	11,317
11.21	1,155	1,920	375	355	205	13	88	4,295	1,695	10,101
11.23	1,480	2,005	500	347	280	11	40	4,250	2,910	11,823
11.28	1,755	1,560	520	315	345	12	124	3080	2,465	11,176
12.1	1,456	1,365	<b>735</b>	315	360	10	85	3,435	<b>3,825</b>	11,586
12.5	<b>2,390</b>	2,145	665	261	130	11	62	4,020	3,360	12,444
12.7	1,705	1,320	685	194	235	13	59	<b>5,730</b>	2,635	<b>12,576</b>
12.12	680	440	237	103	187	16	50	1,420	335	3,468
12.16	783	735	220	103	235	19	31	695	240	3,061
12.19	227	381	173	36	205	11	37	142	234	1,446
12.22	121	417	77	23	575	9	20	163	116	1,521
12.27	225	385	184	44	235	10	67	168	128	1,446
12.30	185	330	180	38	162	10	1	145	73	1,124
1.2.05	186	449	175	31	290	11	35	156	115	1,448
1.6.05	35	117	84	25	187	17	4	60	124	653

This was such an extraordinary event that it is worth taking a more detailed look as each species reacted differently in the timing and the length of stay. If the District had not drained the fields it is likely that some 10,000 plus birds would have wintered.

Of the nine species involved five showed a response to the passing of a hurricane. The most immediate was the Green Heron. Hurricane Charley crossed the area on August 13 and on August 16 there were 236 Green Herons instead of the ten seen on August 15. What the actual total was for that day is anyone's guess, perhaps in the range of 500 to 1,000. All had left by August 29. After Hurricane Frances on September 5 there were 40 Green Herons on September 12 as against six on September 1. These had all left by October 6. My guess is that these two hurricanes caught migrating parties of Green Herons forcing them to land. On resuming their passage they stopped at Zellwood to feed.

The Cattle Egrets did not appear to be effected by Hurricane Charley but after Hurricane Frances passed on September 5 there were 6,400 Cattle Egrets on September 16. These finally left the area by October 17. Perhaps this hurricane drove Cattle Egrets that were resident on the prairies south of Kissimmee northward and that this influx involved birds returning south.

Both the ibis species were affected by Hurricane Frances but only to a minor extent. There were an extra 200 White Ibis and 150 Glossy Ibis on September 9. Numbers of both species continued to grow culminating in 790 White Ibis and 610 Glossy Ibis on September 16 (the Cattle Egret day). Numbers then declined until October 6, this was after Hurricane Jeanne crossed the area on September 26. Whilst the White Ibis count only went up by 330 the Glossy Ibis count went up by 1,000 to 1360, but that was a one day event. These described events would appear to be local corrections. I will come back to these species later.

Hurricanes Charley and Frances had no effect on the Black-crowned Night-Heron but Hurricane Jeanne did. Initially the increase was minor from five to 16 but there were 63 on October 11 and 208 on October 13. These birds left immediately as only eight seen on October 17. This was the slowest reaction but the rapid departure does suggest that this was a party of birds returning south. Again this species will be discussed later.

Now to the main event, the last hurricane was on September 26 but the main influx did not start for most species for one to two months. Central Florida was flooded with Great Egrets and Snowy Egrets. I live in DeLand well to the north of Orlando and every flooded ditch or field had its quota of herons and egrets. This was a huge event covering a large area. It seems plausible that these three hurricanes had between them driven the herons, egrets and ibis out of the Everglades and other locations in South Florida and sent them north, perhaps to the Carolinas. However in *North American Birds* for the fall of 2004 there is no mention of any such influx or exodus. The timing of their arrival suggests that they were displaced and wandering.

Hurricane Jeanne seems to be involved as the initial influx for Snowy Egret, White Ibis and Glossy Ibis was on October 6. The Black-crowned Night-Heron was on October 11 with Great Egret and Little Blue Heron on October 13. The Tricolored Heron was last with the influx starting on October 21. Whilst for most species the counts were only significantly higher the

counts were very high for Glossy Ibis and the highest ever for Black-crowned Night-Heron. I discussed these two species earlier

Numbers climbed again on October 27 for Snowy Egret, Little Blue Heron and White Ibis, to a lesser degree for Glossy Ibis and Black-crowned Night-Heron. It would appear that this four day period was very significant.

For three species the numbers rose for a third time to reach their peak. The Black-crowned Night-Heron numbers rose on November 10, the Glossy Ibis on November 17 and the Great Egret on November 21.

The main influx for all species ended on December 7 with the exception of the White Ibis when the date was December 12. Similarly the actual influxes ended for all species on January 2 with the exception of the Tricolored Heron that ended early on December 16.

The highest counts for all species, whichever hurricane involved were the highest counts ever for each species at Zellwood. Many were probably the highest one site counts for Florida as a whole. The highest counts were: Green Heron 236 on August 16, Cattle Egret 6,400 on September 16, Black-crowned Night-Heron 208 on October 11, Snowy Egret 2,585 on November 7, Little Blue Heron 735 on December 1, Glossy Ibis 3,825 also on December 1, Great Egret 2,390 on December 5 and White Ibis 5,730 on December 7. The period December 1 to December 7 being the most important i.e. just before the fields finally drained. In total the highest daily count was that of 12,576 birds on December 7. I do not expect to see such an event again, pure Zellwood.

#### Wood Stork (*Mycteria americana*)

Whilst there were records for every month this was a decidedly uncommon bird this year. Early fall records: *there were three on July 4 with two on July 14. There were three on July 29 with one on August 4.* For this year there were two on August 19 with one on August 22. There were also seven on September 22. Those were the early fall records. For the main fall passage there was one on October 21 with three on October 24. There were singles on November 14, November 21 and November 23. That closed the main fall passage. For the winter passage there were three on November 28 with five on December 5 and December 7, then one seen on December 12. Finally for the winter passage there were two on December 27. For the early spring passage there were singles on January 30, February 6 and February 8, that was it. For the main spring passage there were two on March 13 with one on March 20. There were two on April 14 with one on April 20. There were three on April 24 with one on May 5. Finally for the main spring passage there was one on May 22. For the summer passage there

were two on June 5 with one on June 12. There were two on June 26 with later singles on July 6 and July 14.

#### Black Vulture (*Coragyps atratus*)

Seen in very low numbers, there were no significant influxes. Early fall records: *there were 16 on June 16 with 17 on June 23 and 32 on July 2, then 11 seen on July 4 with ten on July 7 and two on July 11. There were 15 on July 14 with three on July 18 and one on July 21. There were two on July 24 with nine on July 29 and 31 on August 4, then 15 seen on August 11 with nine on August 16 and seven on August 19. There were 16 on August 22 with five on August 26 and one on August 29. There were three on September 1 with six on September 8, then two seen on September 9 with singles to September 28. That was the early fall passage. For the late fall passage there were three on October 3 with four on October 6 and seven on October 13, then three seen to November 3 with one on November 7. There were seven on November 10 with one on November 14. There were two on November 17 with three on November 21 and five on November 23, then three seen on November 28. That closed the late fall passage. For the winter passage there were five on December 1 with four on December 5 and three on December 7. There were 15 on December 12 with 27 on December 16, then 18 seen on December 19 with eight on December 27, four to January 2 and singles to January 9. That completed the winter passage. For the early spring passage there were three from January 16 to January 24 with seven on January 26 and 14 on February 2, then two seen on February 8 with singles to February 20. There were two on February 23 with nine on February 28, then four seen on March 2. That concluded the early spring passage. For the main spring passage there were seven on March 6 with 13 on March 13, then four seen on March 18 with two on March 20. There were 14 from March 24 to April 3 with eight on April 10 and three to April 17. There were 16 on April 20 with four on April 24 and singles to April 30. That was the main spring passage. For the summer passage there were eight on May 15 with seven to June 5 and four on June 12. There were eight on June 19 with 15 on June 26, then seven seen on July 1 with six on July 6 and three on July 11. That was the summer passage. For the early fall passage there were eight on July 14 with 23 on July 20, then five seen on July 23 with two to July 31. There were 12 on August 3 with 47 on August 7, then 27 seen on August 15 with four on August 17.*

#### Turkey Vulture (*Cathartes aura*)

Seen in moderate numbers this year; there were no major influxes. Early fall records: *there were three on June 20 with nine on June 23 and ten on July 2, then nine seen on July 4 with five on July 7. There were 24 on July 11 with 37 on July 14, 84 on July 21, 106 on July 29, 129 on August 1, 150 on August 9 and 221 on August 11, then 35 seen on August 15. There were 110*

on August 16 with 194 on August 19 and 365 on August 26, then 132 seen on September 1 with 27 on September 12, 20 on September 16 and 16 on September 19. There were 26 on September 22 with 24 on October 3, 17 to October 11, nine to October 17 and eight on October 21. There were 36 on October 24 with 187 on October 31, then 19 seen on November 3 with 16 on November 7. There were 19 on November 10 with 21 on November 14, 30 on November 17, 33 on November 23 and 97 on November 28, then 32 seen on December 1 with seven on December 5. That was what appeared to be a single fall passage. For the winter passage there were 25 on December 7 with 24 on December 12 and 12 on December 16. There were 30 on December 19 with 43 on December 27 and 65 on January 2, then 20 seen on January 6. That completed the winter passage. For the early spring passage there were 26 on January 9 with 45 on January 16 and 88 on January 24, then 87 seen on January 26 with 32 on January 30, 24 on February 2 and 19 on February 6. There were 20 on February 8 with 34 on February 13 and 127 on February 16, then 38 seen on February 20 with 36 on February 23. That closed the early spring passage. For the late spring passage there were 39 on February 28 with 635 on March 2, then 180 seen on March 6 with 72 on March 13, 27 on March 16, 20 on March 18 and 15 on March 20. There were 24 on March 24 with eight on March 27. There were 12 on March 30 with 17 on April 3, then 13 seen on April 6 with five on April 10 and three on April 14. There were four on April 17 with 17 on April 20, then 12 seen on April 26 with four on April 30. That was the end of the late spring passage. For the summer passage there were five on May 15 with seven on May 22, nine on June 5, 16 on June 19, 22 on June 26 and 36 on July 1, then 25 seen on July 3 with 21 on July 6. That finished the summer passage. For the early fall passage there were 27 on July 11 with 110 on July 14, then 27 seen to July 20. There were 105 on July 23 with 134 on July 28 and 163 on August 3, then 72 seen on August 10 *with 68 on August 17 and 20 on August 21*. In both years there were higher numbers in the very early fall I am not sure what that represented.

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

An unusual species in that it was present all year with the exception of the period mid-March to mid-May; numbers were lower this year. Early fall records: *there was one on June 28 with two on July 4 and July 7, then four seen on July 14 with two to August 1*. For this year there was one on August 16 with four on August 22, then two seen on August 26. There were two on September 16 with five on September 19, then two seen on September 22. That was the early fall passage. For the main fall passage there were two on September 28 and October 3 with four on October 6, then two seen on October 13. There were two on October 21 and October 24. Later there were 23 on November 17 but none seen on November 23. That closed the main fall passage. For the winter passage there were five on November 28 with 23 on December 1 and 32 on December 7. Later there were 32 on December 19 with two on December 22. There were 15 on December 27 with 18 on December 30, 28 on January 2 and 185 on January 6, then

90 seen on January 9 with 15 to January 19 and two on January 24. The winter passage overran by two weeks this year. For the early spring passage there were 39 on January 26 with 43 on January 30, 44 on February 2 and 71 on February 8, then 24 seen on February 20 with four on February 23. That concluded the early spring passage. For the late spring passage there were 11 on February 28 with 45 on March 2, then 18 seen on March 10, that was it. There were no further sightings until mid-May. For the summer passage there were five on May 15 with later one on May 29. There were ten on June 5 with four to June 19 and two on June 26. That finished the summer passage. For the early fall passage there were four on July 1 and July 3 with seven on July 6, then six seen on July 11 with two to July 20 and one on July 23. There were two on July 28 with five on August 3, *then four seen on August 15 with one on August 17.*

#### Fulvous Whistling-Duck (*Dendrocygna bicolor*)

Present all year in varying numbers, the highest numbers were seen during the winter and early spring passages. There was no evidence of breeding this year. Early fall records: *there were seven on July 4 with later two on August 4.* For this year there were 13 on August 16 with one on August 22. There were five on September 8 with ten on September 9, 13 on September 12, 27 on September 16 and 49 on September 19, then 44 seen on September 22 with three on September 28. That was the early fall passage. For the main fall passage there were 11 on October 3 with two to October 13. There were four on October 17 with two on October 21. Later there were 315 on November 14 with 95 on November 17, nine on November 23 and two on November 28. That closed the main fall passage. For the winter passage there were 20 on December 1 with ten on December 5 and five on December 7. There were six on December 12 with 18 on December 16 and December 19, then three seen on December 22. There were five on December 27 with 130 on December 30, 207 on January 6 and 240 on January 9, then four seen on January 16. The 16<sup>th</sup> does appear to be a frequent last date for the winter passage. For the early spring passage there were 24 on January 19 with 25 on January 24, 120 on January 26 and 133 on January 30, then 70 seen on February 2 with eight on February 8 and two on February 13. There were 29 on February 16 with 46 on February 23, then 33 seen on February 29 with 30 on March 2 and three on March 6. That concluded the early spring passage. For the late spring passage there were five on March 10 with 11 on March 13 and 12 on March 16, then two seen on March 20. There were six on March 24 with 28 on March 30, then 11 seen on April 3 with three to April 10 and two on April 14. There were three on April 17 with four on April 20 and 36 on April 24, then seven seen on April 30 with one on May 1. That was the late spring passage. The only sightings for the summer passage were those of five on May 15 and one on June 5. For the early fall passage there were singles on June 26 and July 1 with two to July 11 and eight on July 28, then one seen on August 10.

### Snow Goose (*Chen caerulescens*)

This was a vagrant. There were three adult white morphs on December 30 that was a winter passage record. More unusual an adult white morph flew to the north on March 13 that was a late spring passage record.

### Wood Duck (*Aix sponsa*)

Present all year in low numbers; that being said the highest numbers were seen during the fall passage. A pair bred on the southern border; there were three young on May 29. Early fall records: *there were singles on June 28 and July 4 with six on July 11, then five seen on July 18 with one on July 21. There were three on August 1 and August 11 with five on August 16, seven on August 19 and 18 on August 22, then three seen on August 26. There were six on August 29 with 27 on September 8 and 36 on September 12, then 17 seen on September 16 with two on September 19. There were 86 on September 22 with 31 on September 28 and four on October 3. That was the early fall passage. For the late fall passage there were seven on October 6 with 28 on October 11, then 13 seen on October 17 with four on October 21, two on October 24 and one on October 27. There were 25 on October 31 with 13 on November 3, eight to November 14 and one on November 17. There were three on November 21 and November 23 with five on November 28, then four seen on December 1 with two on December 7. That closed the late fall passage. For the winter passage there were two on December 16 with eight on December 22, then two seen to January 2. There were 14 on January 6 with 13 on January 9 and one on January 16. That completed the winter passage. For the early spring passage there were three on January 19 with eight on January 24, then four seen on February 2. There were six on February 6 with eight on February 8 and 12 on February 16, then six seen to February 28 with three on March 2 and two on March 6. That concluded the early spring passage. For the late spring passage there were two on March 10 with three on March 13 and four from March 16 to March 24, then one seen on March 27. There were two from March 30 to April 10 with three on April 14 and April 20, then one seen on April 24. There were three on April 26 with eight on April 30. That was the late spring passage. For the summer passage there were three on May 15 with one on May 22. There were seven on May 29 with six on June 12, four on June 19 and two on June 26. That was the end of the summer passage. For the early fall passage there were three on July 1 with five on July 3. There were also five on July 14 with four on July 17. There were five on July 28 with four on August 7 and two on August 10.*

### Gadwall (*Anas strepera*)

With the very limited areas of open water this was a very uncommon passage migrant, there were no winter records. For the fall passage there were two from October 24 to November 10 that was it. For the early spring passage there were two on January 6 and January 9 with singles later on February 6 and February 23.

### American Wigeon (*Anas americana*)

A quite common spring passage migrant; there was a single winter record. For the winter passage there were four on Lake Apopka on December 5. For the early spring passage there were six on January 6. Later there were 12 on January 26 and January 30 with 16 on February 2, 21 on February 6 and 34 on February 8, then 12 seen on February 13 with one on February 16. There were 24 on February 20 with 48 on February 23, then two seen on March 2. That closed the early spring passage. For the late spring passage there were six on March 6 with four on March 10. There were also 42 on March 16 with 38 on March 18, there were no later records.

### American Black Duck (*Anas rubripes*)

This was a vagrant. For the fall passage there was one on October 24. For the winter passage there were two on December 16, December 22 and January 6 with one on January 9. For the early spring passage there were two on January 24 with one on January 26. Have no idea how many birds involved in the above. The problem was that these birds could well have been going back and forth between Duda and the Sand Farm Cattail Marsh.

### Mallard (*Anas platyrhynchos*)

Present for most of the year but very scarce during the summer; very exceptionally there was a major invasion of wild birds from the north in October. There were no early fall records from the previous survey year. For this year there were singles on August 16 and August 19 with eight on August 22, then four seen on August 26 with three to September 9 and one on September 12. There were three on September 16 with eight on September 19, then three seen to September 22 with two on September 28. That was the early fall passage. For the main fall passage there were three on October 3 with 18 on October 6 and 24 on October 11, then nine seen on October 13 with two on October 17. That was the first influx that involved wild birds from the north. There were two on October 21 with 103 on October 24, then 13 seen on October 31 with one on November 3. The count of 103 is still (2013) the highest ever count

for Zellwood; the previous high count was that of 40 on November 19, 1999. These were wild birds with numerous adult males in breeding plumage. There were 17 on November 7 with 13 on November 10, 11 to November 21, six on November 23, two to December 1 and one on December 5. That was the last influx involving wild birds from the north. It was also the end of the main fall passage. For the winter passage there was one on December 7 with two from December 16 to December 22 and three on December 30, then one seen on January 2. That completed the winter passage. For the early spring passage there were three on January 6 and January 9 with four on January 16, then two seen on January 24 with one on January 26. There were two on January 30 and February 6 with singles to February 20. There were two on February 23 and February 28 with singles to March 6. That concluded the early spring passage. For the late spring passage there were two from March 10 to March 16 with three on March 18 and March 20, then two seen on March 27 with singles to April 6. There were two on April 14 and April 24 with one on April 30. That was the late spring passage. For the summer passage there were singles on May 15, May 22, June 19 and June 26. For the early fall passage there were singles on July 6, July 11 and July 28. There were no later records for this survey year.

#### Mottled Duck (*Anas fulvigula*)

A common fall passage migrant; numbers were significantly lower from the winter passage to the end of the survey year. Early fall records: *there were two on July 7 with singles to July 18*. For this year there were seven on August 16 with 41 on August 19 and 86 on August 22, then 68 seen on August 26 with five on August 29. There were 85 on September 8 with 42 on September 9 and 35 on September 12. There were 46 on September 16 with 62 on September 19 and 71 on September 22, then eight seen on September 28. That was the early fall passage. For the main fall passage there were 16 on October 3 with 22 on October 6 and 40 on October 11, then 32 seen on October 13 with seven on October 17 and six on October 21. There were 72 on October 24 with 56 on October 31 and 21 on November 3. There were 59 on November 7 with 96 on November 10 and 102 on November 17, then 64 seen on November 21 with 60 on November 23, eight on November 28, six on December 1 and four on December 5. That closed the main fall passage. For the winter passage there were nine on December 7 with seven on December 16 and five on December 19. There were 14 on December 22 with nine on December 30 and seven on January 2. There were 14 on January 6 with 11 on January 9 and eight on January 16. That completed the winter passage. For the early spring passage there were eight on January 19 with 14 on January 24, then 13 seen on January 30 with eight on February 2, five on February 6 and four on February 8. There were nine on February 13 with seven on February 16. There were eight on February 20 with nine on February 23, 11 on February 28 and 15 on March 2, then nine seen on March 6. That concluded the early spring passage. For the main spring passage there were 19 on March 10 with 14 on March 13. There were 15 on March 16 with 20 on March 18, then 14 seen on March 24 with 13 on March 27. There were 17 on March

30 with 12 on April 3, eight to April 10 and five on April 14. There were eight on April 17 with 11 on April 24, then three seen on April 26. That was the main spring passage. For the summer passage there were eight on April 30 with 15 on May 15, then four seen on May 22 with one on May 29. There were two on June 5 and June 12 with four on June 19 and five on June 26, then two seen on July 1 with one on July 3. That was the summer passage. For the early fall passage there were five on July 6 with three to July 14 and one on July 17. There were eight on July 23 with five on July 28 and three to August 10.

#### Blue-winged Teal (*Anas discors*)

A common passage migrant; numbers in the late fall and the winter were very low. Early fall record: *there were two adult males in breeding plumage at the Sand Farm on August 4.* For this year there were five on August 19 with 44 on August 22, 160 on September 8, 290 on September 9 and 600 on September 12, then 410 seen to September 19 with 215 on September 22. There were 885 on September 28 with 1,025 on October 3, then 570 seen on October 11 with 125 on October 13, 30 on October 21, 16 on October 24, four on November 3 and two on November 7. There were three on November 10 with 48 on November 14, then 12 seen on November 21 with nine on November 28 and six on December 1. That was the end of the fall passage. For the winter passage there were eight from December 5 to December 22 with 35 on December 27 and 310 on December 30, then 100 seen on January 2. There were 105 on January 6 with 113 on January 9, then 32 seen on January 16. That completed the winter passage. For the early spring passage there were 12 on January 19 with 26 on January 24, 160 on January 26 and 225 on January 30, then 90 seen on February 2. There were 190 on February 6 with 220 on February 8 and February 16, then 180 seen on February 23 with four on February 28. That concluded the early spring passage. For the late spring passage there were 125 on March 2 with 146 on March 6, then 79 seen on March 10 with 14 on March 13. There were 80 on March 16 with 25 on March 18, 14 on March 20, 13 on March 27 and eight on March 30. There were 20 on April 3 with ten on April 6. Later there were three on April 20 with eight on April 24, then three seen on April 26 with two on May 1. Finally for the late spring passage there was one on May 22. There were no summer records, the next sighting as it was after June 21 I treat as a fall record so for the early fall passage there were two on June 26.

#### Northern Shoveler (*Anas clypeata*)

For this year there was a minor fall passage with two records for the early spring passage. For the early fall passage there were two on September 16, September 19 and September 22. For the main fall passage there were two on September 28 with ten on October 3, then eight seen on October 11 with three on October 13. There were 36 on October 21 with

eight on October 24, six on October 31, four on November 7 and one on November 10. That completed the main fall passage. There were no winter records. For the early spring passage there were three on January 6 with four on January 9 that was it.

#### Northern Pintail (*Anas acuta*)

A passage migrant there were somewhat higher numbers in the spring. For the early fall passage there were singles on September 9, September 19 and September 22. For the main fall passage there was one on September 28 with two from October 6 to October 21, then singles seen to November 3. There were four on November 7 with five on November 10, then four seen on November 14 with two on November 21. That was the end of the main fall passage. There were no winter records. For the early spring passage there were two on January 6 with 12 on January 9, then two seen on January 19. There were eight on January 26, January 30 and February 6 with 12 on February 8. Later there was one on February 20; there were no later records.

#### Green-winged Teal (*Anas crecca*)

Seen in small numbers from the fall to the spring, for this species there were winter sightings. For the early fall passage there were 30 on September 8 that was it. For the main fall passage there were four on October 11 with eight on October 21, then five seen to November 14 with two on November 21. That closed the main fall passage. For the winter passage there were singles on December 1, December 7 and December 16 with two to December 22, six on December 30, 16 on January 6 and 18 on January 9, then one seen on January 16. That completed the winter passage. For the early spring passage there were three on January 19 and January 26 with 31 on January 30, then seven seen on February 6 with six on February 8. There were 12 on February 13 with 20 on February 20 and 40 on February 23, then six seen on March 2 with five on March 6, two on March 10 and one on March 13. That was the end of the early spring passage; in this instance it appeared that there was no incoming late spring influx to cover the declining early spring influx. For the late spring passage there were six on March 16 with 14 on March 18, then five seen on March 24 with one on April 6.

#### Ring-necked Duck (*Aythya collaris*)

An uncommon passage migrant and winter visitor, we really need some large areas of open water. For the fall passage there were singles on October 11 and October 24 with six on November 7 and eight on November 14, then one seen on November 17. There were also two

on November 21. That closed the fall passage. For the winter passage there were two on November 28 and December 1 with three on December 5 and December 7, then two seen to December 22 with one on December 30. There were two on January 2 with 39 on January 6, then three seen on January 9. That completed the winter passage. For the early spring passage there were 15 on January 16 with four on January 19. There were eight on January 30 with four on February 6. That was the early spring passage. Finally for the late spring passage there were two on March 16.

#### Lesser Scaup (*Aythya affinis*)

This has nearly earned vagrant status this year. For the fall passage there were six on November 3 with three on November 7. Later there were 32 on November 21. That was the fall passage. For the winter passage there were six on December 7. Finally for the early spring passage there were six on January 6.

#### Bufflehead (*Bucephala albeola*)

This was a vagrant. For the winter passage there was a flock of 11 on Lake Apopka on December 16. The count of 11 was the highest count for Zellwood but the highest count is now (2013) that of 34 on December 31, 2010.

#### Hooded Merganser (*Lophodytes cucullatus*)

A winter visitor and spring passage migrant, numbers were low this year. For the winter passage there were two on December 1 with four on December 5 and 11 on December 16, then eight seen on December 22 with six on December 27 and five on January 2. That completed the winter passage. For the early spring passage there were singles on January 16 and January 19 with five to January 26 and nine on February 2, then four seen on February 6 with two to February 13 and one on February 16. There were five on February 20 with two to February 28. That closed the early spring passage. For the late spring passage there were four on March 2 with seven on March 6, then five seen on March 13 with one on March 18.

#### Red-breasted Merganser (*Mergus serrator*)

This was a vagrant. For the early spring passage there was a female on February 2. For the main spring passage there were two adult males on March 24.

### Ruddy Duck (*Oxyura jamaicensis*)

A very common duck on Lake Apopka from the late fall to the spring. This is a problem species in that I only get to the lake in the afternoon and if there is even just a light breeze it could be sufficient to hide these ducks from view in the ripples. The counts are therefore more broken up than normal. Early fall record: *there was an adult male in breeding plumage on Lake Apopka on June 23*. For the main fall passage there was one on October 11 with later 12 on October 31, then six seen on November 3. There were seven on November 7 with 120 on November 10, then three seen on November 14. Most of these records probably came from the Sand Farm Cattail Marsh. There were 10,500 on Lake Apopka on November 21 and that puts things in a different light. Just 120 were seen on November 23 with five on November 28; that was the fall passage. For the winter passage there were 780 on December 1 with 3,400 on December 5 and 8,700 on December 7. I have no information about the numbers on Lake Apopka for the rest of the winter passage. Elsewhere there were 50 on December 12 with three on December 16. There were also 170 on December 19 with one on December 22. That completed the winter passage. For the early spring passage there were 13,250 on January 6 and January 9 with 23,000 on February 20. Again I have no counts from the lake to the end of this passage. Elsewhere there were 110 on January 19 with 870 on February 2 and 12,450 on February 8. Later there were 60 on February 23 with three on March 2. That concluded the early spring passage. For the late spring passage there were 4,500 on March 6 with 4,600 on March 10, 5,200 on March 16 and 12,400 on March 20, then 8,800 seen on March 24 with 550 on March 30 and singles to April 6. There were five on April 20 with later three on May 15. There were no later records.

### Osprey (*Pandion haliaetus*)

Present all year with numbers gradually increasing through the year. Early fall records: *there were 16 on July 4 with 18 on July 7, 24 on July 11, 30 on July 14, 52 on July 21 and 59 on July 24, then 39 seen on July 29. There were 46 on August 1 with 55 on August 4, then 37 seen on August 9 with 16 on August 11 and nine on August 15. There were 18 on August 16 with 31 on August 19, then 19 seen to August 26. There were 23 on August 29 with 28 on September 9 and 35 on September 12, then 31 seen on September 16 with 11 on September 19. There were 15 on September 22 with 16 on September 28, and 19 on October 6, then 15 seen on October 11 with 14 on October 13, 13 on October 24, 12 on October 31 and seven on November 3. There were 20 on November 7 with 24 on November 10, then 20 seen on November 14 with 16 on November 17 and 13 on November 21. There were 23 on November 23 and November 28 with 18 on December 1. That was what appeared to have been a single fall passage. For the winter passage there were 28 on December 5 with 24 on December 7, 19 on December 16, 13 on December 22 and nine on December 27. There were ten on December 30 with 15 on January*

2 and 17 on January 6, then 12 seen on January 9 with 11 on January 16. That completed the winter passage. For the early spring passage there were 13 on January 19 with 23 on January 24, 24 on January 26, then 30 seen on February 2 and February 8 with 27 on February 16, 25 on March 2 and 22 on March 6. That closed the early spring passage. For the main spring passage there were 27 on March 10 with 37 on March 13, 50 on March 16 and 72 on March 18, then 42 seen on March 20 with 33 on March 24. There were 51 on March 27 with 22 on April 3, 21 on April 6 and 15 on April 10. There were 31 on April 14 with 43 on April 17 and 46 on April 20, then 39 seen on April 24. There were 44 on April 26 with 57 on April 30 but because of the two week break I do not know what happened next. That was however the end of main spring passage. For the summer passage there were 35 on May 15 with 22 on May 22 and 17 on May 29. The influx that followed appeared to belong to the post-breeding gathering but that event was exceptionally early this year. There were 34 on June 5 with 41 on June 12, 44 on June 19, 57 on June 26, 88 on July 1 and 102 on July 3, then 65 seen on July 11 with 32 to July 17. The count of 102 was the highest count for Zellwood but the highest count is now (2013) that of 201 on July 11, 2012. There were 75 on July 20 with 62 on July 28 and 47 on July 31. There were 77 on August 3 with 73 on August 10, *36 on August 15, 35 on August 21 and 25 on August 25.* One excellent feature with this species is that the peak count is going up year after year. This has to mean that the lake is getting cleaner.

#### Swallow-tailed Kite (*Elanoides forficatus*)

There was a scattering of records for the spring and the summer but the highlight of the year for Zellwood is the post-breeding gathering. They roost at Lake Woodruff in Volusia County and drift down to Zellwood daily to feed over the fields. It is a very special spectacle. Early fall records: *for the post-breeding gathering there were 54 on June 16 with 28 on June 23 and ten on June 28. There were 310 on July 2 with 417 on July 4 and 438 on July 11, then 388 seen on July 14. There were 475 on July 21 with 310 on July 24, 259 on July 29 and 24 on August 1. There were 68 on August 4 with 158 on August 9 and 221 on August 11, then 128 seen on August 16 with 82 on August 19, 80 on August 22, 66 on August 26, 52 on August 29, 23 on September 1 and ten on September 9. Hurricane Frances closed this event down. For the spring/summer passage there was one on March 13 with two on March 24, then one seen on March 27. There were two on April 10 with singles on April 30, May 1 and May 22. It is possible that the records from April 10 relate to the summer passage. For the post-breeding gathering there were six on May 29 with 19 on June 5, 207 on June 19 and 274 on June 26, then 104 seen on July 1 with 41 on July 3. There were 480 on July 6 with 809 on July 14 and 856 on July 17, then 667 seen on July 20 with 393 on July 23. The count of 856 was the highest count for Zellwood but the highest count is now (2013) that of 1,642 on August 3, 2012 There were 446 on July 28 with 486 on July 31, then 341 seen on August 3 with 182 on August 7 and 46 on August 10, *28 on August 15, 22 on August 17, eight on August 21 and five on August 25.**

### Bald Eagle (*Haliaeetus leucocephalus*)

Whilst this species will have bred on the southern border and at the Sand Farm this was more than anything a spring passage migrant this year. Early fall records: *there were singles on July 2, July 4, July 7 and July 11 with two from July 14 to July 29, then singles seen to August 9.* For this year there was one on August 16 with two on August 19 and three on August 29, then one seen on September 8. There were three on September 12 and September 22 with two to October 3. That was the early fall passage. For the main fall passage there were two on October 6 with four on October 11, then three seen on October 17 with one on October 21. There were two on October 24 and October 27 with five on October 31, then three seen on November 3. There were four on November 7 with six on November 10, then two seen to November 21. That was the main fall passage. For an early starting winter passage there were four on November 23 and November 28 with five on December 1 and nine on December 5, then seven seen on December 7 with six on December 12. There were seven on December 16 and December 19 with ten on December 22, then six seen on December 27 with five on December 30 and three to January 6. That completed the winter passage. For the early spring passage there were six on January 9 and January 16 with 22 on January 19 and 33 on January 26, then 16 seen on February 2 with ten on February 6. There were 36 on February 8 with 28 on February 16 and nine on February 20. That concluded the early spring passage. For the late spring passage there were 17 on February 23 with 24 to March 2, 25 on March 6 and 28 on March 10, then 15 seen on March 13 with 12 on March 16. There were 17 on March 18 with five on March 20. There were 13 on March 24 with 19 on March 27, then 13 seen on April 3 with 11 on April 6, ten on April 14, seven on April 17 and six to April 24. There were seven on April 26 with five on April 30, three on May 1 and two on May 15. That closed the late spring passage. For the summer passage there were singles on 11 dates from May 22 to July 28. This is a winter breeding species so the seasons do not actually relate. For the early fall passage there were two on August 3 and August 7 with one on August 10.

### Northern Harrier (*Circus cyaneus*)

An exceptionally common winter visitor and spring passage migrant, there were 37 counts of over 100, four of them were over 200 and one over 300. As far as I know there are only two other locations in the United States that have ever had 100 plus on single dates. This is the premier site in the country for this species! The main roost was near the Sand Farm Bridge in Unit One and there was another at the Sod Farm. There may well have been a roost in the southern fields near Lust Road but I have no information on any such roost. Early fall record: *an adult male flew to the south by Pole Road on August 9.* For this year there was an adult female on August 29 with an adult male on September 1. I did not sex/age these birds after those records. There was one on September 8 with two on September 12, then one seen on

September 16. There were two on September 19 and September 22 with four on September 28, then one seen on October 3. That was the early fall passage. For the main fall passage there were eight on October 6 with 11 on October 11, then ten seen on October 17 with five on October 21. There were nine on October 24 with 11 on October 27, then nine seen on October 31 with five on November 3. There were 22 on November 7 and November 10 with 23 on November 14, 42 on November 17, 56 on November 21, 108 on November 23, 158 on November 28 and 228 on December 1, then 226 seen on December 5. That closed the main fall passage. For the winter passage there were 305 on December 12 with 195 on December 16. The count of 305 is still (2013) the highest count for Zellwood. There were 201 on December 19 with 202 on December 22, then 197 seen on December 30 with 192 on January 2, 189 on January 6, 170 on January 9 and 152 on January 16. That completed the winter passage. For the early spring passage there were 154 on January 19 with 164 on January 24, then 155 seen on January 26 with 135 on January 30. There were 148 on February 2 with 152 on February 6, then 146 seen on February 8 with 115 on February 13. There were 127 on February 16 with 131 on February 20 and 184 on February 23, then 149 seen to March 2. That concluded the early spring passage. For the late spring passage there were 164 on March 6 with 165 on March 13, then 124 seen on March 18 with 122 on March 20, 114 on March 27, 59 on April 3, 53 on April 6, 35 on April 10, 30 on April 14, 21 on April 17, 14 on April 20, 12 on April 24, six on April 26 and four on April 30. This has to be the strongest known event involving this species in the United States. At the beginning I mentioned that there were two roosts. The main one was by the Sand Farm Bridge with a secondary roost at the Sod Farm. The roost at the Sod Farm was in use from November 23 to January 2. The highest count was that of 63 on December 1. On December 12, the day with the count of 305 there were 274 in the main roost with 31 at the Sod Farm roost. Finally there was a record for the early fall passage; there was one on August 10. I did not note its age/sex but for this species some adults travel south very early.

#### Sharp-shinned Hawk (*Accipiter striatus*)

A passage migrant and winter visitor that was seen in small numbers; most sightings were out in the fields. Initially for the early fall passage there were adult males at the Sand Farm on September 9 and by the Hooper Farms Road gate on September 12. I did not age/sex them after that date. There were also singles on September 22, September 28 and October 3. That was the early fall passage. For the main fall passage there were two on October 6 with singles seen to October 13. There were two on October 17 with singles to October 31. There were two on November 3 with nine on November 10 and 11 on November 14, then five seen on November 17 with four on November 21 and one on November 23. The count of 11 was the highest count for Zellwood but the highest count is now (2013) that of 26 on November 30, 2007. There were five on November 28 with two on December 1. That closed the main fall passage. For the winter passage there were four on December 5 with five on December 12,

then six seen on December 19 and December 27 with three to January 9 and two on January 16. That closed the winter passage. For the early spring passage there were three on January 19 with singles to January 26. There were two on January 30 with three on February 2 and four on February 6, then three seen on February 13 with two on February 16. There were three on February 20 with one on February 23. That concluded the early spring passage. For the main spring passage there were six on February 28 with seven on March 2, then five seen to March 18 with three on March 24 and two to April 3. There were three on April 6 with singles on April 10, April 14 and April 20. That was the main spring passage. For the early fall passage there was an adult male by the Pole Road extension on August 10.

### Cooper's Hawk (*Accipiter cooperii*)

Present all year with a noticeable post-breeding gathering; they will have bred in the wooded borders but I have no details. Early fall records: *for the post-breeding gathering there was one on July 2 with three on July 4, four on July 7, eight on July 14 and nine on July 18, then four seen on July 21. There were seven on July 24 with 18 on July 29 and 23 on August 1, then 18 seen on August 4 with 15 on August 9, nine on August 11 and one on August 15. On July 29 they were all immatures whilst on August 1 there was a single adult with the immatures.* There were 25 on August 16 with 15 on August 19, eight on August 26 and five on August 29. The counts of 23 and then 25 were the highest counts for Zellwood; but the highest count is now (2013) that of 45 on August 25, 2006. There were 15 on September 1 with six on September 12 and September 19, then five seen on September 28 with four on October 3, and one on October 6. That closed the post-breeding gathering. There was no early fall passage so for the late fall passage there were two on October 11 and October 13 with one on October 21. There were four on October 24 with three on October 27 and two to November 3. There were three on November 7 and November 10 with two on November 14. There were three on November 17 with singles to November 23. That was the late fall passage. For the winter passage there were two on November 28 and December 1 with three on December 5, then two seen on December 7 with one on December 12. There were three from December 16 to January 6 with two on January 9. That completed the winter passage. For the early spring passage there were three on January 16 with two on January 19 and one on January 24. There were three on January 30 with four on February 2 and February 6, then two seen to February 13 with singles to February 28. That concluded the early spring passage. For the late spring passage there were four on March 2 with singles to March 16. There were three on March 18 with two on March 20 and singles to April 10. There were two from April 14 to April 26 with singles to May 1. That was the late spring passage. For the summer passage there were three on May 15 with two on May 22. There were three on May 29 with one on June 5. There were four on June 19 with two to July 1 and one on July 3. That closed the summer passage. For the post-breeding gathering there were three on July 6 with six on July 14, ten on July 17 and 16 on July 23, then 14 seen on July 31 with

13 on August 3, 12 on August 7, seven on August 15 and five on August 17. There were eight on August 21 with ten on August 28, then nine seen on August 31 with five on September 4. There were ten on September 7 with three on September 12 and one on September 19. That was the end of the post-breeding gathering.

#### Red-shouldered Hawk (*Buteo lineatus*)

A resident of the wooded borders, there was a strong post-breeding gathering with decreasing numbers through to March. A brood of three was first seen on April 30. Early fall records: *for the post-breeding gathering there were six on June 28 and July 2 with nine on July 4, 15 on July 7, 20 on July 11, 31 on July 18, 42 on July 21, 44 on July 24, 54 on July 29, 58 on August 4, 59 on August 9, 68 on August 16 and 76 on August 19, then 47 seen on August 22 with 42 on August 26. On July 21 nearly all were immatures.* There were 45 on August 29 with 65 on September 1, then 43 seen on September 9 with 29 on September 12, 26 to September 19, 24 on September 28 and 22 on October 3. That was the post-breeding gathering. Again there was no early fall passage so for the main fall passage there were 26 on October 6 with 28 on October 11 and October 13, then 25 seen on October 17 with 21 on October 21. There were 30 on October 24 with 34 on October 27, then 47 seen on October 31 and November 7 with 29 on November 10. There were 40 on November 14 with 42 on November 17, then 35 seen on November 21 with 29 on November 23. That closed the main fall passage. For the winter passage there were 38 on November 28 with 32 on December 5, 26 on December 7 and 25 on December 12. There were 30 on December 16 with 22 on December 22 and 20 on December 27. There were 28 on December 30 with 39 on January 2, then 21 seen on January 6. That completed the winter passage. For the early spring passage there were 35 on January 9 with 41 on January 16, then 35 seen on January 19 with 27 to January 26, 22 on January 30 and 21 on February 6. There were 22 on February 8 and February 16 with 14 on February 20, 12 on February 23 and nine on February 28. That concluded the early spring passage. For the late spring passage there were 11 on March 2 with 13 on March 6, then 12 seen to March 13 with seven to March 18. There were 12 on March 20 and March 27 with eight to April 10 and four on April 14. There were six on April 17 with eight on April 20, then four seen on April 24. There were six on April 26 with nine on April 30, then seven seen on May 1. That was the late spring passage. For the summer passage there were nine on May 15 with eight on May 22, six on May 29 and four on June 5. There were six on June 12 and June 19 with seven on July 1, then three seen on July 3. That was the limit of the summer passage. For the post-breeding gathering there were four on July 6 with nine on July 11 and 15 on July 17, then 13 seen on July 20 with 11 on July 23. *There were 14 on July 28 with 19 on July 31, 24 on August 7 and 32 on August 10, then 19 seen on August 15 with 18 on August 17. There were 23 on August 21 with 22 to August 31, 17 on September 4 and 11 on September 7. That was the post-breeding gathering; a very weak event this year.*

### Broad-winged Hawk (*Buteo platypterus*)

This was a vagrant. As often happens a juvenile wandered south before the start of the fall migration. For the early fall passage this year there was a juvenile at the Nursery on August 19.

### Short-tailed Hawk (*Buteo brachyurus*)

This was a vagrant although it breeds in central Florida. Early fall record: *there was an adult dark morph by Pole Road on July 7*. For this year there were single adult dark morphs on the eastern border on June 19 and July 31.

### Swainson's Hawk (*Buteo swainsoni*)

This was another vagrant. There was a juvenile light morph at the Sand Farm on October 31; it was flying to the east.

### Red-tailed Hawk (*Buteo jamaicensis*)

A resident in the larger more isolated pieces of woodland; numbers were on the low side this winter. Early fall records: *there were six from July 7 to July 21 with seven on July 24 and ten on July 29, then nine seen to August 4 with six on August 9. There were ten on August 11 with nine on August 16 and eight on August 19. There were 12 on August 22 with 16 on August 29, then 14 seen on September 1 with 13 on September 9, 12 on September 16, nine to September 22 and seven to October 3. That was the early fall passage. For the late fall passage there were 11 on October 6 with ten on October 11 and October 17, then six seen on October 21. There were seven on October 24 with eight on October 27, then seven seen on October 31 with six on November 3. There were seven on November 7 with eight on November 10, ten on November 17, 11 on November 21 and 12 on November 23, then 11 seen on November 28. That closed the late fall passage. For the winter passage there were 18 on December 1 with 20 on December 5, 21 on December 7, 23 on December 16 and 24 on December 19, then 22 seen to December 30 with 15 on January 2 and 12 on January 6. That completed the winter passage. For the early spring passage there were 16 from January 9 to January 19 with 24 on January 24, then 17 seen on January 26 with 12 on January 30. There were 17 on February 2 with 20 on February 6, then 17 seen on February 13 with 13 to February 20. There were 15 on February 23 with 13 on February 28. That concluded the early spring passage. For the late spring passage there were 19 on March 2 and March 6 with 17 on March 13 and 11 on March 16. There were 13 on March 18 with 15 on March 20, then nine seen on March 24 with seven to March 30.*

There were 11 on April 3 with ten on April 10, nine on April 14, seven to April 24 and six on April 26. There were eight on April 30 with six on May 1. That was the end of the late spring passage. For the summer passage there were three on May 15 with five on May 22, then three seen to June 5. There were six on June 12 with seven from June 19 to July 1, then four seen on July 3 with three on July 6. That closed the summer passage so for the early fall passage there were six on July 11 with nine on July 17 and July 23, then five seen on July 28. There were eight on July 31 with 11 on August 3 and 15 on August 7, then 14 seen on August 10 with nine on August 15. Rather unexpectedly there was one with hunter's jesses' on March 30, April 3 and May 22; all sightings were by Hooper Farms Road.

#### Golden Eagle (*Aquila chrysaetos*)

This was a vagrant. An adult or near adult flew to the south over the Sand Farm, it crossed Duda and then turned to the south-east to avoid going over Lake Apopka; this individual was seen on March 10.

#### American Kestrel (*Falco sparverius*)

A late fall passage migrant with decreasing numbers through the winter and the spring; there were no summer records this year. Early fall records: *an adult male flew to the south at the Workshops on July 7 what may have been the same bird was by Lust Road in the evening of July 7*. For this year there was one on September 9 with later four on September 22, five on September 28, seven on October 3, 13 on October 6 and 18 on October 11, then 15 seen on October 17 with 13 on October 21. There were 18 on October 24 with 19 on October 27, then 14 seen on October 31. There were 17 on November 3 with 22 on November 7, 24 on November 14 and 26 on November 17, then 20 seen to November 23 with 13 on November 28. That was the fall passage. Numbers now gradually lower. For the winter passage there were 15 on December 1 with 18 on December 7, then 15 seen on December 12 with 14 on December 16. There were 17 on December 19 with 12 on December 22 and nine on December 27. There were 17 on December 30 with 14 on January 2, 12 on January 6 and 11 on January 9. That completed the winter passage. For the early spring passage there were 15 on January 16 with 13 to January 24 and nine on January 26. There were 14 on January 30 with 17 on February 2, then 12 seen to February 16 with six on February 20. That was the early close of the early spring passage. For the late spring passage there were seven on February 23 with 12 on February 28 and 15 on March 6, then eight seen on March 10. There were ten on March 13 and March 16 with 19 on March 18, then 14 seen on March 20 with 12 on March 24, 11 to April 3, eight on April 10, six on April 17 and one on April 24. That closed the late spring passage. There were no

summer records this year. For the early fall passage there was an adult female by Lust Road on June 26.

#### Merlin (*Falco columbarius*)

A fall passage migrant; there was just the trace of passage during the winter and the spring. For the fall passage there were singles on September 16 and September 19 with four on September 22 and five on October 6, then three seen on October 11 with one on October 13. The count of five was the highest count for Zellwood but the highest count is now (2013) that of eight on September 30, 2007. There were also three on October 17 with singles on four dates to November 7. That was the main passage as only singles now seen. Finally for the fall passage there were singles on November 17 and November 23. For the winter passage there were singles on December 1, December 5 and December 22. For the early spring passage there was one on January 19 with two on January 24, then singles seen on seven dates to February 28. For the late spring passage there were singles on March 10, and March 13. There was also a late individual flying to the north on April 30.

#### Peregrine Falcon (*Falco peregrinus*)

There were only a few sightings for the fall and the spring passages. For the fall passage there was one on September 22 with later two on October 3, October 6, October 11 and October 13, that was it. For the early spring passage there were singles on February 16 and February 28.

#### Northern Bobwhite (*Colinus virginianus*)

A resident with the greatest numbers at the Sand Farm and the Sod Farm; they only call during the summer months so at other times of the year I have to rely on finding coveys. The coveys tend to be just inside the wooded borders. Early fall records: *there were 31 on July 4 with 26 on July 7 and 14 on July 11. There were 16 on July 14 with 58 on July 18 (this included coveys of 15 and ten), then 21 seen on July 21 with seven on July 24 and five on July 29. There were seven on August 1 with 20 on August 4, then 13 seen on August 9 with four on August 11.* For this year there were five on August 16 with 11 on August 19 and 23 on August 22, then seven seen on August 26 with six on September 1, four on September 12 and one on September 16. I am unable this year to identify when the calling came to an end. Up to seven a day then seen regularly through the winter to March 27, there were coveys of: 14 on October 11, 16 on October 17, ten on November 21, 12 on December 1, 27 on December 12, 14 on

December 19, 11 on December 22, 12 on January 2, 25 on January 9, 12 on January 19, 18 on January 24 and 12 on January 30. For the summer there were three on March 30 with five on April 3, seven on April 6 and 11 on April 10, then nine seen on April 17 with seven on April 20. There were 12 on April 24 with 19 on April 26, then ten seen on April 30 with four on May 1. There were 18 on May 15 with 26 on May 22, then 23 seen on May 29 with 21 on June 5 and 18 to June 19. There were 28 on June 26 with 23 on July 3 and 17 on July 6. There were 26 on July 11 with 20 on July 14 and 18 on July 17. There were 25 on July 20 with 19 on July 23. There were 22 on July 28 with 56 on July 31, then 15 seen on August 3 with nine on August 7 and seven on August 10. *There were eight on August 15 with 11 on August 17 and 17 on August 25, then five seen on August 28 with two on August 31. There were 15 on September 4 with 22 on September 12 and 23 on September 22, then three seen on October 2 with one on October 8. I have shown the rest of the summer as this species is in decline elsewhere.*

#### King Rail (*Rallus elegans*)

A resident; they were present in good numbers all year there was also a strong post-breeding gathering in each year. I located a total of 13 pairs; there were eight pairs at the Sand Farm with two pairs by the Lake Level Canal, one pair by Laughlin Road, one pair by Pole Road and a pair by Lake Apopka to the south of the Hooper Farms Road extension. I saw a small chick on May 15 but I did not note the location. Early fall records: *for the post-breeding gathering there were six on July 2 with seven on July 7, eight on July 11, 14 on July 14, 23 on July 18, 36 to July 24, 53 on July 29, 77 on August 1, 83 on August 4, 93 on August 9, 107 on August 11, 113 on August 16 and 134 on August 19, then 74 seen on August 22 with 47 on August 29, 41 on September 1 and 21 on September 9. That was the post-breeding gathering; the single influx lasted two months. For the remnant early fall passage there were 56 on September 12 with 15 on September 16 and 14 on September 19. There were 18 on September 22 with seven to October 3. That was the early fall passage. For the main fall passage there were 12 on October 6 with 34 on October 11 and 65 on October 13, then 54 seen on October 21 with 32 on October 24. There were 35 on October 27 with 56 on October 31, then 45 seen on November 3 with 25 on November 7. There were 54 on November 10 with 51 on November 14. There were 52 on November 17 with 55 on November 21, then 50 seen on November 28 with 27 on December 1 and 26 on December 5. That closed the main fall passage. For the winter passage there were 31 on December 7 with 33 on December 16, 34 on December 19 and 44 on December 22, then 40 seen on December 30 with 35 on January 2. That completed the winter passage. For the early spring passage there were 36 on January 6 with 63 on January 9, then 37 seen on January 16 with 35 on January 19 and 17 on January 24. There were 61 on January 26 with 57 on February 2 and 52 on February 6. There were 74 on February 8 with 31 on February 13, 26 on February 16, 11 on February 20 and ten on February 23. That concluded the early spring passage. For the late spring passage there were 20 on February 28 with 25 on March 6,*

then ten seen to March 13 with four on March 16. There were six on March 18 with 21 on March 20, then 17 seen on March 27 with 15 on April 3 and two on April 6. There were nine on April 10 with 14 on April 14, then 12 seen on April 17 with four on April 20. That was the late spring passage. For the summer passage there were five on April 24 with seven on April 26, then three seen on April 30. There were seven on May 15 with one on May 22. There were six on May 29 with seven on June 5, then four seen on June 12 with one on June 19. There were nine on June 26 and July 1 with ten on July 3, then two seen on July 6. That was the end of the summer passage and the start of the post-breeding gathering. There were eight on July 11 with 21 on July 17, 25 on July 20, 56 on July 23, 141 on July 28, 175 on July 31, 183 on August 3, 236 on August 10 and 295 on August 15, then 254 seen on August 17 with 242 on August 21, 234 on August 25 and 145 to August 31. The count of 236 was the highest count for Zellwood with the count of 295 being the highest count with respect to that passage. The highest count is however now (2013) that of 523 on August 23, 2006.

#### Virginia Rail (*Rallus limicola*)

This species is normally very uncommon but numbers were noticeably higher this year, they were present from October to March. For the fall passage there were singles on October 11 and October 13 with six on October 27, then three seen on November 3 with one on November 14. There were two on November 17 with three on November 21, then two seen on November 23 with one on November 28. That was the fall passage. For the winter passage there was one on December 1 with three on December 5, then four seen on December 7 and December 12 with three to December 19. There were six on December 22 with two on December 27. There were three on December 30 with five on January 2 and January 9, then two seen on January 16. That completed the winter passage. For the early spring passage there were two on January 24 and January 30 with one on February 2. There were two on February 8 with seven on February 13 and nine on February 16, then five seen on February 20 with four on February 28. The count of nine is still (2013) the highest count for Zellwood. That concluded the early spring passage. For the late spring passage there were singles on March 13, March 16 and March 30. The latter was by Lake Apopka near the Lust Road pump house.

#### Sora (*Porzana carolina*)

A common fall passage migrant there were decreasing numbers seen through to the spring. For the fall passage there were two on September 28 with eight on October 3, 31 on October 11, 56 on October 13, 65 on October 17 and 134 on October 21, then 78 seen on October 24 with 26 on October 27. There were 177 on October 31 with 71 on November 3 and 65 on November 7. There were 118 on November 10 with 121 on November 14 and 186 on

November 21, then 92 seen on November 23 with 91 on November 28 and 54 on December 1. That closed the fall passage. For the winter passage there were 71 on December 5 with 55 on December 7. There were 64 on December 12 with 69 on December 16 and 86 on December 19, then 66 seen on December 22. There were 71 on December 27 with 109 on December 30, then 41 seen on January 6 with 37 on January 9 and 33 on January 16. That date keeps coming up as the end date of the winter passage. For the early spring passage there were 40 on January 19 with 29 on January 26, 18 on February 2 and 13 on February 6. There were 20 on February 8 with 16 on February 13, 14 on February 16 and five on February 20. There were 22 on February 23 with eight on February 28. That completed the early spring passage. For the late spring passage there were 17 on March 2 with 27 on March 6, then 12 seen on March 13 with six on March 16. There were ten on March 18 with seven on March 20 and six on March 24. There were seven on March 27 with ten on March 30, 14 on April 3 and 16 on April 6, then three seen on April 10 with two on April 14. There were nine on April 17 with six on April 20 and singles on April 24, April 26 and April 30.

#### Purple Gallinule (*Porphyrio martinica*)

A summer visitor with only one to two staying for the winter; I believe that there were at least 28 pairs this year. The first young (one) was seen on June 5. Early fall records: *there were 43 on June 20 and June 28 with 49 on July 2, then 43 seen on July 4 with 22 on July 7 and 17 on July 11. There were 36 on July 14 with 31 on July 18, 27 on July 24 and 24 on July 29. There were 45 on August 1 with 14 on August 4. There were 26 on August 9 with 33 on August 11, then 24 seen on August 16 with 17 on August 22 and seven on August 26. There were eight on August 29 with ten on September 1, then six seen on September 9 with two on September 12.* The summer visitors appear to have slipped away at this point making this the end of the early fall passage. There was no late fall passage as from September 16 to October 17 up to two a day seen. There were three on October 21 and October 27 otherwise up to two a day seen to November 28. That ended the late fall passage. The winter passage was no better with up to two a day from December 1 to January 16, there were no higher counts. For the early spring passage there were up to two a day from January 19 to January 30. There were four on February 2 with two on February 6. There were three on February 8 and February 13 with five on February 16, then three seen on February 20 with two on February 23. That closed the early spring passage. For the main spring passage there were five on February 28 with four to March 10 and three to March 18. There were nine on March 20 with ten on March 27, 11 on March 30, 12 on April 3, 18 on April 6, 22 on April 10, 28 on April 17 and 56 on April 20, then 25 seen on April 24. There were 30 on April 26 with 37 on April 30, then five seen on May 1. That was the main spring passage. For summer passage there were 19 on May 15 with 24 on May 22, 30 on May 29 and 37 on June 5, then 24 seen on June 12 with 19 on June 19. For the early fall passage there were 26 on June 26 with 27 on July 1 and 29 on July 6, then 22 seen to July 17 with 15 on

July 20 and 11 on July 23. There were 18 on July 28 with 16 on July 31, 15 on August 3, eight on August 7 and six on August 10.

#### Common Gallinule (*Gallinula galeata*)

A common resident, numbers did not vary much month on month. I have no idea how many pairs bred but the last brood of young were first seen on November 23, there were four chicks. The first brood in 2005 was first seen on April 6; again there were four young. Early fall records: *there were 95 on June 13 with 110 to June 20, 115 on June 23, 130 to July 2 and 190 on July 4, then 145 seen on July 7 with 65 on July 11. There were 150 on July 14 with 135 on July 21 and 130 on July 24. There were 180 on July 29 with 145 on August 4 and 100 on August 9. There were 170 on August 11 with 145 on August 16 and 140 on August 19. There were 165 on August 22 with 115 on August 26 and 105 on August 29. There were 115 on September 1 with 150 on September 9 and 155 on September 12, then 135 seen on September 16 with 110 on September 19. There were 145 on September 22 with 160 on September 28, then 150 seen on October 3 with 110 on October 6. That was the early fall passage. For the main fall passage there were 190 on October 11 with 300 on October 13, then 200 seen on October 21 with 140 on October 24. There were 155 on October 27 with 160 to November 7, 205 on November 10, 265 on November 14 and 275 on November 21, then 264 seen on November 23 with 250 on December 1 and 180 on December 5. That closed the main fall passage. For the winter passage there were 190 on December 7 with 280 on December 12 and December 16, then 185 seen on December 19. There were 240 on December 22 with 265 on December 27, then 170 seen on December 30. There were 210 on January 2 with 270 on January 6, then 245 seen on January 9 with 200 on January 16. That completed the winter passage. For the early spring passage there were 210 on January 19 with 245 to January 26, 260 on January 30 and 275 on February 6, then 270 seen on February 8 with 260 on February 16, 205 on February 23, 165 on March 2 and 110 on March 6. That concluded the early spring passage. For the late spring passage there were 165 on March 10 with 100 on March 13. There were 135 on March 16 with 160 on March 18, 170 on March 20 and 180 on March 24, then 140 seen on March 27 with 130 on March 30. There were 175 on April 3 with 184 on April 6 and 240 on April 10, then 120 seen on April 14. There were 215 on April 17 with 230 on April 20, then 150 seen on April 24 with 130 on April 26, 110 on April 30 and 60 on May 1. That was the late spring passage. For the summer passage there were 80 on May 15 and May 22 with 110 on May 29, 115 on June 12, 150 to July 1, 160 to July 6, 170 on July 11, 200 on July 14 and 250 on July 20, then 190 seen on July 23 with 180 on July 28 and 150 on July 31. That influx lasted two and a half months. That was the summer passage. For the early fall passage there were 165 on August 3 with 190 to August 10 and 200 on August 17, then 135 seen on August 21 with 120 on August 25.*

### American Coot (*Fulica americana*)

With only limited areas of open water the population was low; it was a passage migrant and there were smaller numbers present during the winter. There were no summer records. Early fall records: *in 2004 there were two pairs at the Sand Farm Cattail Marsh with broods of three and two. These were last seen on July 24.* For the late fall passage there were 88 on October 11 with 18 on October 13 and 16 on October 17. There were 620 on October 21 with 420 on October 24, six on October 27 and one on October 31. There were 15 on November 3 with 127 on November 7, then 29 seen on November 10 with 18 on November 14. There were 23 on November 17 with 35 on November 21 and 100 on November 23, then 15 seen on November 28. That was the late fall passage. For the winter passage there were 51 on December 1 with 73 on December 5, then 42 seen on December 7. There were 71 on December 12 with 130 on December 16, then 75 seen on December 19. There were 110 on December 22 with 260 on December 27 and 265 on January 2, then 200 seen on January 6 with 190 on January 9 and 120 on January 16. That completed the winter passage. For the early spring passage there were 130 on January 19 with 190 on January 24, then 160 seen to January 30. There were 165 on February 2 with 185 on February 6, then 165 seen on February 8 with 150 on February 13, 75 on February 16 and 40 on February 20. There were 103 on February 23 with 50 to March 2 and 49 on March 6. That concluded the early spring passage. For the late spring passage there were 50 on March 10 with 67 on March 13, then 50 seen to March 18. There were 64 on March 20 with 86 on March 24 and 98 on March 30, then 74 seen on April 3 with 54 on April 6, 33 on April 10, nine on April 14 and singles to April 24. Finally for the late spring passage there were two on April 26. There was a single summer sighting as there was one by Laughlin Road on May 29. For the early fall passage there were singles on July 20, July 23 and July 28 with two on July 31 and August 3, then singles seen on August 7 and August 10.

### Limpkin (*Aramus guarauna*)

There were records for every month but with the exception of the fall passage it was a very uncommon visitor. Early fall records: *there were three on July 4 with singles to July 14. There were two on July 18 and July 29 with singles on August 1 and August 11.* For this year there were singles on August 22 and August 26, that was the early fall passage. For the main fall passage there was one on September 28 with four on October 6, then two seen on October 11 with one on October 13. There were three on October 21 with two to October 31 and singles to November 21. That closed the main fall passage. For the winter passage there were two on December 1 with later singles on December 19 and December 22. There was one on January 2 with two on January 6, then singles seen to January 16. That completed the winter passage. For the early spring passage there were singles on January 19, January 26 and February 2. For the late spring passage there were singles on March 13 and March 16 with two on March 20, then

singles seen to April 6. Finally for the late spring passage there was one on May 1. For the summer passage (this species breeds in the late winter/early spring so seasons are inaccurate) there was one on May 15 with two on May 22, then singles seen on June 12 and June 19. All these summer sightings were from the Sand Farm. For the early fall passage at the Sand Farm there were singles on July 1, July 3 and July 14. There was one by Airport Road on July 17 with singles at the Sand Farm on July 23 and July 28. Finally there was one by Lake Apopka to the south of the Hooper Farms Road extension on August 3.

#### Sandhill Crane (*Grus canadensis*)

A passage migrant and winter visitor there were no large migratory flocks seen this year. For the fall passage 12 flew to the south on November 10 with three in the area on November 17. A total of 14 flew to the south on November 28 with seven likewise on December 1. That was the extent of the fall passage however for this species the winter passage is really a continuation of the fall passage. So for the fall/winter passage there was one in the area on December 5 with five on December 16. A total of 44 flew to the south on December 19; one of them was an adult of the "dwarf" race *G.c.canadensis*. Finally for the fall/winter passage there was one in the area on December 30. For the spring passage there were eight in the area on January 24 with five on February 6. A total of 80 flew to the north on February 13 with 16 likewise on February 20. In the area there were 19 on March 2 with two on March 6. A total of 16 flew to the north on March 13. All later sightings relate to birds off passage. There were four from March 16 to March 20 with two on six dates to April 24. I have treated this as a single spring passage. There were no summer sightings. For the early fall passage there was one on August 10.

#### Whooping Crane (*Grus americana*)

Attempts are being made to reintroduce this species to Florida so any sightings come from that population. This year there were three adults at the Sod Farm on July 14.

#### Black-bellied Plover (*Pluvialis squatarola*)

This year it was an uncommon fall passage migrant. For the early fall passage there were 11 on August 22 with singles on September 8 and September 9. For the late fall passage there were two on November 3.

American Golden-Plover (*Pluvialis dominica*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on October 11.

Semipalmated Plover (*Charadrius semipalmatus*)

This was a vagrant this year. For the early fall passage there was one on September 1 that was it.

Killdeer (*Charadrius vociferus*)

Present all year with the heaviest passage in the early spring. One pair seen near the Hooper Farms Road gate, there was one chick on April 17. Early fall records: *there were singles on June 20, June 28 and July 4 with two on July 18 and July 21.* For this year there were two on August 16 with nine on August 22 and August 29, then four seen on September 1 with one on September 8. There were three on September 9 with 12 on September 12, then one seen on September 16. There were two on September 19 with three to September 28 and eight on October 3, then one seen on October 6. That was the early fall passage. For the main fall passage there were five on October 11 with singles to October 17. There were three on October 21 with five on October 27, 19 on November 3, 37 on November 7 and 38 on November 14, then five seen on November 17 with four on November 21. That closed the main fall passage. For the winter passage there were eight on November 23 with 18 on November 28, 20 to December 5, 21 on December 7, 73 on December 12 and 148 on December 19, then 39 seen on December 22 with 20 on December 27, 15 on December 30 and 14 on January 2. That completed the winter passage. For the early spring passage there were 26 on January 6 with 167 on January 16 and 300 on January 24, then 137 seen on January 26 with 57 on January 30. There were 155 on February 2 with 82 on February 6. There were 113 on February 8 with 300 on February 13, then 105 seen on February 20 with 33 on February 23 and ten on February 28. That concluded the early spring passage. For the late spring passage there were 65 on March 2 with 37 on March 6, 20 on March 10, 13 on March 13 and six on March 16. There were 29 on March 18 with ten on March 20, three on March 24 and one on March 27. There were two on March 30 with three on April 3 and seven on April 10, then four seen on April 17 with three on April 24, two on April 26 and singles to May 1. That was the late spring passage. For the summer passage there was one on May 15 with eight on May 22, then three seen on June 5 with two on June 12 and one on June 19. There were seven on June 26 with three on July 1, two on July 3 and singles to July 14. That closed the summer passage. There was no post-breeding gathering this year so we go straight to the early fall passage there were two on July 17 with

singles to July 31. There were two on August 3 with five on August 10, *11 on August 15 and 54 on August 21, then five seen on August 25.*

#### Black-necked Stilt (*Himantopus mexicanus*)

A summer visitor with a few records for the fall passage; I have no information as to the number of pairs that bred. Early fall records: *there were seven on June 23 with eight on June 28, then five seen on July 4 with two to July 14 and one on July 18.* For this year there were three on August 26 with later eight on September 16. There were five on October 3 with four on October 6. Those were the only fall records. For the winter passage there were two by Lake Apopka on December 5. There were no sightings for the early spring passage. For the late spring passage there was one on March 20 with 11 on March 27, then ten seen on March 30 with nine on April 6, five on April 14 and two on April 17. There were ten on April 20 with 13 on April 26, then 12 seen on April 30 with four on May 1. That closed the late spring passage. For the summer passage here were two on May 15 with 11 on May 29, then four seen on June 5 with two on June 12. For the early fall passage there was one on July 1 with two on July 3 and July 6, then singles seen to July 14. Finally there were two on July 17.

#### Greater Yellowlegs (*Tringa melanoleuca*)

A passage migrant in small numbers this year; there was a solitary winter record. Early fall records: *there were singles on August 9 and August 11.* For this year there was one on August 15 with two on August 22 and four on August 26, then two seen to September 9. There were five on September 12 with six on September 16, nine to October 3, 20 to October 17 and 23 on October 24, then singles seen to November 7. There were nine on November 14 with one on November 23. That was the fall passage. There was a single winter record as there was one on December 7. For the early spring passage there were singles on seven dates from January 26 to February 28. For the main spring passage there were singles on March 13 and March 16. There was also one on April 3 with three on April 6, then singles seen to April 14. There were two from April 17 to April 26 with three on April 30, then two seen on May 1. That was the main spring passage. For the early fall passage there were singles on July 28 and July 31.

#### Lesser Yellowlegs (*Tringa flavipes*)

A common fall passage migrant there were only low numbers for the winter and the spring. Early fall records: *there were two on July 14 with later one on August 4 and two on August 9.* For this year there was one on August 15 with seven on August 16, 13 on August 22

and 160 on August 26, then 60 seen on September 9 with 48 on September 12 and 26 on September 16. There were 140 on September 19 with 208 on September 28, then 160 seen on October 3 with 114 on October 11, 110 on October 13, 75 on October 17 and 46 on October 21. There were 194 on October 24 with two on October 31 and one on November 3. There were four on November 7 with 68 on November 14, then singles seen to November 23. That was what appears to be a single fall passage. For the winter passage there were two on December 7 with eight on December 16, then one seen on December 19. There were two on December 22 and December 27 with three on December 30, then two seen on January 6 with one on January 9. That completed the winter passage. For the early spring passage there were singles on January 24 and January 26 with three on January 30 and February 6, then two seen on February 8 with singles to February 28. That concluded the early spring passage. For the main spring passage there were singles on March 6 and March 10 with two to March 24 and 13 on March 30, then seven seen on April 3 with six on April 6, five on April 10 and two on April 14. There were six on April 17 and April 24 with ten on April 30, then three seen on May 1. That closed the main spring passage. For the early fall passage there was one on July 11.

#### Solitary Sandpiper (*Tringa solitaria*)

A passage migrant; the greatest numbers were in September and April. Early fall records: *there were singles on July 18, July 24 and August 1*. For this year there were singles on August 15 and August 22 with three on August 26, 13 on September 8 and 17 on September 9, then six seen on September 16 with three on September 19 and two on September 22. The count of 17 was the highest count for Zellwood; the highest count is now (2013) that of 76 on May 7, 2006. There were five on September 28 with singles on October 3 and October 6. Finally for the fall passage there were two on October 11 with one on October 13. For the early spring passage there were singles on January 16 and January 19 with later singles on February 16 and February 20. For the main spring passage there were singles on March 24, March 27 and April 3 with three on April 6, five to April 17, six on April 20, seven on April 24 and ten on April 26, then three seen on April 30 with one on May 1. That closed the main spring passage. For the early fall passage there were singles on July 23, August 3 and August 10.

#### Willet (*Tringa semipalmata*)

This was a vagrant. *For the early fall passage there was one at the Sand Farm on August 1, 2004*. There were no sightings for this survey year.

Spotted Sandpiper (*Actitis macularius*)

A very uncommon passage migrant this year; most sightings were from the shore of Lake Apopka. For the fall passage there were singles on August 26, August 29 and September 8 with two on September 9. For the spring passage there were singles on April 3, April 14 and April 24 with two on April 26.

Upland Sandpiper (*Bartramia longicauda*)

This was a vagrant. For the early fall passage there was one on September 9, location not noted.

Red Knot (*Calidris canutus*)

This was a vagrant. For the late fall passage there was one on October 24.

Sanderling (*Calidris alba*)

This was a vagrant. For the early fall passage there was one on September 8 and for the spring passage there were two on May 1.

Semipalmated Sandpiper (*Calidris pusilla*)

Normally this is a common spring passage migrant with a few records for the fall passage however for this year it was a fall passage migrant with a few records for the spring passage. For the fall passage there were 12 on August 22 with 35 on September 1, then three seen on September 8. There were ten on September 9 with 20 on September 12, then singles seen on September 19 and September 22. There were also three on September 28. That closed the early fall passage. For the late fall passage there were two on October 13 with one on October 17. Finally for the fall passage there were two on October 24. For the spring passage there was one on April 24 with two on May 1; that was it.

### Western Sandpiper (*Calidris mauri*)

A very uncommon fall passage migrant; there were no spring sightings. Early fall record: *there was one on July 24*. For this year there were eight on August 22 with two on August 26 and singles on September 8 and September 9. Finally there were two on September 12.

### Least Sandpiper (*Calidris minutilla*)

A fall passage migrant, there were very few records for the spring passage. Early fall records: *there were five on July 18 with two on July 24*. For this year there were 44 on August 22 with 16 on September 8 and 15 on September 9. There were 32 on September 12 with six on September 16 and three on September 19. There were 11 on September 22 with 23 on September 28, then two seen to October 6. That was the early fall passage. For the main fall passage there were 12 on October 11 with 36 on October 13, 82 on October 21 and 90 on October 24, later 33 seen on November 14 with one on November 17. That closed the main fall passage. There were no winter sightings this year. For the early spring passage there was one on February 28. Later for the main spring passage there were two on April 26 with 50 on April 30. Finally for the early fall passage there were four on July 17.

### White-rumped Sandpiper (*Calidris fuscicollis*)

A rare passage migrant, for the fall passage there were singles on August 22 and September 22 with in the spring one on April 30.

### Pectoral Sandpiper (*Calidris melanotos*)

A quite common fall passage migrant, there were only two spring records. There were no early fall records appropriate to the earlier survey year. For the early fall passage there were two on August 16 and August 19 with three on August 22, nine on August 26, 80 on September 8 and 250 on September 9, then 120 seen on September 12 with 16 on September 19, nine on September 28 and one on October 3. That was the early fall passage. For the late fall passage there were 40 on October 6 with 28 on October 13, 18 on October 17 and ten on October 21. Finally for the late fall passage there were 24 on October 24 with later one on November 14. For the spring passage there were three on April 30 with one on May 1.

Dunlin (*Calidris alpina*)

This was an uncommon fall passage migrant. There were three from October 11 to October 17 with 16 on October 24. There was also one on November 3 with later six on November 14.

Curlew Sandpiper (*Calidris ferruginea*)

This was a vagrant. There was an adult in winter plumage on October 17 and October 24, location not noted.

Stilt Sandpiper (*Calidris himantopus*)

A quite common fall passage migrant, there were just three spring sightings. Early fall records: *there were seven on August 11* with two on August 16 and one on August 22. There were seven on August 26 with six on September 8 and one on September 9. There were four on September 12 with six on September 19 and 16 on September 22, then six seen on September 28 with five on October 3. That was the early fall passage. For the main fall passage there were six on October 6 with 18 on October 13 and 46 on October 17, then 28 seen on October 24 with later one on November 14. That closed the main fall passage. For the spring passage there were four on April 20 with singles on April 26 and April 30

Buff-breasted Sandpiper (*Tryngites subruficollis*)

This was a vagrant. Early fall record: *there was one at the Sand Farm on August 11*. For this year for the late fall passage there was one on October 13, location not noted.

Short-billed Dowitcher (*Limnodromus griseus*)

A very uncommon fall passage migrant this year; there was a single spring sighting. For the early fall passage there was one on August 22. For the main fall passage there were three on October 11 with four on October 17 and five on October 21, then two seen on October 24. For the spring passage there was one on March 27.

Long-billed Dowitcher (*Limnodromus scolopaceus*)

There was a limited fall passage with just two spring sightings. For the fall passage there was one on October 3 with four on October 11, 14 on October 13 and 78 on October 17, then 65 seen on October 24 with nine on October 31. Later there were five on November 14. For the spring passage there were singles on April 6 and April 30.

Wilson's Snipe (*Gallinago delicata*)

A quite common passage migrant and winter visitor, the greatest numbers were seen during the fall passage. For the fall passage there were two on September 12 with three on September 19, six on September 22, 13 on October 3, 37 to October 11, 47 on October 17 and 118 on October 21, then 55 seen on October 24 with 20 on October 27. There were 28 on October 31 with 38 on November 3 and 49 on November 7, then 48 seen on November 14 with 16 on November 17. There were 24 on November 21 with 61 on November 23, then 28 seen on November 28 with 23 on December 1. That closed the fall passage. For the winter passage there were 30 on December 5 with 31 on December 12, then 17 seen on December 16 with ten on December 19 and nine on December 22. There were 20 on December 27 with 16 on December 30 and three on January 2. That completed the winter passage. For the early spring passage there were six on January 6 with seven on January 9, 13 on January 16 and 26 on January 19, then 12 seen on January 26 with ten on January 30, six on February 2 and two on February 6. There were 40 on February 8 with four on February 13 and one on February 16. There were three on February 20 with 11 on February 23, then one seen on February 28. That concluded the early spring passage. For the late spring passage there were four on March 2 with two on March 10. There were nine on March 16 with 12 on March 18, then eight seen on March 20 with three on March 27 and two on April 3.

American Woodcock (*Scolopax minor*)

An uncommon passage migrant and winter visitor, all sightings this year were from the Sand Farm Bridge. For the late fall passage there were singles on October 13, October 24 and November 7 with four on November 17, then one seen on November 21. That was the late fall passage. For the winter passage there was one on November 28 with three on December 5 and December 7, then singles seen on December 12, December 16 and December 19. There were two on December 22 with three on December 30, then singles seen on January 2 and January 9. That completed the winter passage. For the early spring passage there was one on January 16 with two on January 19 and January 26. There were no later records.

### Wilson's Phalarope (*Phalaropus tricolor*)

This was a rare fall passage migrant; there were six records in all. For the fall passages there were singles on September 19, September 28, October 11, October 13, October 21 and October 24. I did not note locations.

### Red-necked Phalarope (*Phalaropus lobatus*)

This was a vagrant. There were two in a flooded field on September 28 after Hurricane Jeanne. This was the highest count for Zellwood but thanks to Tropical Storm Fay the highest count is now (2013) that of five on August 22, 2008.

### Laughing Gull (*Larus atricilla*)

A spring passage migrant with a few records suggesting it was a non-breeding summer visitor. Early fall records: *there were four on July 11 with one in first-summer plumage on July 24*. There were 34 in first-summer plumage and one adult on August 15 with 30 on August 16 (age was not noted). Finally for the early fall passage there were singles on August 29, September 22 and September 28. For the late fall passage there were singles on November 7 and November 10. There were no winter sightings. For the early spring passage there were three on February 20. Now we come to the event of the year the main spring passage, this involved adults in breeding plumage. Two flew to the east on March 13 with three on March 20. In the area there were two on April 3. One flew to the east on April 6. In the area there were singles on April 10 and April 14. Four flew to the east on April 17. In the area there was one on April 24 with four on April 26, then singles seen on April 30 and May 1. That closed the main spring passage. For the summer passage there were three adults and three in first-summer plumage on May 15 with four in first-summer plumage on June 5 and June 12. Finally for the summer passage there was one in first-summer plumage on June 19. For the early fall passage there were six juveniles on July 31

### Bonaparte's Gull (*Larus philadelphia*)

A very uncommon winter visitor and spring passage migrant; numbers were especially low this year. For the winter passage there were two on November 23 with singles on November 28 and December 1. There were 12 on December 7 with one on December 12. There were two on December 22 with 13 on December 27, then four seen to January 2. There were 19

on January 6 with two on January 9. That completed the winter passage. For the early spring passage there were five on January 16 with 11 on January 19, then one seen on January 30. There were five on February 2 with 15 on February 6, then one seen on February 8. There were two on February 13 with four on February 20, then one seen on February 23. That closed the early spring passage. For the late spring passage there was one on March 16 that was it.

#### Ring-billed Gull (*Larus delawarensis*)

A common winter visitor there was a heavy spring passage this year. For the fall passage there were 26 on November 7 with 38 on November 10, then 23 seen on November 14 with seven on November 17. There were 160 on November 21 with five on November 23. That was the fall passage. For the winter passage there were 39 on November 28 with 56 on December 1, 60 on December 7, 176 on December 12, 520 on December 19 and 871 on December 22, then 870 seen on December 27 with 510 on December 30. That completed the winter passage. For the early spring passage there were 760 on January 2 with 1,210 on January 6 and 7,400 on January 9, then 1,900 seen on January 16 with 950 on January 19. There were 3,400 on January 24 with 530 on January 26 and 31 on January 30. There were 480 on February 2 with 700 on February 6 and 18,000 on February 8, then 900 seen on February 13 with 840 on February 16. The count of 18,000 is still (2013) the highest count for Zellwood. There were 3,650 on February 20 with 1,850 on February 28 and 620 on March 2. That closed the early spring passage. For the late spring passage there were 680 on March 6 with 730 on March 10, then 685 seen on March 16 with 380 on March 18. There were 1,440 on March 20 with 1,500 on March 24, then 185 seen on March 27. There were 2,300 on March 30 with 500 on April 3, 400 on April 6, 230 on April 10 and 136 on April 14. There were 820 on April 17 with 250 on April 20, 24 on April 24 and 21 on April 26. There were 55 on April 30 with 25 on May 1 and two on May 15.

#### Herring Gull (*Larus argentatus*)

Unlike the last species this was an uncommon winter visitor and spring passage migrant. For the fall passage there were in first-winter plumage two on November 21 with one on November 23. For the winter passage there was one in first-winter plumage on December 12. Also in first-winter plumage there were two on December 16 with singles on December 19 and December 22. On December 27 there was an adult with one in first-winter plumage then two seen in first-winter plumage on December 30. There was an adult on January 2 with two in first-winter plumage on January 6 and one on January 9. That completed the winter passage. For the early spring passage there was an adult with one in first-winter plumage on January 16 then two seen in first-winter plumage on January 19. There were three in first-winter plumage with

an adult on January 24. There were singles in first-winter plumage on January 26, January 30 and February 2 with four on February 6, then one in first-winter plumage seen on February 8 and February 13. There were three in first-winter plumage with an adult on February 20 then in first-winter plumage there was one on February 23 with two on February 28. That closed the early spring passage. For the late spring passage there were three in first-winter plumage with an adult on March 2. In first-winter plumage there were two on March 6 with four on March 10, then one seen on March 13. There were three in first-winter plumage on March 16 with an adult in breeding plumage on March 20. Finally for the late spring passage there were in first-winter plumage singles on March 24 and April 6.

#### Lesser Black-backed Gull (*Larus fuscus*)

This was a vagrant. There was one in first-winter plumage on November 23. This could be either a fall or a winter record.

#### Gull-billed Tern (*Geochelidon nilotica*)

A rare passage migrant, there was one record this year that might be better placed as a summer record. For the spring passage there were singles on March 27, March 30, April 3 and April 17 with two on April 24, then one seen on April 26. That appeared to close the spring passage. There were two on May 22; this is potentially the summer record. For the early fall passage an immature flew to the north at the Sand Farm on July 20.

#### Caspian Tern (*Hydroprogne caspia*)

A winter passage and spring passage migrant; there were no large flocks this year. For the early fall passage there was an adult in breeding plumage on August 26. For the late fall passage there were two on November 10 with one on November 21. For the winter passage there were two on November 23 with seven on November 28 and 14 on December 1, then two seen on December 7. There were four on December 12 with 22 on December 22, then two seen to January 6. That completed the winter passage. For the early spring passage there was one on January 24 with two on February 2, then singles seen on February 20 and February 23. There were four on February 28 with one on March 2. That closed the early spring passage. For the main spring passage there were two on March 6 with 16 on March 13, then 12 seen on March 18 with five on March 20. There were 16 on March 24 with six on March 27 and five on March 30. There were six from April 3 to April 14 with eight on April 17, 13 on April 20 and 19 on April

26, then 13 seen on April 30 with seven on May 1 and singles on May 22 and June 5. That was the main spring passage; there were no later records

#### Royal Tern (*Thalasseus maxima*)

This was a vagrant. For the winter passage there was one on November 28 (see Sandwich Tern) with for the early spring passage one on February 2.

#### Sandwich Tern (*Thalasseus sandvicensis*)

This was a vagrant. There was one for the winter passage on November 28 (see Royal Tern). For the spring passage there was one on April 6 and April 10.

#### Common Tern (*Sterna hirundo*)

A near vagrant; there were four sightings this year. For the late fall passage there were two on November 14 with one on November 23. For the late spring passage there was an adult in breeding plumage on April 20 and April 30. It is likely that just three birds involved in the above.

#### Forster's Tern (*Sterna forsteri*)

A passage migrant and winter visitor; there were no large wind driven flocks this year. For the early fall passage there were ten on September 12 with one on September 22. Finally for this passage there were two on September 28. For the main fall passage there were eight on November 7 with 29 on November 10, then 14 seen on November 14 with 13 on November 21 and six to November 28. That was the main fall passage. For the winter passage there were 14 on December 1 with two on December 5. There were eight on December 7 with 15 on December 12 and December 16, then six seen on December 19. On December 16 one was an adult in winter plumage. There were eight on December 22 with 11 on December 27, then six seen on December 30. There were ten on January 2 with 11 on January 6 and 38 on January 9, then seven seen on January 16. That completed the winter passage. For the early spring passage there were 24 on January 19 with one on January 24. There were five on January 26 and January 30 with 26 on February 2, then 18 seen to February 13 with three on February 16. There were 14 on February 20 with 35 on February 23, then 17 seen on March 2 with eight on

March 6. That closed the early spring passage. For the late spring passage there were 23 on March 10 with 11 on March 13 and seven on March 16. There were 12 on March 18 with nine on March 20, eight on March 24, seven on March 27 and six on March 30. There were 14 on April 3 with nine to April 10 and seven on April 14. There were 17 on April 17 with six on April 20 and two on April 24. There were four on April 26 with seven on April 30, then one seen on May 1. That was the late spring passage. There were no summer sightings. For the early fall passage there was one on July 31.

#### Least Tern (*Sternula antillarum*)

An uncommon passage migrant this year; there were no summer sightings. For the early fall passage there was an immature on August 16. For the spring passage there were three on April 6 with five on April 17, then singles seen on April 20 and April 30. That was the spring passage. For the early fall passage there was one on June 26 with four on July 1 and July 3, then one seen on July 6. There were no later records.

#### Black Tern (*Chlidonias niger*)

There was a very limited fall passage with a single record for the spring passage. For the early fall passage there were seven on August 16 with later three on September 16. There were also ten on September 28. That was the early fall passage. For the spring passage there were three on April 30.

#### Sooty Tern (*Onychoprion fuscata*)

This was a vagrant. There was an adult at Lake Apopka on June 12; this was compliments of Tropical Storm Arlene. This was the first record for Zellwood.

#### Rock Pigeon (*Columba livia*)

A rare visitor; for the late fall passage there were singles on November 14 and November 28. For the early spring passage there was also one on January 6. For the early fall passage there was a party of ten at the Sand Farm on July 20.

### Eurasian Collared-Dove (*Streptopelia decaocto*)

A resident that was only seen in low numbers this year; there will have been one or more pairs nesting on the northern border. Early fall records: *there were two on June 28 and July 4 with four on July 7 and five on July 14, then three seen on July 18 with two on July 21 and one on July 24. There were two on July 29 with three on August 1, then two seen on August 9 with one on August 11.* For this year there were three on August 16 with singles to August 22. There were three on August 26 and August 29 with singles to September 12. There were six on September 16 with four on September 19 and singles to September 28. That was the early fall "passage". For the late fall "passage" there were three on October 3 and October 6 with six on October 13, then three seen to October 21 with two on October 24 and one on October 27. From October 31 to January 2 up to two a day seen there was a higher count of three on December 1. This means that there was no "passage" in November and for the whole of the winter "passage". For the early spring "passage" there were three on January 6 with five on January 16 and seven on January 19, then six seen on January 26 with two on January 30. There were eight on February 2 with five on February 8, three on February 13 and singles to March 2. That closed the early spring "passage". The contrast between this passage and that of the winter "passage" is very striking. For the late spring "passage" there were two on March 6 and March 13 with three to March 20 and four on March 24, then two seen to April 3. There were four on April 6 with three on April 10 and singles to April 17. There were six on April 20 with four on April 26, then one seen on April 30. That concluded the late spring "passage". For the summer "passage" there were two on May 15 and May 22. There were four on May 29 and June 5 with three on June 19 and one on June 26. That was the summer "passage". For the early fall "passage" there were two on July 1 with four from July 3 to July 11, then six seen on July 17 and July 23 with three on July 31 and two on August 3. There were four on August 7, August 10 *and August 15 with five on August 21 and seven on August 25, then five seen on August 31 with three to September 19.*

### White-winged Dove (*Zenaida asiatica*)

Just a passage migrant this year, there were no summer or winter records. Early fall records: *there were three on June 20 with six on June 28 and seven on July 7, then one seen on July 18. There were two on July 24 with later one on August 11.* For this year there was one flying to the south-east on August 19. On August 22 one flew to the south-east with 18 flying to the north-west. Flying to the east were five on September 1 with two on September 16. That was the end of the early fall passage. For the early spring passage there were two on January 2. For the main spring passage there were two on March 16. Later there was one on April 30 with two on May 1. That closed the main spring passage. For the early fall passage there was one on July 6 with two on July 20 and four on July 23, then three seen on August 3.

Mourning Dove (*Zenaida macroura*)

A resident that bred in small numbers in the wooded borders; there was only a minor post-breeding gathering this year. Early fall records: *for the post-breeding gathering there were 175 on May 20 with 106 on May 23 and 82 on May 26. There were 167 on May 30 with 143 on June 6 and 101 on June 9. There were 185 on June 13 with 205 on June 16, then 97 seen on June 20. There were 113 on June 23 with 390 on June 28, then 85 seen on July 2. There were 290 on July 4 with 370 on July 7 and 435 on July 14, then 415 seen on July 18 with 310 on July 24 and 195 on July 29. There were 335 on August 1 with 125 on August 4, 52 on August 11 and 38 on August 15. That ended the post-breeding gathering. For the early fall passage there were 85 on August 16 with 150 on August 22 and 185 on August 26, then 122 seen on August 29 with 34 on September 1. There were 42 on September 9 with 178 on September 12, then 28 seen on September 16 with 21 on September 19 and ten on September 22. That was the early fall passage. For the late fall passage there were 12 on September 28 with 103 on October 3, then 94 seen on October 11 with 21 on October 17, 15 to October 27 and seven on October 31. There were ten on November 3 with 32 on November 7, then 14 seen on November 10. There were 21 on November 14 with 51 on November 17, then six seen on November 21. That closed the late fall passage. For the winter passage there were 19 on November 23 with 20 on November 28 and 26 on December 1, then 18 seen on December 5 with 12 on December 7. There were 15 on December 12 with 18 on December 16, then 15 seen on December 19 with five on December 22. There were seven on December 27 with 25 on December 30, 28 to January 9 and 34 on January 16, then five seen on January 19. That completed the winter passage. For the early spring passage there were 13 on January 24 with eight on January 26. There were ten on January 30 with 23 on February 2, then 14 seen to February 8 with 13 on February 13. There were 16 on February 16 with 19 on February 23, then 14 seen on February 28 with nine on March 2. That was the early spring passage. For the main spring passage there were 34 on March 6 with 35 on March 13, 45 on March 16 and 53 on March 18, then 36 seen on March 20. There were 50 on March 24 with 52 on March 27 and 132 on March 30, then 41 seen on April 3 with 26 on April 6. There were 100 on April 10 with 115 on April 14, then 90 seen on April 17 with 87 on April 20 and ten on April 24. That closed the main spring passage. For the summer passage there were 117 on April 26 with 78 on April 30, 21 on May 1 and 16 on May 15. There were 26 on May 22 with 32 on May 29, 41 on June 12, 75 on June 26, 90 on July 1 and 143 on July 3, then 95 seen on July 6. That was the end of the summer passage. The post-breeding gathering started very late this year there were 110 on July 11 with 160 on July 14, 320 on July 17 and 360 on July 23, then 215 seen on July 28 with 200 on July 31 and 153 on August 3. There were 178 on August 7 with 230 on August 10, *then 180 seen on August 15 with 82 on August 17 and 65 on August 21. There were 95 on August 25 with 220 on August 28, then 55 seen on August 31 with 41 on September 4. That was the much shortened post-breeding gathering.**

### Common Ground-Dove (*Columbina passerina*)

A resident that becomes very hard to locate in the colder months. Early fall records: *there were 32 on June 28 with 34 on July 2 and 52 on July 4, then 34 seen on July 11 with 24 on July 14. There were 43 on July 18 with 47 on July 21 and 55 on July 24, then 51 seen on August 1 with 29 on August 4, 25 on August 9, 15 on August 11 and five on August 15. There were 14 on August 16 with 16 on August 19 and 17 on August 22, then ten seen to August 29. There were 15 on September 1 with 12 on September 12, 11 on September 16, three on September 19 and one on September 22. That was the early fall passage. For the late fall passage there were four on September 28 with nine on October 3, then four seen on October 6. There were six on October 11 with nine on October 13 and October 17, then three seen on October 21. There were six on October 24 and October 27 with three on October 31, two to November 7 and one on November 10. There were two on November 14 with seven on November 17, then one seen on November 23. That closed the late fall passage. For the winter passage there were three on November 28 with four on December 1, then two seen on December 5 with one on December 7. There were four on December 12 with seven on December 19 and eight on December 22, then two seen on December 27. There were five on December 30 and January 2 with 13 on January 6, then seven seen on January 9 with three on January 16. That completed the winter passage. For the early spring passage there were five on January 19 with three on January 24. There were four on January 26 with seven on January 30, then four seen on February 6 with three to February 13. There were six on February 16 and February 20 with 12 on February 23, then nine seen to March 2. That concluded the early spring passage. For the main spring passage there were ten on March 6 and March 10 with 15 on March 13, then nine seen on March 18 with six on March 20. There were 21 on March 24 with ten on March 30 and nine on April 3. There were 14 on April 6 with 11 on April 10. There were 14 on April 14 with 36 on April 20, then 31 seen on April 26 with 28 on April 30 and eight on May 1. That was the main spring passage. For the summer passage there were 30 on May 15 with 40 on May 22, 43 on May 29 and 63 on June 5, then 50 seen on June 12 with 29 on June 19. That was the end of the summer passage so for the early fall passage there were 53 on June 26 with 60 on July 3, then 53 seen on July 11 with 36 on July 17, 24 on July 23, 18 on July 31 and nine on August 3. There were 11 on August 7 with 17 on August 10, then 15 seen on August 15 with 11 on August 17.*

### Cockatiel (*Nymphicus hollandicus*)

This was an escaped cage bird; as usual it was beside Lake Apopka. In Australia this species can be found in trees by water. There was one by Lake Apopka to the south of the Hooper Farms Road extension on March 30.

### Black-billed Cuckoo (*Coccyzus erythrophthalmus*)

This was a vagrant. For the late fall passage there was an immature at the Sand Farm on October 21.

### Yellow-billed Cuckoo (*Coccyzus americanus*)

An uncommon passage migrant and summer visitor; I have no information on the number of pairs. Early fall records: *there were 16 on May 30 and June 2 with 12 on June 9, ten on June 16, nine on June 23, eight on June 28, seven to July 7, four on July 11, three on July 14 and two on July 18. Whilst this records the gradual cessation of calling it may also indicate the departure of the local breeding population so where did the early fall passage start? There were four from July 21 to July 29 with six on August 4, then three seen to August 11 with one on August 15. There were four on August 16 with two on August 22 and singles to September 1. That was the extent of the early fall passage. For the late fall passage there was one on September 28 with two on October 3, then singles seen to October 11. There were three on October 17 with two on October 21 and singles to October 31. Finally for the late fall passage there were two on November 3 with one on November 7. For the spring passage there were singles on April 20 and April 24 with two on April 26, six on April 30, then two seen on May 1. That finished the spring passage. For the summer passage there were 14 on May 15 with 13 on May 29, 11 on June 5, seven on June 12 and six on June 19. There were seven on June 26 with five on July 1. That concluded the summer passage. For the early fall passage there were six on July 3 with nine on July 6 and July 11, then four seen on July 14 with three on July 17, two on July 20 and singles to August 3. There were two on August 7 with three on August 10, then two seen on August 15 with singles to August 21.*

### Groove-billed Ani (*Crotophaga sulcirostris*)

This was a vagrant, well it was meant to be. For the winter passage there was one initially by the Lake Level Canal on December 27, January 2, January 6 and January 9. This individual continued to be seen there into the early spring passage. It was seen by the canal on January 19, January 26 and January 30. On the latter date there were also four by the Lust Road gate. There were no more sightings from the Lake Level canal but the party of four was seen again by the Lust Road gate on February 2. On February 6 this party had grown to six but the Anis were being pushed by birders trying to get better views of them. That was unfortunate as they were not seen again. The count of six is still (2013) the highest count for Zellwood.

### Barn Owl (*Tyto alba*)

A resident with a strong population as the District put up nest boxes when the derelict buildings were removed. Early fall records: *there were eight on June 28 with six on July 2, five on July 4 and one on July 11. There were two on July 14 with three on July 18, four on July 24 and five on August 1, then four seen on August 9 with two on August 11.* There were five on August 16 with one on August 19. There were three on August 22 with four on August 26, then singles seen to September 1. There were two on September 9 with seven on September 12, then five seen on September 16 with one on September 19. There were five on September 22 with six on September 28, then four seen on October 3 with three on October 6 and two to October 13. There were four on October 17 with six on October 24, then two seen on October 27 with one to November 3. There were six on November 7 with four on November 10 and one on November 14. There were two on November 17 with four on November 21 and six on November 23, then five seen on November 28 with four on December 1, two on December 5 and one on December 7. That was the fall passage. For the winter passage there were three on December 12 with four from December 16 to December 22, then three seen on December 27 with one on December 30. There were four on January 2 with five on January 6, then four seen on January 9 with two on January 16. That completed the winter passage. For the early spring passage there were two on January 19 and January 26 with six on January 30, then four seen to February 8 with three to February 16. There were four on February 20 with six on February 23, then five seen on February 28 with three on March 2 and two on March 6. That concluded the early spring passage. For the main spring passage there were three on March 10 and March 13 with five on March 16 and eight on March 18, then four seen to April 3. There were six on April 6 with four to April 14. There were five on April 17 with four on April 20 and three on April 24. That was the main spring passage. For the summer passage there were five on April 26 with six on April 30, then one seen on May 15. There were six on May 22 with two to June 5. There were four on June 12 with seven on June 19, then two seen to July 11. That was the summer passage. For the early fall passage there were four on July 14 with eight on July 20 and July 23, then four seen to July 31. There were eight on August 3 with six to August 10, *four on August 15 and two on August 17.* Whilst this species is meant to be resident there were still the influxes.

### Eastern Screech-Owl (*Otus asio*)

As I do not use recordings this was a totally under-recorded species. At the Nursery I heard singles on September 9, September 28 and March 13. Those were the only records.

### Great Horned Owl (*Bubo virginianus*)

They were heard or seen in the major pieces of woodland, normally only one to two a day noted. There were higher counts of three on December 12, five on January 24, ten on January 30, three on February 20, three on March 13, three on April 10 and three on April 14. The count of ten is still (2013) the highest count for Zellwood.

### Barred Owl (*Strix varia*)

Present in the larger pieces of woodland; however not as vocal as the last species again one to two noted regularly with higher counts of four on December 5, four on January 6, three on February 20, seven on March 13, five on March 20, three on April 14 and four on April 24.

### Short-eared Owl (*Asio flammeus*)

A better passage than normal, there was an especially strong winter passage. For the fall passage there were singles on November 7, November 10, November 17, November 21 and November 28. For the winter passage there was one on December 16 with four on December 19 and December 22, then two seen on December 27. There were three on December 30 with four on January 2, six on January 6 and seven on January 9, then singles seen to January 19. On January 6 at least four were heard calling. The count of seven was the highest count for Zellwood but the highest count is now (2013) that of nine on December 29, 2006. That was the end of the winter passage. For the early spring passage there were six on January 24 with three to January 30 and two on February 2. There were four on February 6 and February 8 with two to February 20 and one on February 23. There were two on February 28 and March 2 with one on March 6. That closed the early spring passage. For the late spring passage there two on March 10 and March 16 with singles to April 6.

### Lesser Nighthawk (*Chordeiles acutipennis*)

This was a vagrant. For the winter passage there was one on December 5 at dusk by Lake Apopka at the end of the Laughlin Road extension.

### Common Nighthawk (*Chordeiles minor*)

An uncommon passage migrant and summer visitor, there were three pairs on the northern border with single pairs by Interceptor Road and at the Sand Farm. Early fall records: *there were three on July 4 with later one on July 18 and three on July 24, then singles seen on July 29, August 1 and August 4.* For this year there were three on August 16 with eight on September 12 and 13 on September 16, then singles seen on September 19 and September 22. There were no later records. For the spring passage there were four on April 20 with ten on April 26, 11 on April 30 and 12 on May 1, then five seen on May 15 with three on May 22. That was the end of the spring passage. For the summer passage there were seven on May 29 with one on June 5. There were three on June 12 with nine on June 26, then five seen on July 3 with four on July 6 and two on July 11. There were five on July 14 with two on July 20 and singles to July 28. That concluded the summer passage so for the early fall passage there were two on July 31 with singles on August 3 and August 7.

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

A summer visitor; the greatest numbers were along the northern border by Canal Road. It is possible that there were nine pairs along the northern border. There were no early fall records from the previous survey year. For this year there was one at the Nursery on August 19. There were no further sightings until the spring. For the spring passage there were singles on March 20, March 24 and March 27 with 13 on March 30, then nine seen on April 6 with six on April 10 and four to April 17. There were eight on April 20 with nine on April 24, then three seen on April 26. That was the spring passage. For the summer passage there were four on April 30 with nine on May 15, then two seen on May 22. There were three on May 29 with six on June 5, then five seen on June 12 with four on June 19. There were nine on June 26 with one on July 1. There were no later records.

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

An uncommon passage migrant and winter visitor; most were from the Sand Farm or the northern border. For the fall passage there were singles on September 16, September 28 and October 6 with two on October 11, then singles seen on October 13 and October 21. There were no November sightings. That was the fall passage. For the winter passage there were singles on December 5, December 7, December 12, December 16, December 22, December 30 and January 2 with two on January 6. That completed the winter passage. For the early spring passage there were singles on January 19, January 24, January 30 and February 2. For the late

spring passage there were singles on March 20 and March 27 with two on March 30 and April 3, then one seen on April 6.

#### Chimney Swift (*Chaetura pelagica*)

A non-breeding summer visitor although it will have bred in the township of Zellwood; it was also a passage migrant in small numbers with the exception of a one day major influx. Early fall records: *there were three on July 2 and July 4 with six on July 7, 16 to July 14 and 37 on July 18, then 30 seen on July 21 with three on July 24. There were 20 on July 29 with 23 on August 1, then 22 seen on August 4 with six on August 9. There were 45 on August 11 with five on August 19 and two on August 22. There were ten on August 26 with 58 on August 29, then 12 seen on September 1 with five on September 9 and three on September 12. There were 34 on September 16 and September 19 with 15 on September 28 and nine on October 3. That was the early fall passage. For the main fall passage there were 34 on October 6 with 6,800 on October 11, then 12 seen on October 13 with nine on October 17. The count of 6,800 was the highest count for Zellwood but the highest count is now (2013) that of 8,100 on September 24, 2008. There were 14 on October 21 with two on October 31. That closed the main fall passage. There were no further sightings until the spring. For the spring passage there were two on March 27 with four on April 3, then three seen to April 10. There were four on April 14 with 16 on April 20, then 14 seen on April 24 with 12 on April 26, four on April 30 and one on May 1. There were 11 on May 15 with five on May 22. That closed the spring passage. For the summer passage there were six on May 29 and June 12 with five on June 19 and four on June 26. That ended the summer passage. For the early fall passage there were 11 on July 1 with 13 on July 3, then two seen on July 6. There were eight on July 14 with 16 on July 17 and 46 on July 23, then two seen to July 31 with one on August 3. There were 34 on August 7 with 100 on August 15, 125 on August 17 and 785 on August 25, then 140 seen on August 28 with eight on August 31 and three on September 4.*

#### Ruby-throated Hummingbird (*Archilochus colubris*)

A very rare passage migrant, this species stayed away from open areas. Early fall record: *there was one at the Sand Farm on June 23.* For the fall passage there was one at the Sand Farm on August 22 with one at the Nursery on September 9. For the spring passage there was one at the Nursery on March 24. There were no later records.

### Belted Kingfisher (*Megaceryle alcyon*)

A common late fall and winter passage migrant with smaller numbers at other seasons, there were no summer sightings. Early fall records: *there was one on July 4 with two on July 21 and three on August 4, then singles seen to August 11.* For this year there was one on August 15 with two on August 16 and August 26, then singles seen to September 8. There were three on September 9 with singles to September 16. There were two on September 19 and September 22 with one on September 28. That was the early fall passage. For the main fall passage there were two on October 6 with three on October 13, five on October 17, six on October 21, seven on October 24, eight on October 27, 21 on October 31 and 24 on November 3, then 12 seen on November 7. The count of 24 was the highest count for Zellwood but the highest count is now (2013) that of 45 on November 1, 2009. Note the closeness in the dates. There were 13 on November 10 with 19 on November 14, then 17 seen on November 17 with 14 to November 28 and 11 to December 5. That closed the main fall passage. For the winter passage there were 15 on December 7 with nine on December 12, eight to December 19 and five to December 27. There were six on December 30 with eight to January 6 and ten on January 9, then eight seen on January 16 with seven on January 19. That completed the winter passage. For the early spring passage there were 12 on January 24 with five on January 26. There were seven on January 30 with nine on February 2 and ten on February 6, then eight seen on February 8 with six to February 20 and one on February 23. That concluded the early spring passage. For the late spring passage there were nine on February 28 with six on March 2, five on March 6 and four on March 10. There were six on March 13 and March 16 with ten on March 18, then six seen on March 20. There were eight on March 24 with ten on March 27, then nine seen on March 30 with three on April 3 and singles to April 14. There were two on April 20 with one on April 24. That concluded the late spring passage. There were no summer sightings. For the early fall passage there were two on July 20 with three on July 23 and July 31. There were no further sightings to the end of the survey year.

### Red-headed Woodpecker (*Melanerpes erythrocephalus*)

This was a rare fall migrant. For the early fall passage there was a juvenile at the Sand Farm on September 1 with two juveniles there on September 12. Finally two adults flew to the west at the Sand Farm on September 28.

### Red-bellied Woodpecker (*Melanerpes carolinus*)

A resident in the wooded borders but it can turn up anywhere, there was little to suggest a fall passage this year. Early fall records: *there were 18 on July 14 with 16 on July 21*

and nine to July 29. There were 13 on August 1 with 17 on August 4, then 11 seen on August 9. There were 14 on August 11 with 15 on August 16 and 19 on August 19, then 18 seen to September 1 with 15 on September 9. There were 20 on September 12 and September 16 with 23 on September 22 and 32 on October 3, then 27 seen on October 11 with 13 on October 13. There were 20 on October 17 with 23 on October 21, then 19 seen on October 27 with 18 on November 3, 12 on November 7 and nine on November 10. There were 20 on November 14 with 17 on November 17, 12 to November 28 and eight on December 1. That closed the fall passage. For the winter passage there were 16 on December 5 with 19 on December 7, then 16 seen on December 12 with 13 on December 16 and 11 on December 19. There were 19 on December 22 with 21 on December 30 and 25 on January 6, then 24 seen on January 9 with 19 on January 16 and 17 on January 19. That completed the winter passage. For the early spring passage there were 20 on January 24 and January 26 with 26 on February 2, then 18 seen on February 8 with 16 on February 13, 14 on February 16 and seven on February 20. There were 19 on February 23 with 12 on March 2 and 11 on March 6. That concluded the early spring passage. For the late spring passage there were 13 on March 10 with 16 on March 13 and 23 on March 16, then 19 seen on March 20. There were 21 on March 24 with 23 on March 30, then 12 seen on April 3. There were 21 on April 6 with 28 on April 10, then 27 seen on April 14 with 24 on April 20, 20 on April 26, 19 on April 30 and four on May 1. That was the late spring passage. For the summer passage there were 20 on May 15 with 19 on May 22, 16 on May 29, 15 on June 5 and 13 on June 12. There were 14 on June 19 with 22 on June 26, then 12 seen on July 3 with ten on July 6. That ended the summer passage. For the fall passage there were 15 on July 11 with 18 on July 14, then 15 seen on July 17 with ten on July 20, eight to July 31 and seven on August 3. There were 13 on August 7 with 14 on August 10, 18 on August 15 and 29 on August 21, then 19 seen on August 25.

#### Yellow-bellied Sapsucker (*Sphyrapicus varius*)

A passage migrant and winter visitor; numbers were low this year but sightings were now much more frequent with access to the Nursery. For the fall passage there was one on September 28. Later there was one on October 13 with six on October 17, then four seen on October 24 with two to October 31. The count of six was the highest count for Zellwood but the highest count is now (2013) that of ten on December 13, 2006. There were four on November 3 with two to November 10 and singles to November 28. That was the fall passage. For the winter passage there were two on December 1 with one on December 7. There were two on December 12 with three on December 16, then two seen on December 19 with singles to January 16. That completed the winter passage. For the early spring passage there was one on January 19 with three on January 24 and January 26, then singles seen to February 6. There were also singles on February 23 and February 28. That closed the early spring passage. For the

late spring passage there were two on March 2 with singles to March 16. Finally for the late spring passage there were two on March 18 with one on March 27.

#### Downy Woodpecker (*Picoides pubescens*)

A widespread resident in the wooded borders, they can turn up anywhere; there was a significant fall passage this year. Early fall records: *there were three on July 11 with five to July 21 and ten on July 24, then nine seen on July 29 with five on August 4 and three on August 9. There were eight on August 11 with one on August 15. There were three on August 16 with ten on August 19, then four seen on August 22. There were six on August 26 with eight on August 29, ten to September 12 and 11 on September 16, then ten seen on September 19 with nine on September 22. That was the early fall passage. For the main fall passage there were 17 on September 28 with 33 on October 3, then 19 seen on October 11 with 17 on October 17, 15 on October 21, 14 on October 27, seven on October 31, six on November 7 and two on November 10. The count of 33 was the highest count for Zellwood but the highest count is now (2013) that of 49 on March 28, 2007. There were four on November 14 with 12 on November 17, then five seen on November 23 with four on November 28. That closed the main fall passage. For the winter passage there were five on December 1 with four to December 7 and two on December 12. There were four on December 16 with five from December 19 to December 27, then four seen on December 30 with three on January 2. There were four on January 6 with eight on January 9, then four seen on January 16. That completed the winter passage. For the early spring passage there were five on January 19 with six to January 30 and seven on February 2, then two seen on February 6. There were six on February 8 with eight on February 13 and nine on February 16, then four seen on February 20 with three on February 28 and two on March 2. That concluded the early spring passage. For the main spring passage there were four on March 6 with 13 on March 10, then 11 seen on March 16 with ten on March 20, six on March 27, four to April 3 and three on April 6. There were seven on April 10 and April 14 with six on April 20 and two on April 24. There were four on April 26 with six on April 30, then one seen on May 1. That was the end of the main spring passage. For the summer passage there were seven on May 15 with four on May 29, three on June 5 and one on June 12. There were nine on June 19 with seven on July 1, three on July 6 and two to July 14. That was the summer passage. For the early fall passage there were four on July 17 with three on July 23 and two on July 28. There were five on July 31 and August 3 with six on August 10, *seven on August 15, 11 on August 17, then eight seen on August 21.**

Hairy Woodpecker (*Picoides villosus*)

This was a vagrant. For the early spring passage there was one on the northern border on January 16.

Northern Flicker (*Colaptes auratus*)

A resident in the larger pieces of woodland; normally one to three a day seen but there were higher counts of four on December 16, six on February 6, six on February 8, four on March 2, four on March 16, four on March 18, four on April 20 and four on May 1. There is nothing to suggest a pattern of influxes for this species.

Pileated Woodpecker (*Dryocopus pileatus*)

Another resident of the larger pieces of woodland there was a pattern of influxes for part of the fall passage. Early fall records: *there was one on July 2 with two on July 4 and July 7, then singles seen to July 18. There were two on July 21 and July 24 with three on July 29, then singles seen to August 4. There were two on August 9 and August 11 with singles to August 19;* now the pattern changed as there were two on August 22 with six on August 29, then singles seen to September 9. There were five on September 12 with eight on September 16 and nine on September 22, then three seen to October 6 with two on October 11. There were three on October 13 and October 17 with two on October 21 and one on October 24. There were five on October 27 with two on October 31 and one on November 3. That was the end of the influxes. From November 7 to August 10 up to three a day seen there were higher counts of four on January 9, four on April 30, four on August 3 and five on August 7.

Olive-sided Flycatcher (*Contopus cooperi*)

This was a vagrant. There was one by Airport Road on April 20. This was the first record for Zellwood. A description is in Appendix B.

Eastern Wood-Pewee (*Contopus virens*)

An uncommon fall passage migrant; all the sightings were at the Nursery. For the fall passage there was one on August 22 with two on August 29, then singles seen on September

28, October 3, October 6 and October 11. There were two on October 13 with singles on October 17 and October 24.

#### Yellow-bellied Flycatcher (*Empidonax flaviventris*)

This was a vagrant. There was one in first-winter plumage at the Nursery from October 11 to October 24. As an adult it was also seen on October 8, 2005, September 27, 2006 and from September 30 to October 5, 2007. All the sightings came from the same small part of this woodland. There is a description in Appendix B.

#### Acadian Flycatcher (*Empidonax virescens*)

An uncommon fall passage migrant; there was a single record for the spring passage. Early fall record: *there were two by Lust Road gate on August 11*. For this year there were singles at the Nursery on August 16, August 19, August 22 and August 26. There was also one at the Sand Farm on August 26 and August 29. That was the early fall passage. For the late fall passage there was one at the Nursery on October 13 and October 17. There were no later fall records. For the spring passage there was one at the Nursery on May 1.

#### Willow Flycatcher (*Empidonax traillii*)

This was a vagrant. There was an adult calling at the Sand Farm on August 22.

#### Least Flycatcher (*Empidonax minimus*)

A quite common passage migrant and winter visitor, now that is saying something! At the Sand Farm there was one on August 29 with later one there from September 12 to September 22 with two on September 28, three on October 3 and four on October 11, then three seen on October 17 with two to October 27 and one on October 31. During this period there was one at the eastern end of the McDonald Canal on October 21. Again at the Sand Farm there were two on November 3 and November 7 with one to December 1. I am stating that there was just one present during the above period but even though I only located one per day there may have been more present. There was also one by Lake Apopka to the west of the Laughlin Road extension on November 17. That closed the fall passage. At a minimum I believe that eight birds were recorded during the fall. For the winter passage there were two at the

Sand Farm on December 5 with four there on December 7, then three seen on December 16 with one on December 19. During this period there was one by the Lust Road gate on December 7 with another at the Nursery on December 12. There were four at the Sand Farm on December 22 with five to January 2 and six on January 6, then two seen on January 9 with one on January 16. During this period there was one at the Sod Farm on December 30. There were also two by the Lust Road gate on January 6 with one to January 16. That completed the winter passage. I believe a minimum of 13 seen during this event. For the early spring passage there were three at the Sand Farm from January 19 to February 8 with two on February 13 and one on February 16. Later there was one there on February 23. During this period there was one at the Sod Farm on January 19 with two there on January 24, then one seen on January 30. At the eastern end of Lust Road i.e. the gate there was one on January 19 with two on January 24 and February 2, then one seen on February 6. There were also two by the Lust Road gate on February 20 with one there on February 23. There were two at the western end of Lust Road on January 19. There was one by the Lake Level Canal on January 26 and January 30. Later there was one by the canal on February 13. That ends the early spring passage. I estimated 11 birds for that passage. For the late spring passage there were two at the Sand Farm on March 18 with one on March 20. There was one by Lake Apopka to the north of the Lust Road pump house from March 10 to March 18 with two there on March 13. There were two by the Lust Road gate on March 16 and March 18. Finally there was a late individual by the Lust Road gate on April 14. That closed the late spring passage. I estimated seven birds for that event. This comes to a total of 39 birds; a good year.

#### Eastern Phoebe (*Sayornis phoebe*)

A common fall passage migrant, there were smaller numbers for the winter and the spring passages. For the fall passage there were singles on September 19 and September 22 with 11 on October 6, 20 on October 11, 21 on October 13, 85 on October 17, 223 on October 24 and 264 on October 27, then 215 seen on October 31 with 210 on November 7 and 117 on November 10. There were 206 on November 14 with 237 on November 17, then 161 seen on November 23 with 157 on November 28 and 112 on December 1. That closed the fall passage. For the winter passage there were 114 on December 5 with 136 on December 7, then 108 seen on December 12 with 94 on December 16, 92 on December 19, 78 on December 27 and 58 on December 30. There were 84 on January 2 with 78 on January 6 and 63 on January 9. That completed the winter passage. For the early spring passage there were 87 on January 16 with 90 on January 24, then 72 seen on January 26. There were 73 on January 30 with 81 on February 2, then 53 seen on February 6 with 50 on February 8, 46 on February 16 and 39 on February 20. That was the end of the early spring passage. For the late spring passage there were 47 on February 23 with 66 on March 2 and 81 on March 6, then 59 seen on March 13 with

49 on March 16. There were 71 on March 18 with 56 on March 20, 24 on March 24, ten on March 30 and one on April 3.

#### Vermillion Flycatcher (*Pyrocephalus rubinus*)

This was a vagrant. For the late fall passage there was an immature male at the eastern end of the McDonald Canal on October 21. Later there was an immature female near the Hooper Farms Road gate on November 3 and November 17. Whilst there were three visits to that location between those two dates I am assuming that just one bird involved.

#### Ash-throated Flycatcher (*Myiarchus cinerascens*)

A not so common passage migrant and winter visitor this year, most sightings were from the Sand Farm and the Lust Road gate areas. For the fall passage there was one at the Lust Road gate from November 14 to November 28. For the winter passage there were two there on December 1 with singles there to December 16. There were two by the Lust Road gate on December 30 with singles there to January 6. There was also one at the Sand Farm on December 7. Later there was one at the Sand Farm on December 22 and December 27 with two there on December 30 and January 2, then one seen to January 9. There was one on the southern border on December 12. There was also one north of the Lust Road pump house from December 16 to December 27. That completed the winter passage. So the totals now stand at one for the fall and eight for the winter. For the early spring passage there was one by the Lust Road gate from February 2 to February 13. There was also one at the Sand Farm on February 16. There was another at the Sand Farm on March 6. That ended the early spring passage. There were just three birds for this passage. For the main spring passage on March 13 there were singles on the eastern border north of the McDonald Canal and by Lake Apopka to the south of the Hooper Farms Road extension. There was one at the Sand Farm from March 20 to March 30 with one on the southern border on March 20. On March 30 to complete the picture there were singles at the eastern end of the McDonald Canal and by Hooper Farms Road gate. There were six individuals seen during this passage so for the year a minimum of 18 individuals seen.

#### Great Crested Flycatcher (*Myiarchus crinitus*)

A summer visitor to the wooded borders; there is little to suggest actual passage. Early fall records: *there were four on June 28 with five on July 4, then four seen on July 7 with two on*

*July 11 and one on July 14. There were five on July 21 and July 24 with four on July 29, three on August 1 and singles to August 11. For this year there were three on August 16 with five on August 19, then three seen to August 29 with singles to September 12. Later there were singles on September 28 and October 3. There were no further sightings until the spring. For the spring passage there were singles on March 20, March 30, April 3 and April 6 with three on April 10, ten on April 14 and 11 from April 17 to April 26, then nine seen on April 30 with six on May 1. That was the spring passage. For the summer passage there were eight on May 15 with two to June 5 and one on June 12. There were two on June 19 with three on June 26 and five on July 1, then three seen on July 6 with singles to July 20. That closed the summer passage. For the early fall passage there were three on July 23 with four on July 28, then three seen on August 3 with one on August 7. There were four on August 10 and August 15 with two on August 17 and singles to August 22.*

#### Brown-crested Flycatcher (*Myiarchus tyrannulus*)

This was a vagrant. For the winter passage there was one by Lake Apopka at the end of the Laughlin Road extension on December 16, December 19 and January 9. For the early spring passage there was one near the Lust Road gate on February 23.

#### Cassin's Kingbird (*Tyrannus vociferans*)

This was a vagrant. For the winter passage there was one by Hooper Farms Road on December 1 with two there from December 7 to January 9, then one seen on January 19. There were bird(s) present at this site in four winters from December 1 (2004) to March 28 (2004).

#### Western Kingbird (*Tyrannus verticalis*)

A passage migrant and winter visitor; the greatest numbers were seen during the winter. For the fall passage there were singles on October 27, November 3 and November 7 with nine on November 10, then five seen on November 14 with four to November 21 and three on November 23. That was the fall passage. For the winter passage there were ten on November 28 with 15 on December 1, 21 on December 7 and 27 on December 12, then nine seen on December 16 with seven on December 19. There were 13 on December 22 with 15 on December 27, 18 on December 30 and 22 on January 6, then 17 seen on January 9 with three on January 16. That completed the winter passage. For the early spring passage there were six on January 19 with four on January 24 and two on January 26. There were four on January 30

and February 8 with five on February 16 and six on February 23, then one seen on February 28. That ended the early spring passage. For the main spring passage there were three on March 6 with eight on March 13 and 17 on March 16, then one seen on March 18. There were four on March 20 with nine on March 24, then three seen to March 30 with two to April 10 and one on April 14.

#### Eastern Kingbird (*Tyrannus tyrannus*)

A passage migrant; there was no evidence that it bred this year. Early fall records: *there were two on June 28 with singles on July 2, July 4, July 11 and July 21.* For this year a total of 28 flew to the south on August 16 with in the area seven on August 26 and three on August 29. A total of 44 flew to the south on September 1 with ten likewise on September 8. All the later sightings relate to birds off passage. There were nine on September 12 with singles to September 22. Finally for the early fall passage there were five on September 28. For the spring passage there were singles on March 18, March 24 and April 3 with two to April 14 and eight on April 17, then three seen on April 20 with one on April 24. There were seven on April 26 with 22 on May 1. That finished the spring passage. For the summer passage there were five on May 15 with later three on May 29. There were two on June 12 with singles on June 19 and June 26. There was no evidence of breeding. For the early fall passage there were two on July 6 with one on July 14.

#### Scissor-tailed Flycatcher (*Tyrannus forficatus*)

This was one of the better years as a passage migrant and winter visitor. For the late fall passage there were singles on October 31 (a juvenile) by Lust Road gate, on November 3 (an adult) by Hooper Farms Road gate and November 7 (an adult) by Lust Road gate with four on November 10. That was the fall passage. For the winter passage there were five on December 7 with singles on December 12 and December 16. There were three on December 30 with four on January 2, then singles seen on January 6 and January 9. That completed the winter passage. There was no early spring passage. For the main spring passage there were singles on March 16 and March 30.

#### Loggerhead Shrike (*Lanius ludovicianus*)

This was probably the last year before the crash; there were sightings throughout the year even if the numbers were a bit low. As it was present through the breeding season I am

assuming that it bred this year. Early fall records: *there were three from June 23 to July 4 with seven on July 7 and eight on July 14, then six seen on July 18 with four to July 24. There were five on July 29 with six on August 1 and seven on August 4, then five seen on August 9 with singles to August 15. There were three from August 16 to August 22 with five on August 26, then four seen on August 29 with three on September 1. There were four on September 8 and September 12 with six on September 19, then two seen on September 22. That was the early fall passage. For the late fall passage there were three from September 28 to October 6 with two to October 13 and one on October 17. There were three on October 21 and October 27 with two on October 31. There were three from November 3 to November 14 with two on November 21 and one on November 23. That closed the late fall passage. For the winter passage there were two on November 28 with singles to December 12. There were three on December 16 and December 22 with two to January 2 and one on January 6. That completed the winter passage. For the early spring passage there were two on January 9 and January 16 with four on January 19, then three seen on January 24 with one on January 26. There were two on January 30 with four on February 2 and February 6, then two seen to February 13. There were three on February 16 with singles to February 23. There were three on February 28 and March 2 with one on March 6. That closed the early spring passage. For the main spring passage or in this case the summer passage as this species nests so early there were singles from March 10 to March 30 with two on April 3, then three seen on April 10 and April 17 with two to April 24. There were three on April 26 with singles to May 1. There was one on May 15 with three to May 29 and four on June 5, then three seen on June 12 with two on June 19 and one on June 26. That ended the summer passage. For the early fall passage there were four on July 1 with three to July 11 and one on July 14. There were three on July 17 with five on July 23, then three seen on July 28 with singles to August 3. There were two on August 7 with eight on August 10, then four seen on August 15 with three on August 17.*

#### White-eyed Vireo (*Vireo griseus*)

A quite common resident; there was a noticeable fall passage. Early fall records: *there were six on July 4 and July 7 with three on July 11. There were six on July 14 with three on July 18 and two on July 21. There were six on July 24 with eight on August 9, then three seen on August 11 with two on August 16 and one on August 22. There were two on August 26 with three to September 1 and six on September 9, then four seen to September 16. There were 13 on September 19 with 18 on September 22 and 27 on October 3, then 13 seen to October 11. There were 17 on October 13 with 18 on October 17 and 21 on October 21, then 13 seen on October 24 with 12 on October 27, seven on November 3, five on November 7, three to November 17 and singles to November 23. The main passage ran from September 9 to November 7. That was the fall passage. For the winter passage there were three on November*

28 and December 5 with two to December 12 and one on December 16. There were three on December 19 with singles to December 27. There were two on December 30 and January 2 with three on January 6 and January 9, then one seen on January 16. That completed the winter passage. For the early spring passage there were singles on January 19 and January 24 with three on January 26, six to February 6, seven on February 8 and ten on February 13, then seven seen on February 20 with six to February 28 and five on March 2. That concluded the early spring passage. For the main spring passage there were 13 on March 6 with eight on March 13, seven on March 18, five on March 20 and three on March 24. There were seven on March 27 with six on April 3, five to April 10, four on April 17, three on April 20 and two on April 24. There were five on April 26 with three on April 30 and one on May 1. That ended the main spring passage. For the summer passage there were four on May 15 and May 29 with six on June 5, then three seen to June 26. That was the end of the summer passage. For the early fall passage there were four on July 1 with three on July 3 and two on July 6. There were three on July 11 and July 14 with four on July 17 then three seen to July 23 with one on July 28. There were two on July 31 with four from August 3 to August 17, then three seen on August 21 with two on August 25.

#### Bell's Vireo (*Vireo bellii*)

This was a vagrant. For the early fall passage there was one at the Nursery on September 12. For the early spring passage there was one at the Sand Farm on February 16.

#### Yellow-throated Vireo (*Vireo flavifrons*)

This was a vagrant that seems a strange statement when compared to the real rarity of the previous species. For the early fall passage there was one on September 22 with two on September 28, then one seen on October 3.

#### Blue-headed Vireo (*Vireo solitarius*)

A passage migrant and winter visitor; all sightings came from the wooded borders. For the fall passage there were two on October 31 with three on November 3 and four on November 7, then singles seen to November 21. For the winter passage there were two on November 23 with nine on November 28, then five seen on December 5 with singles to December 12. There were two from December 19 to December 27 with three on December 30 and January 2, then one seen on January 6. That completed the winter passage. For the early

spring passage there were three on January 9 with five on January 16 and ten on January 19, then two seen on January 24 with one on January 26. The count of ten was the highest count for Zellwood but the highest count is now (2013) that of 19 on November 23, 2008. There were four on January 30 with two to February 6. There were four on February 8 with five on February 13, then three seen on February 20 with two on February 23. There were four on February 28 with two on March 2 and one on March 6. That was the early spring passage. For the late spring passage there were three on March 10 and March 13 with two on March 18 and singles to March 30. Later there were singles on April 10 and April 14.

#### Red-eyed Vireo (*Vireo olivaceus*)

An uncommon passage migrant; sightings were in the wooded borders. Early fall records: *there were singles on August 9 and August 11*. For this year there was one on August 19 with two on August 26, then singles seen on September 1, September 9, September 12, September 22 and September 28. That closed the early fall passage. For the late fall passage there were singles on October 3, October 6 and October 13. There were also three on October 17 with one on October 21. That was the late fall passage. For the spring passage there were singles on March 16, March 18, March 20, March 24, March 27, and March 30. Later there were singles on April 10 and April 26. There were no summer sightings. For the early fall passage there was one on August 7.

#### Blue Jay (*Cyanocitta cristata*)

Present all year in the wooded borders; there was no significant fall passage this year. Early fall records: *there were 24 on July 4 with 25 on July 7 and 30 on July 14, then 16 seen on July 18. There were 20 on July 21 with 25 on July 24, then 14 seen on July 29. There were 15 on August 1 with 16 on August 4 and 27 on August 9, then 12 seen on August 11 with five on August 15. There were 13 on August 16 with 25 on August 19, then 16 seen on August 22. There were 24 on August 26 with 31 on August 29, then 27 seen on September 1 with 25 on September 9. There were 30 on September 12 with 35 on September 19 and 57 on September 28, then 45 seen on October 3 with 27 on October 6, 26 on October 11 and 17 on October 13. There were 35 on October 17 with 42 on October 21, then 23 seen on October 27 with 21 on October 31. There were 24 on November 3 with 19 on November 7, 18 to November 28 and four on December 1. That was the fall passage. For the winter passage there were nine on December 5 and December 7 with 11 on December 12 and 17 on December 16, then five seen on December 19. There were eight on December 22 with 14 on December 27, then 13 seen on December 30 with ten on January 2. That completed the winter passage. For the early spring*

passage there were 16 on January 6 with 21 on January 16, then 17 seen on January 19 with 13 on January 24. There were 30 on January 26 with 27 on February 2, 19 on February 6, 12 on February 13 and six on February 16. There were 12 on February 20 with 19 on February 23, then 11 seen on February 28. That concluded the early spring passage. For the main spring passage there were 12 on March 2 with 21 on March 6, then 13 seen on March 10 with 11 on March 13. There were 20 on March 16 with 27 on March 18 and 29 on March 20, then 22 seen on March 24 with 14 on March 27. There were 25 on March 30 and April 6 with 24 on April 14, 21 on April 20, 20 on April 26, 18 on April 30 and 12 on May 1. That closed the main spring passage. For the summer passage there were 11 on May 15 with 13 on May 22, then 12 seen on June 5 with nine on June 12. There were 13 on June 19 with 16 on June 26 and 22 on July 1, then 19 seen on July 3 with seven on July 6. That was the end of the summer passage. For the early fall passage there were ten on July 11 with 15 on July 14 and 18 on July 17, then 14 seen on July 20. There were 17 on July 23 with 18 on July 28 and 20 on July 31, then 17 seen to August 10.

#### American Crow (*Corvus brachyrhynchos*)

A spring visitor this year, there were only a few records for the other seasons. Early fall records: *there were two on August 1*. For this year there was one on August 29 with two on September 9 and four on September 12. Later there were two on September 28. That was the early fall passage. For the late fall passage there were two on October 13 with later two on October 24, then one seen on November 3. Finally for the late fall passage there were two on November 10. For the winter passage there was one on December 1 with at the end of the month two on December 27 and January 6 with one on January 9. Those were the very limited fall and winter passages. For the early spring passage there were singles on January 24 and January 26 with three on February 2, then singles seen on seven dates to March 2. That closed the early spring passage. For the main spring passage there were four on March 6 with two on March 10 and singles to March 16. There were two on March 18 with singles to April 6. There were three on April 10 with singles to April 26. There were two on April 30 and May 1 with later one on May 22. That completed the main spring passage. There were no summer sightings. For the early fall passage there were singles on July 14 and July 17.

#### Fish Crow (*Corvus ossifragus*)

This was a complicated species: it was present for the bulk of the year but it was absent from late September to late October. There was a noticeable early spring passage followed in June by a very rapid passage to the south-east. Finally there was a belated post-breeding

gathering in late July and August. Early fall records: *for the post-breeding gathering there were nine on June 23 with 46 on June 28, then six seen on July 2. There were 14 on July 4 with 48 on July 7, then five seen on July 11 with three on July 14. There were 22 on July 18 with 32 on July 24 and 171 on August 1, then 140 seen on August 4 with 32 on August 11 and two on August 16.* That was the end of the post-breeding gathering. For the balance of the early fall passage there were four on August 19 with six on August 22 and 80 on August 29, then one seen on September 1. There were two on September 12 with three on September 16. Later there were three on September 28. That was the end of the early fall passage. There were no further sightings for a month. For the remnant of the late fall passage there were five on October 24 with 13 on October 31 and 14 on November 7, then four seen on November 17 with singles to November 23. That closed the late fall passage. For the winter passage there were two on December 1 with seven on December 5 and December 7, then two seen on December 12 with one on December 16. There were 140 on December 19 with 32 on December 22, 11 on December 27 and two to January 9. That completed the winter passage. For the early spring passage there were eight on January 16 with 360 on January 24, then 141 seen on January 30 with 106 on February 2 and one on February 6. There were 405 on February 8 with 66 on February 16, 16 on February 23 and four on February 28. That ended the early spring passage. For the late spring passage or in this case the summer passage there were 44 on March 2 with 54 on March 6, then 30 seen on March 10 with 18 on March 13. There were 58 on March 16 with 52 on March 18 and 49 on March 20. There were 59 on March 24 with 60 on March 30, then 19 seen on April 3 with 17 on April 6. There were 20 on April 10 with 19 on April 17, 13 on April 20, 12 on April 24 and ten on April 26. There were 23 on April 30 with six on May 1. There were nine on May 15 with 13 on May 22 and 24 on June 5, then five seen on June 12. This may be the end of the summer passage but it appears that the early fall passage occurs before and after the post-breeding gathering and that is without taking into account the passage to the south-east. The strange passage to the south-east now took place, on June 5 a total of 40 flew to the south-east in a tight flock flying very fast as if being pursued. There were also 230 on June 19 with 280 on June 26 all flying to the south-east in a similar manner. This strange event has been seen in other years. These three counts are in addition to the ones already detailed as being in the area. There were six on June 19 with 35 on July 1 and 46 on July 6, then 28 seen on July 14 with seven on July 17. That ended part one of the early fall passage! Now we come to the post-breeding gathering. There were 15 on July 20 with 21 on July 23, 175 on July 28 and 225 on July 31, then 110 seen on August 3 with 35 on August 7 and 23 on August 10. *There were 80 on August 15 with 140 on August 17, then 124 seen on August 25 with 120 on August 28, 35 on August 31, 31 on September 4, three on September 7 and one on September 19. That was the end of the post-breeding gathering.* I have to admit to being confused I just do not know when the early fall passage started was it back on June 5?

### Purple Martin (*Progne subis*)

A non-breeding summer visitor; there was only a minor fall passage this year (but see the early fall records). Early fall records: *there were 14 on May 14 with 19 on May 20, 73 on May 23 and 345 on May 26, then 163 seen on May 30. There were 210 on June 2 with 140 on June 9, 43 on June 13 and 22 on June 16. Now there was an invasion as 2,850 seen on June 20 with 2,180 on June 23, 770 on July 2, 160 on July 4, 25 on July 7, 12 on July 11, ten on July 14, five on July 18 and singles on July 24 and August 1. The count of 2,850 is still (2013) the highest count for Zellwood.* For this year there was one on August 29 with two on September 9. That was the end of the fall passage. I say a fall passage but this may have been a post-breeding gathering. For the spring passage there was one on February 2 with later two on February 23 and February 28, then six seen on March 2 with five on March 10, four on March 13 and two on March 16. There were 13 on March 18 with three on March 20 and one on March 24. That ended the spring passage. For the summer passage there were four on March 27 with eight on April 3 and nine on April 6, then six seen on April 10 with three on April 17 and two to April 24. There were three on April 26 with two to May 1. That concluded the summer passage. For the fall passage there were five on May 15 and May 22 with 85 on May 29, then 51 seen on June 12 with 37 on June 19. There were 73 on June 26 with 21 on July 3 and four on July 11. Later there was one on July 28 with two on July 31. There was nothing here to suggest a post-breeding gathering.

### Tree Swallow (*Tachycineta bicolor*)

Passage migrant and winter visitor, there was a very strong main spring passage this year. Early fall records: *there was a juvenile at the Lust Road Barn Swallow colony on July 14 and July 21.* For this year there was one on August 22 with three on August 26, then singles seen on August 29, September 1 and September 16. There were 25 on September 22 with one on September 28. That was the early fall passage. For the main fall passage there were 30 on October 3 with 315 on October 11, then 60 seen on October 13 with 30 on October 17, 20 on October 21, 15 on October 24, 12 on October 27 and four on October 31. There were 40 on November 3 with 80 on November 7, then 66 seen on November 10 with 42 on November 14. There were 49 on November 17 with 180 on November 21 and 200 on November 23, then 43 seen on November 28 with 39 on December 1 and four on December 5. That closed the main fall passage. For the winter passage there were 26 on December 7 with 12 on December 12 and three to December 19. There were 62 on December 22 with 60 on December 30 and ten on January 2. There were 61 on January 6 with 42 seen on January 9 and two on January 16. That completed the winter passage. That was the weakest event. For the early spring passage there were 40 on January 19 with 130 on January 26, 300 on January 30, 530 on February 6, 750 on February 8, 820 on February 13 and 1,300 on February 20, then 340 seen on February 23 with

125 on February 28. That ended the early spring passage. For the main spring passage there were 150 on March 2 with 1,100 on March 6 and 12,000 on March 13, then 3,500 seen on March 18 with 1,750 on March 20, 310 on March 24, 275 on March 27 and 200 on March 30. The count of 12,000 was the highest count for Zellwood but the highest count is now (2013) that of 71,000 on March 10, 2006. Note the closeness in the dates. On March 13 there was a strong south-west wind i.e. this was the warm sector ahead of a front. There were 210 on April 3 with 650 on April 6, then 570 seen on April 14 with 210 on April 17. There were 700 on April 20 with 70 on April 24, 44 on April 30, six on May 1 and one on May 22. That was the main spring passage. For the early fall passage there were single adults by Interceptor Road on July 6 and at the Sand Farm on July 11. There was a juvenile on July 28, location not noted.

#### Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

With the exception of one record they were only seen in low numbers this year. Early fall records: *there was one on July 7 with two on July 21, then one seen on July 24. Perhaps surprisingly there were no records for June.* For this year there was one on September 9. That was the early fall passage. For the main fall passage there were three on October 6 with 28 on October 11, then one seen on October 17. The count of 28 is still (2013) the highest count for Zellwood. There were no winter sightings. For the spring passage there were singles on March 13, April 3, April 17 and April 24. This year was normal in so far as there were June records even if I am not sure what they represented. There were three on May 29 with singles on June 19, June 26, July 1 and July 6.

#### Bank Swallow (*Riparia riparia*)

A passage migrant, there were no large flocks this year. Early fall records: *there was one on July 21 with three on August 9.* For this year there were six on August 19 with seven on August 22 and 45 on August 26, then 12 seen on August 29 with 11 on September 1, nine on September 9 and two to September 19. There were seven on September 22 with one on September 28. There were two on October 3 with seven on October 6 and 12 on October 11, then one seen on October 17. That was the fall passage. For the spring passage there were four on April 3 with two on April 10. There were three on April 17 and April 20 with four on April 30, then two seen on May 1. There were also singles on May 22 and May 29. That ended the spring passage. Very exceptionally there was one by Lust Road (the Barn Swallow colony) on June 12. For the fall passage there were singles on July 3, July 14, July 17, July 20 and July 23 with two on July 28, then one seen on July 31.

### Cliff Swallow (*Petrochelidon pyrrhonota*)

An uncommon fall passage migrant; there was only one spring record this year. Early fall records: *there were singles on July 4 and July 18 with two on August 1, then one seen on August 4. There were two on August 9 with three on August 11, then one seen on August 22. There were four on August 26 with three on August 29 and singles on September 1, September 8, September 9 and October 6. There were also two on October 11 with one on October 17. That was the fall passage. For the spring passage there was one on March 18, perhaps exceptionally it was still in first-winter plumage. For the early fall passage there was an immature on July 3 with three (not aged) on July 23 and July 28, then two seen on July 31 with one on August 7.*

### Cave Swallow (*Petrochelidon fulva*)

This was a vagrant. There was an adult of the Mexican race *P.f. pelodoma* by Lake Apopka to the north of the Lust Road pump house on May 22.

### Barn Swallow (*Hirundo rustica*)

A summer resident and passage migrant; the fall passage is by far the strongest event. This species nested under some of the bridges and under the overhang at Plant Express. I have no information on the size of the breeding population. Early fall records: *there were 56 on June 13 with 63 on June 16 and 69 on June 23, then 47 seen on June 28 with 40 on July 2. There were 80 on July 4 with 105 on July 11, then 56 seen on July 14. There were 65 on July 18 with 141 on July 21 and 290 on July 24, then 105 seen on July 29 with 48 on August 1. There were 118 on August 4 with 120 on August 9 then 78 seen on August 15 with 18 on August 16. There were 1,230 on August 19 with 1,160 on August 22, 305 on August 26, 265 on August 29 and 78 on September 1. There were 110 on September 9 with 705 on September 9, then 415 seen on September 16 with 275 on September 22 and 154 on September 28. The fall passage takes two forms: from July 29 to September 16 nearly all the birds were observed flying to the south; after September 16 they were just in the area feeding. That was in any case the end of the early fall passage. For the late fall passage there were 420 on October 3 with 184 on October 11, 162 on October 17, 18 on October 24, 17 on October 27 and one on October 31. There were four on November 3, November 7 and November 14 with one on November 17. That ended the late fall passage. For the spring passage there were four on February 28 with 12 on March 6 and 18 on March 13, then 14 seen on March 16 with seven on March 18. There were 24 on March 20 with 29 on March 24, 52 on March 27 and 74 on April 3, then 58 seen on April 6 with 46 on April 10. There were 245 on April 14 with 390 on April 17, then 152 seen on April 24 with 87 to May 1. That closed the spring passage; this was in part a misnomer as locally the birds will have been*

breeding from March. So we now come to the summer passage for everybody. There were 58 on May 15 with 82 on May 22, then 63 seen on May 29. There were 73 on June 5 with 81 on June 12 and 128 on June 26, then 90 seen on July 1 with 75 on July 3. There were 140 on July 6 with 145 on July 11, then 55 seen on July 14. That ended the summer passage. For the early fall passage there were 70 on July 17 with 200 on July 20 and 260 on July 23, then 202 seen on July 28 with 138 on July 31, 105 on August 7 and 20 on August 10.

#### Carolina Chickadee (*Poecile carolinensis*)

This was a vagrant. For the early spring passage there was one at the Nursery on February 13.

#### Tufted Titmouse (*Baeolophus bicolor*)

A resident in the wooded borders, there was nothing to indicate passage. Normally one to three seen through the year there were higher counts of four on August 19, August 26, September 12 and December 12. There were five on February 8 with four on February 13. There were also five on February 28 with four on March 24, April 17 and June 26.

#### Carolina Wren (*Thryothorus ludovicianus*)

A resident but unlike the last species there were the influxes. Early fall records: *there were 18 on June 13 with 22 on June 16, 33 on June 20 and 40 on June 28, then 34 seen on July 4 with 29 on July 7, 27 on July 11 and 25 on July 14. That influx lasted a month. There were 28 on July 18 with 32 on July 24, then 30 seen on August 1 with 24 on August 4. There were 31 on August 9 with 29 on August 16 and 27 to August 22. There were 29 on August 26 with 22 on August 29 and 20 on September 1. There were 24 on September 9 with 21 on September 12 and 16 on September 16. There were 17 on September 19 with 23 on September 22 and 33 on September 28, then 23 seen on October 3 with 18 on October 6. That was the early fall passage. For the late fall passage there were 20 on October 11 with 17 to October 17. There were 18 on October 21 with 17 to October 31, 13 on November 3, ten on November 7 and five on November 10. There were 11 on November 14 with 17 on November 17, then five seen on November 21. There were eight on November 23 with 16 on November 28 and December 5, then seven seen on December 7. That closed the late fall passage. For the winter passage there were ten on December 12 with 11 from December 16 to December 22 and 13 on December 30, then 11 seen on January 2. That completed the winter passage. For the early spring passage*

there were 16 on January 6 with 19 on January 9 and 20 on January 16, then 17 seen to January 26 with 13 on January 30. For the early spring passage there were 18 on February 2 with 25 on February 8, then 15 seen on February 13 with 13 on February 16. There were 14 on February 20 with 18 on February 23, then 12 seen on February 28. That closed the early spring passage. For the main spring passage there were 16 on March 2 with 24 on March 6, then 21 seen on March 10 with 17 to March 16. There were 31 on March 18 with 30 on March 24, 24 on March 30, 19 on April 3 and eight on April 6. There were 36 on April 10 with 19 on April 14. There were 20 on April 17 with 32 on April 20, then 27 seen on April 26 with 24 on April 30 and 14 on May 1. That ended the main spring passage. For the summer passage there were 26 on May 15 with 35 on May 22, then 17 seen on May 29. There were 22 on June 5 with 29 on June 12 and 33 on June 19, then 28 seen on June 26 with 23 to July 6 and 18 on July 11. That was the summer passage. For the early fall passage there were 23 on July 14 with 25 on July 17, then 15 seen on July 20 with 13 on July 23. There were 14 on July 28 with 17 on July 31, then 14 seen on August 3 with 13 on August 7. There were 23 on August 10 *with 29 on August 17 and August 21, then 13 seen on August 25.*

#### House Wren (*Troglodytes aedon*)

A very common fall passage migrant; numbers were much lower for the winter and the spring passages. For the fall passage there were three on September 28 with 20 on October 3, 29 on October 6, 154 on October 11, 274 on October 17, 352 on October 24 and 408 on October 27, then 286 seen on October 31 with 248 on November 7 and 127 on November 10. Whilst the count of 408 is a high count the actual high count (to 2013) for Zellwood is that of 674 on November 5, 2000. There were 155 on November 14 with 161 on November 17, then 139 seen on November 21 with 101 on November 23, 82 on November 28, 76 on December 1 and 64 on December 5. That was the fall passage. For the winter passage there were 68 on December 7 with 72 on December 12, then 34 seen on December 16. There were 43 on December 19 with 64 on December 22, then 60 seen on December 30 with 48 on January 2. There were 96 on January 6 with 53 on January 9 and 33 on January 16. That completed the winter passage. For the early spring passage there were 43 on January 19 with 64 on January 26, then 63 seen on February 2 with 50 to February 13, 34 on February 16 and 26 on February 20. There were 39 on February 23 with 19 on February 28. That was the early spring passage. For the late spring passage there were 29 on March 2 with 49 on March 6, then 44 seen on March 10 with 35 on March 16, 34 on March 18 and 27 on March 20. There were 42 on March 24 with 34 on March 30, 28 on April 3, 19 on April 10, nine to April 17 and two on April 26.

### Sedge Wren (*Cistothorus palustris*)

A passage migrant and winter visitor; unlike the last species this one was seen in higher numbers during the spring passages. For the fall passage there were three on October 3 with one on October 6. There were two on October 11 with three on October 13, six to October 24 and 23 on October 27, then ten seen on October 31 with eight on November 7 and five on November 10. There were 14 on November 14 with nine on November 17 and seven on November 21. That was the fall passage. For the winter passage there were nine on November 23 with 13 on November 28, then 12 seen to December 5 with ten to December 12 and eight on December 16. There were 13 on December 19 with 12 on December 22 and four on December 27. There were ten on December 30 and January 2 with 14 on January 6, then ten seen on January 9 with four on January 16. That completed the winter passage. For the early spring passage there were 13 on January 19 with 12 on January 26 and ten on January 30. There were 15 on February 2 with 16 on February 8, 17 on February 13 and 18 on February 16, then 15 seen on February 20 with 14 on February 23 and six on February 28. That ended the early spring passage. For the main spring passage there were eight on March 2 with 15 on March 6 and March 10, then 11 seen on March 13. There were 13 on March 16 and March 18 with 16 on March 20 and 29 on March 24, then 23 seen on March 30 with 11 to April 6. There were 13 on April 10 and April 14 with eight to April 20 and five on April 24. Finally for the main spring passage there were eight on April 26.

### Marsh Wren (*Cistothorus palustris*)

For this species of wren the heaviest passage was in the fall; numbers were lower but similar for the winter and the spring passages. For the fall passage there were six on October 3 with eight on October 11 and 39 on October 17, then 15 seen to October 24. There were 174 on October 27 with 119 on November 3, 115 on November 7, 93 on November 14, 80 on November 17, 52 on November 21, 48 on November 28, 41 on December 5 and 29 on December 7. The count of 174 was the highest count for Zellwood but the highest count is now (2013) that of 211 on November 9, 2005. That was the fall passage. For the winter passage there were 34 on December 12 with 42 on December 16, then 47 seen on December 19 and December 22 with 31 on December 30 and 23 on January 2. There were 50 on January 6 with 21 on January 9 and five on January 16. That completed the winter passage. For the early spring passage there were 33 on January 19 with 37 on January 26, 39 on February 2 and 47 on February 8, then 30 seen on February 16 with 25 on February 20, 16 on February 23, 14 on February 28 and 11 on March 2. That ended the early spring passage. For the late spring passage there were 18 on March 6 with ten to March 13 and seven on March 16. There were 13 on March 18 with 14 on March 20, 23 on March 24, 24 on March 30 and 35 on April 3, then 15

seen on April 6. There were 20 on April 10 with 47 on April 14, then 36 seen to April 26 with seven on April 30 and one on May 1.

#### Golden-crowned Kinglet (*Regulus satrapa*)

This was a vagrant. For the late fall passage there was one at the Nursery on October 31.

#### Ruby-crowned Kinglet (*Regulus calendula*)

A quite common passage migrant and winter visitor; the greatest numbers were in the fall and the winter passages. For the fall passage there was one on September 28 with two on October 3 and three on October 11, then four seen on October 13 and October 21 with three on October 24 and two on October 27. There were six on October 31 with 24 on November 7, then four seen on November 10. There were 11 on November 14 and November 17 with 15 on November 21 and 20 on November 28, then six seen on December 1. That was the fall passage. For the winter passage there were 11 on December 5 with 31 on December 12, then ten seen to December 19 with six on December 22. The count of 31 was the highest count for Zellwood but the highest count is now (2013) that of 67 on November 17, 2006. There were nine on December 27 with ten to January 2 and 15 on January 6, then six seen on January 9. That completed the winter passage. For the early spring passage there were 15 on January 16 with ten on January 19. There were 12 on January 24 with 15 on January 26 and 18 on February 2, then ten seen on February 6 with nine on February 8. There were 12 on February 13 with eight on February 16, seven on February 20 and six to February 28. That was the end of the early spring passage. For the late spring passage there were eight on March 2 and March 6 with 18 on March 10, then ten seen on March 13 with nine on March 18, six to March 24, five to March 30, three on April 3 and two on April 6. Finally there were four on April 10 with one on April 14.

#### Blue-gray Gnatcatcher (*Poliioptila caerulea*)

There was a strong fall passage and they remained common through to March. Early fall records: *there were two on July 14 and July 21 with one on July 29. There were two on August 1 with five on August 4, then two seen on August 9. There were three on August 11 with five on August 19, then one seen on August 22. There were three on August 26 with 14 on August 29, 20 on September 1, 37 on September 12, 63 on September 19, 118 on September 22, 134 on September 28 and 167 on October 3, then 38 seen on October 6. The count of 167 was the highest count for Zellwood but the highest count is now (2013) that of 173 on December 7,*

2007. That was the early fall passage. For the late fall passage and its lower numbers there were 56 on October 11 with 84 on October 13, then 75 seen on October 21 with 66 on October 27, 50 on October 31, 49 to November 14, 42 on November 17, 34 to November 28 and 18 on December 1. That long decline says to me that there was no meaningful arrival after October 13. That closed the late fall passage. For the winter passage there were 40 on December 5 with 39 on December 12 and 28 on December 16. There were 35 on December 19 with 48 on December 22, then 44 seen on December 27 with 39 on December 30. There were 50 on January 2 with 42 on January 6 and 37 on January 9. That completed the winter passage. For the early spring passage there were 38 on January 16 with 47 on January 19, then 37 seen to January 26. There were 50 on January 30 with 55 on February 2, then 42 seen on February 6 with 32 on February 8. There were 52 on February 13 with 37 on February 20 and 28 on February 23. That concluded the early spring passage. For the late spring passage there were 33 on February 28 with 45 on March 2 and 61 on March 10, then 30 seen on March 13 with 28 on March 16. There were 60 on March 18 with 35 on March 20, 14 on March 24, five on March 30 and singles on April 10 and April 24. That was the late spring passage. For the summer passage there was a wandering individual at the Sod Farm on May 22. For the early fall passage there were singles on July 17 and August 10.

#### Veery (*Catharus fuscescens*)

This was a rare fall passage migrant. For the fall passage there was one on September 19 with two on September 22 and six on October 6; there were no later records. As I did not note locations I have no idea how many birds involved in the above.

#### Gray-cheeked Thrush (*Catharus minimus*)

Another rare fall passage migrant again I did not note locations. For the fall passage there were two on September 28 with singles on October 6 and October 13. Finally there were two on October 21.

#### Swainson's Thrush (*Catharus ustulatus*)

This might be considered an uncommon fall passage migrant. There were singles on September 22, September 28 and October 3 with three on October 6, then one seen on October 24.

### Hermit Thrush (*Catharus guttatus*)

Unlike the last three species this was a winter visitor and passage migrant in low numbers. For the fall passage there were singles on October 27, October 31 and November 3 with three on November 7, then one seen on November 14. There were two on November 17 with one on November 21. That was the fall passage. For the winter passage there were four on November 28 with nine on December 12, then two seen on December 16 with one on December 19. The count of nine is still (2013) the highest count for Zellwood. There were three on December 22 with singles to January 2. There were two on January 6 but none seen on January 9. That completed the winter passage. For the early spring passage there were three on January 16 with two on January 19 and singles to February 8. Finally for the early spring passage there were two on February 13. Exceptionally there was a late individual on March 24.

### Wood Thrush (*Hylocichla mustelina*)

This was a vagrant. For the fall passage there was one at the Nursery on October 11.

### American Robin (*Turdus migratorius*)

For this year this was a common spring passage migrant; there were much lower numbers for the fall and the winter passages. For the fall passage there were singles on November 7 and November 10 with two on November 14 and seven on November 17, then three seen to November 28. That was the extent of the fall passage. For the winter passage there were three on December 1 and December 5 with eight on December 7, 14 on December 16, 36 on December 19 and 438 on December 30, then 425 seen on January 6 with 290 on January 9. That completed the winter passage. Now much higher numbers seen with the early spring passage there were 1,840 on January 16 with 3,200 seen on January 19 and January 26, then 2,855 seen on January 30 with 2,650 on February 6, 1,250 on February 8 and 810 on February 13. There were 2,400 on February 16 with 775 on February 20 and 450 to February 28. That concluded the early spring passage. For the late spring passage there were 760 on March 2 with 500 on March 6, 425 on March 10 and 200 on March 13. There were 280 on March 16 with 1,000 on March 18, then 175 seen on March 20 with 85 on March 24, 80 on March 27, five on March 30 and singles on April 3 and April 14.

### Gray Catbird (*Dumetella carolinensis*)

A common fall passage migrant there were much lower numbers for the winter and the spring passages. Early fall records: *there was one on August 1 and August 9*. For this year there were 15 on September 22 with 34 on September 28 and 143 on October 6, then 117 seen on October 11 with 114 on October 13. There were 142 on October 17 with 174 on October 21, then 122 seen on October 24 with 117 on October 27, 87 on October 31, 62 on November 3, 47 on November 7 and 27 on November 10. There were 60 on November 14 with 31 to November 28, 22 on December 1 and 15 on December 5. That was the fall passage. For the winter passage there were 27 on December 7 and December 12 with 15 on December 16. There were 20 on December 19 with 26 on December 22, then 17 seen on December 27. There were 23 on December 30 with 51 on January 2 and January 6, then 30 seen on January 9. That completed the winter passage. For the early spring passage there were 41 on January 16 with 45 on January 19 and 80 on January 26, then 54 seen on February 2 with 43 on February 6. There were 74 on February 8 with 68 on February 13, 48 on February 20, 34 on February 23 and 19 on February 28. That ended the early spring passage. For the late spring passage there were 29 on March 2 with 51 on March 6, then 33 seen on March 10. There were 46 on March 13 with 48 on March 16, then 40 seen on March 20 with 36 on March 24, 28 on March 30 and eight on April 3. There were 15 on April 6 with 17 on April 10, 48 on April 14 and 74 on April 20, then 42 seen on April 26 with seven on April 30, two on May 1 and one on May 15. That was the end of the late spring passage. There were three summer records from the Sand Farm. There were singles on May 29, June 5 and June 12. There was no suggestion of breeding.

### Northern Mockingbird (*Mimus polyglottos*)

A resident; the only significant event this year was a strong post-breeding gathering. Early fall records: *for the post-breeding gathering there were 12 on June 13 with 29 on June 16, then 27 seen on June 20 with 21 on June 23. There were 29 on June 28 and July 4 with 47 on July 7 and 118 on July 11, then 66 seen on July 14 with 47 on July 18, 45 on July 21, 28 on July 24, 16 on July 29 and 11 on August 1. The count of 118 was the highest count for Zellwood, but the highest count is now (2013) that of 126 on October 8, 2006. That was the end of the post-breeding gathering. For the fall passage there were 20 on August 4 and August 9 with six on August 11 and one on August 15. There were 14 on August 16 with 16 on August 19 and 17 on August 22, then 15 seen on August 26 with 14 on August 29 and eight on September 1. There were 16 on September 9 and September 12 with four on September 16. There were 16 on September 19 with 31 on September 28 and 36 on October 3, then 24 seen on October 6 with 23 on October 11 and 15 on October 13. There were 29 on October 17 with 39 on October 21, then 36 seen on October 24 with 18 on October 31, 12 on November 7 and five on November 10. There were 13 on November 14 with eight on November 17. There were 12 on November*

21 with 15 on November 23, then 12 seen on November 28 with ten on December 1. That closed the fall passage. For the winter passage there were 11 on December 5 and December 7 with 14 on December 12, then 12 seen on December 16 with nine on December 19. There were 12 on December 22 with 14 on December 27, then ten seen on December 30. There were 13 on January 2 with 18 on January 6, then 13 seen on January 9. That completed the winter passage. For the early spring passage there were 15 on January 16 with 23 on January 24, then 16 seen on January 26 with 14 on January 30. There were 18 on February 2 with 19 on February 6, then 14 seen on February 8 with 11 to February 20 and eight on February 23. That was the early spring passage. For the main spring passage there were nine on February 28 with ten on March 2, 12 on March 6, 19 on March 10, 20 on March 16, 22 on March 18 and 23 on March 24, then 11 seen on March 27. There were 17 on March 30 with 26 on April 3 and 35 on April 10, then 22 seen on April 17 with 20 on April 20, 19 to April 26, 14 on April 30 and 12 on May 1. That ended the main spring passage. For the summer passage there were 18 on May 15 with 21 on May 29, 25 on June 5 and 34 on June 12, then 18 seen to June 26 with 17 on July 1. That ended the summer passage. For the post-breeding gathering there were 66 on July 3 with 103 on July 11, then 81 seen on July 17 with 48 on July 23, 16 on July 28 and 14 on July 31. This gathering appeared to consist of a single influx this year so for the early fall passage there were 26 on August 3 with 28 on August 10 *and 29 on August 15, then 18 seen on August 17.*

#### Brown Thrasher (*Toxostoma rufum*)

A resident that becomes very hard to find outside of the breeding season, there was a minimal fall passage this year. Early fall records: *there were ten on July 2 with nine on July 7 and four on July 11. There were ten on July 14 with eight on July 18 and six on July 21. There were 11 on July 24 with three on July 29. There were four on August 1 with five on August 4 and eight on August 9, then six seen on August 16 with two on August 19 and one on August 22. There were eight on August 26 with two on August 29. There were five on September 1 with 13 on September 9 and 15 on September 12, then five seen on September 16. There were six on September 19 and September 22 with seven on September 28 and 16 on October 3, then nine seen on October 6 with six on October 11 and five on October 13. There were seven on October 17 with eight on October 21, then five seen on October 24 with three to October 31, two on November 7 and one on November 11. That closed the fall passage. Up to two a day now seen for the rest of the fall passage, the winter passage and all of the early spring passage i.e. from November 10 to March 2 no more than two a day seen from time to time. There is some purpose to the seasons I identify as the spring passage started at the beginning of the main spring passage. For this event there were three on March 6 and March 10 with seven on March 16, then six seen on March 20 with two on March 24. There were three on March 27 and March 30 with four from April 3 to April 10, then two seen on April 14. There were three from April 17 to April 24 with five on April 26, then four seen on April 30 with one on May 1. That concluded*

the main spring passage. For the summer passage there were two on May 15 with five on May 22, then one seen on May 29. There were four on June 5 with five on June 12, seven on June 26 and nine on July 1, then seven seen on July 6 with four to July 17 and two on July 20. That ended the summer passage. For the early fall passage there were three on July 23 with four on July 28, then two seen to August 3. There were 12 on August 7 with seven to *August 15, six to August 21 and three on August 25.*

#### European Starling (*Sturnus vulgaris*)

Seen in varying numbers through the year; there was a minor late fall passage and a much more significant post-breeding gathering. Early fall records: *for the post-breeding gathering there were 26 on May 26 with 122 on May 30, 183 on June 2 and 345 on June 9, then 67 seen on June 13. There were 148 on June 16 with 253 on June 20, then 155 seen on June 23 with 117 on June 28 and 45 on July 2. There were 955 on July 4 with 1,070 on July 7, then 25 seen on July 11. The count of 1,070 was the highest Zellwood count for just one week. There were 190 on July 14 with 1,250 on July 18, then 750 seen on July 24 with 22 on July 29, ten to August 4 and one on August 16.* The count of 1,250 was the highest count for Zellwood but the highest count is now (2013) that of 2,040 on July 13, 2007. That was also the end of the post-breeding gathering. For the early fall passage there were six on August 19 with eight on August 22, then one seen on August 26. There were five on August 29 and September 8 with four to September 12 and one on September 28. That was the extent of the early fall passage. For the main fall passage there were four on October 13 with 15 on October 31, 20 on November 7, 60 on November 17 and 105 on November 28, then 11 seen on December 1 with two on December 5 and one on December 7. That closed the main fall passage. For the winter passage there were two on December 12 with ten on December 16 and 47 on December 22, then 12 seen on December 30 with two to January 6. That completed the winter passage. For the early spring passage there were four on January 9 with five on January 16, then two seen on January 19. There were three on January 24 with eight on January 26 and ten on January 30, then two seen to February 8. There were three on February 13 with two on February 23 and one on February 28. That ended the early spring passage. For the late spring passage or in this case the summer passage there were two on March 16 with six on March 18, then singles seen to March 24. There were 11 on March 27 with two on April 3 then singles seen to April 10. There were nine on April 14 with ten on April 17, then seven seen on April 24 with two to May 1. That concluded the summer passage. For the post-breeding gathering there were three on May 15 with 13 on May 29 and 260 on June 12, then 128 seen on June 19 with 97 on July 1 and 26 on July 3. There were 60 on July 6 with 190 on July 11 and 680 on July 14, then 470 seen on July 17 with 216 on July 23, eight on July 28, five on August 3 and one on August 7. That was the post-breeding gathering, a rather weak event this year.

Common Myna (*Acridotheres tristis*)

This is now an established exotic in Florida. For the early fall passage there was an immature by Airport Road on July 11. This is the first record for Zellwood.

American Pipit (*Anthus rubescens*)

A very uncommon passage migrant and winter visitor, I do not know why numbers were so low this year. For the fall passage there was one on November 3 with two on November 7, then one seen on November 10. For the winter passage there were four on November 28 with singles to December 5. There were four on December 7 with two on December 12. There were three on December 16 and December 19 with four on December 22, then singles seen to January 6. That completed the winter passage. For the early spring passage there were two on January 9 with one on January 19. Finally for the main spring passage there were four on March 18 with one on March 20.

Cedar Waxwing (*Bombycilla cedrorum*)

Whilst there was a trace of a winter passage this was really a spring passage migrant. For the winter passage there were six on December 1 with later three on December 22 and December 27. There were 15 on January 6 with two on January 9. That closed the winter passage. For the early spring passage there were six on January 26 with two on February 8. That was the meager early spring passage. For the main spring passage there were 20 on February 28 with one on March 2. There were 40 on March 10 with five on March 16 and four on March 18. There were 15 on March 20 with 42 on March 27, then two seen on March 30 with one on April 3. There were eight on April 10 and April 14 with 11 later on April 26, then three seen on April 30. There were eight on May 1 with 176 on May 15. There were no later sightings.

Tennessee Warbler (*Vermivora peregrina*)

This is normally a rare passage migrant but this year there was a significant fall passage. For the early fall passage there was one on September 12 with later one on September 28. That was the early fall passage. For the main fall passage there were 17 on October 17 with 29 on October 21, then one seen on October 24. The count of 29 is still (2013) the highest count for Zellwood. To put this into perspective the previous high count was that of eight on October 2, 2003. Finally for the main fall passage there were three on October 27.

### Orange-crowned Warbler (*Vermivora celata*)

Present from October to March with the greatest numbers in late November and early December. For the fall passage there were singles on October 17 and October 21 with two on October 24 and October 31, then one seen on November 3. There were two on November 7 and November 14 with 12 on November 17, then six seen on November 23 with five on November 28. That was the fall passage. For the winter passage there were ten on December 1 with four on December 7 and three on December 12. There were four on December 16 with nine on December 19, then five seen on December 22 with four on December 27. There were five on December 30 with eight on January 6, then four seen on January 9. That completed the winter passage. For the early spring passage there were six on January 16 with three to January 24. There were four on January 26 with seven on February 2 and nine on February 6, then three seen to February 13. There were six on February 16 with three on February 20, two on February 28 and one on March 2. That concluded the early spring passage. For the minimal late spring passage there were three on March 6 with two on March 10 and singles to March 24.

### Northern Parula (*Parula americana*)

A summer visitor and passage migrant, both the fall and the spring passages were heavier than normal. Early fall records: *there were two on July 24 with one on August 1*. For this year there were two on August 19 with singles on August 26 and September 1. There were five on September 9 with four on September 12 and September 19. There were five on September 22 with two to October 3 and one on October 6. That was the early fall passage. For the main fall passage there were three on October 11 with eight on October 13 and 22 on October 17, then 12 seen on October 21 with three on October 24. At the time the count of 22 was the highest count for Zellwood but see March 18. That was the end of the main fall passage. For the early spring passage there were singles on February 13, February 16, February 28 and March 2. For the main spring passage there were three on March 6 with five on March 10, nine on March 13, 39 on March 16 and 52 on March 18, then 25 seen on March 24 with eight on March 27, five on March 30, two on April 6 and one on April 10. This influx had three counts that were higher than the previous high count for Zellwood. The count of 52 is still (2013) the highest count for Zellwood. That ended the spring passage. For the summer passage there two on April 14 with singles on April 20 and April 24. There were four on April 26 with singles on April 30, May 15, May 22, May 29, June 5 and June 12. Those were the only summer sightings. For the early fall passage there were two juveniles on July 1, they were by the Hooper Farms Road gate.

### Yellow Warbler (*Dendroica petechia*)

A common fall passage migrant; there were two spring records this year. Early fall records: *there were singles on July 18 and July 24 with three on July 29, six on August 1, 34 on August 4 and 49 on August 9, then 27 seen on August 11 with one on August 15. There were 14 on August 16 with 30 on August 19 and 65 on August 26, then 46 seen on August 29 with 23 on September 1 and 19 on September 9. There were 27 on September 12 with 22 on September 16, 15 on September 19 and seven on September 22. There were 19 on September 28 with two on October 3 and one on October 6. That was the fall passage. Very exceptionally there was also one at the Sand Farm from October 11 to November 21 with two on October 21. For the spring passage there was an adult female by Lake Apopka to the south of the Hooper Farms Road extension on March 10 with an adult male at the Sand Farm on April 26. For the early fall passage there were three on July 31 with two on August 3. There were four on August 7 with 12 on August 10 and 31 on August 15, then 18 seen on August 17. There were 28 on August 21 with 32 on August 25 and 42 on August 28, then 28 seen on August 31 with 24 on September 4 and 11 on September 7. There were 51 on September 12 with 84 on September 22, then 15 seen on October 8 with two on October 12 and one on October 23. It seemed worthwhile to show the whole of this passage.*

### Chestnut-sided Warbler (*Dendroica pensylvanica*)

This was a very uncommon fall passage migrant. For the fall passage there were three on October 6 with singles on October 21, October 24 and October 27. Locations were not noted.

### Magnolia Warbler (*Dendroica magnolia*)

This was another uncommon fall passage migrant; exceptionally there was a spring record this year. For the fall passage there were singles at the Sand Farm on September 28 and the Nursery on October 11. There were three at the Nursery on October 13 with one there on October 21. The count of three was the highest count for Zellwood but the highest count is now (2013) that of four on October 17, 2009. On October 21 there was also one at the Workshops. Those were the fall records. For the spring passage there was a male by the Lake Level Canal on April 26.

### Cape May Warbler (*Dendroica tigrina*)

For this year a rare spring passage migrant. There were singles at the Sand Farm on April 26 and May 22.

### Black-throated Blue Warbler (*Dendroica caerulescens*)

An uncommon passage migrant; there were more records for the fall than the spring. For the early fall passage there was a female at the Sand Farm on August 26 with a male at the Nursery on September 12. Finally for the early fall passage there was a female at the Nursery on September 28. For the main fall passage there was a male at the Nursery on October 3 and October 6. There was a male at the Workshops on October 17. At the Nursery there were single male and females on October 21 with the male being seen again on October 24. That was the main fall passage. For the spring passage at the Nursery there was a male on April 20 with two males on April 26. Finally there was a female there on April 30.

### Yellow-rumped Warbler (*Dendroica coronata*)

A common passage migrant and winter visitor; this was one of the invasion years with a major passage in the spring. For the fall passage there were singles on October 11, October 13 and October 17 with two to October 24, 22 on October 27, 40 on October 31 and 250 on November 7, then 41 seen on November 10. There were 57 on November 14 with 200 on November 17, then 170 seen on November 23 with 135 on November 28, 87 on December 1 and 85 on December 5. That was the fall passage. For the winter passage there were 150 on December 7 with 250 on December 12, then 210 seen on December 16 with 65 on December 19. There were 110 on December 22 with 195 on December 27, then 120 seen on December 30 with 80 on January 2. There were 240 on January 6 with 85 on January 9. That completed the winter passage. For the early spring passage there were 86 on January 16 with 200 on January 19, then 165 seen on January 26 with 65 on January 30. Now the invasion starts there were 165 on February 2 with 1,075 on February 6, 1,360 on February 8, 2,690 on February 13, 2,760 on February 16 and 3,820 on February 20, then 1,570 seen on February 23 with 775 on February 28. Whilst the count of 3,820 is a high count the highest counts are those of 8,470 on March 5, 2003 and 10,220 on February 23, 2007. Note the closeness in the dates in 2005 and 2007. Although this event continues there was a break where the two spring passages join. So this was the end of the early spring passage. For the late spring passage there were 1,260 on March 2 with 1,890 on March 6, then 1,030 seen on March 13 with 720 on March 16 and 480 on March 18. There were 785 on March 20 with 350 on March 24, 167 on March 25, 31 on April

30, 14 on April 3 and singles on April 6 and April 10. Very exceptionally there was a female (yellow throat, blank face) of the western race *D.c.auduboni* at the Workshops on February 20.

#### Black-throated Green Warbler (*Dendroica virens*)

This was a very rare passage migrant. For the fall passage there were two at the Workshops on October 17 with two at the Sand Farm on October 27.

#### Blackburnian Warbler (*Dendroica fusca*)

This was a rare passage migrant. For the fall passage at the Nursery there were singles on August 22 and October 13. There was one at the Workshops on October 17. Finally there was one at the Nursery on October 27.

#### Yellow-throated Warbler (*Dendroica dominica*)

An uncommon passage migrant and winter visitor; all the sightings bar one were at the Nursery! Early fall records: *there was one at the Sand Farm on August 1*. For this year there were two on August 29 with singles on September 1, September 9, September 12 and September 16. There were two on September 19 and September 22 with one on September 28. That was the early fall passage. For the main fall passage there were two on October 3 and October 6 with four on October 11, then two seen on October 13 with singles on October 17, October 21, November 10 and November 14. The count of four was the highest count for Zellwood but the high count is now (2013) that of eight on September 26, 2007. That closed the main fall passage. For the winter passage there were singles on December 1, December 7, December 12, December 19, December 22, December 27, December 30, January 2 and January 6. That completed the winter passage. For the early spring passage there were singles on January 16 and January 19 with two on February 2, then one seen on February 6. That was the early spring passage. For the late spring passage there were singles on March 16 and March 24. The individual seen on March 16 was by the Sod Farm.

#### Pine Warbler (*Dendroica pinus*)

Passage migrant and winter visitor; from November 17 all sightings were at the Nursery. Early fall record: *there was one at the Nursery on August 9*. For this year there was one at the

Sand Farm on September 19 with one at the Sod Farm on October 3 and October 6. There was also one at the Sand Farm on October 11. At the Nursery there was one on October 27 with two on October 31 and November 3, then one seen there on November 7. There were two at the Nursery on November 10 and November 14 with one on November 17. There was also one by Canal Road on November 14. That was the fall passage and all sightings were now from the Nursery. For the winter passage there were two from November 28 to December 27 with singles to January 2. There were also two on January 6. That completed the winter passage. For the early spring passage there were two on January 16 with one on January 19. There were two on January 30 with singles to February 8. There were two on February 20 with one on February 23. That closed the early spring passage. For the main spring passage there were two on March 2 with singles to March 13. There were two on March 16 with five on March 18, then singles seen on March 24 and March 30. There were no later records.

#### Prairie Warbler (*Dendroica discolor*)

A quite common early fall passage migrant otherwise this species was present through the winter and the spring. Early fall records: *there was one on July 21 and July 24 with two on July 29, 19 on August 1 and 24 on August 9, then 12 seen on August 11 with ten on August 16. There were 14 on August 19 with 13 on August 22 and nine on August 26. There were ten on August 29 with 16 on September 1, then 13 seen to September 19 with five on September 22. That was the early fall passage. For the late fall passage there were ten on September 28 with 12 on October 3, then nine seen on October 6 with three to October 24 and singles to November 28. That closed the late fall passage. For the winter passage there was one on December 1 with three on December 5, then two seen on December 12 with singles to December 30. There were four on January 2 with singles to January 9. That completed the winter passage. For the early spring passage there were two on January 16 and January 19 with one on January 24. There were two on January 30 and February 2 with singles to February 16. There were two on February 20 and February 28 with one on March 2. That concluded the early spring passage. For the main spring passage there were three on March 10 with singles to March 24. There were two on March 27 and March 30 with one on April 3. There were two on April 17 with singles to April 24. That ended the main spring passage. For the early fall passage there were singles on July 20 and July 23 with two on July 31, five on August 7 and 16 on August 10, then ten seen on August 15 with three on August 17.*

## Palm Warbler (*Dendroica palmarum*)

A very common passage migrant and winter visitor; the strongest passage was the early spring passage. For the fall passage there was one on September 12 with two on September 19, seven on September 28, 32 on October 3, 97 on October 11, 200 on October 13 and 300 on October 17, then 290 seen on October 21 with 251 on October 24. There were 302 on October 27 with 348 on October 31, then 330 seen on November 7 with 105 on November 10. There were 175 on November 14 with 235 on November 17, then 175 seen on November 21 with 170 on November 23 and 90 on November 28. That closed the fall passage. For the winter passage there were 115 on December 1 with 185 on December 7, 300 on December 12, 320 on December 19 and 335 on December 22, then 330 seen on December 30 with 235 on January 2. There were 335 on January 6 with 325 on January 9 and 145 on January 16. That completed the winter passage. For the early spring passage there were 410 on January 19 with 625 on January 26, then 460 seen on February 2 with 295 on February 6 and 265 on February 8. There were 485 on February 13 with 580 on February 20, then 320 seen on February 23 with 120 on February 28. That was the early spring passage. For the late spring passage there were 435 on March 2 with 305 on March 10, 220 on March 13 and 185 on March 16. There were 190 on March 18 with 345 to March 27 and 360 on March 30, then 270 seen on April 3 with 195 on April 6, 162 on April 14, 69 on April 17, 28 on April 24, 13 on April 26, three on April 30 and one on May 1.

I kept a record of all "yellow" Palm Warblers *D.p.hypochrysea* that I saw. For the fall passage there was one at the Workshops on October 11 with one at the Nursery on October 24. There was also one by the Hooper Farms Road gate on November 17 with one at the Sand Farm on November 23. That was the fall passage. For the winter passage there was one at the Workshops on December 1 and December 7. There were also singles at the Nursery on December 1 and the Sand Farm on December 7. There was one at the Nursery on December 16 and December 27. Finally for the winter passage there was one at the Sand Farm on January 6. So far there were four for the fall passage and five for the winter passage. For the early spring passage there was one at the Workshops from January 9 to January 19. There was also one at the Nursery on January 9 with one at the Sand Farm on January 19. There were three at the Nursery on January 30 with two there to February 6. There was one at the Workshops on February 2 with two there on February 6. There was one by the Lust Road gate from February 2 to February 13. There was one at the Sod Farm on February 8 and there was one at the Sand Farm on February 8 and February 13 with three on February 16, then singles seen there to February 28. Finally for the early spring passage there was one at the Nursery on February 16. This comes to 13 for the early spring passage. For the late spring passage there was one at the Sand Farm from March 6 to March 24. There was also one by Roach Road on March 6. There was one by the Lust Road gate on March 16 with one at the Sod Farm on March 18. There was one at the Nursery on March 27 with one by Lake Apopka to the north of the Lust Road pump

house on April 3. Finally for the late spring passage there was one by the Lust Road gate on April 10. That comes to a total of seven birds. In all there were 29 individuals seen.

#### Bay-breasted Warbler (*Dendroica castanea*)

This was a vagrant. For the fall passage there was a male at the Nursery on October 21. There was also a female at the Workshops on October 31.

#### Blackpoll Warbler (*Dendroica striata*)

This year it was an uncommon passage migrant, there were sightings in both the spring and the fall. For the fall passage there was an immature at the Nursery on October 11. What may be a different bird was there on October 21 and October 24. For the spring passage there were two on April 24, April 26 and April 30 with one on May 1.

#### Cerulean Warbler (*Dendroica cerulea*)

This was a vagrant. For the early fall passage there was a female/immature at the Nursery on August 19. There was also a male there on September 1.

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

A fall passage migrant that was present through the winter into the early spring; there was a minor late spring passage. Early fall records: *there were two on August 4 with six on August 9, then three seen on August 11* with one on August 19. There were three on August 29 with two to September 16. There were four on September 19 with ten on September 22, then two seen on September 28 with one on October 6. That was the early fall passage. For the late fall passage there was one on October 11 with two on October 13 then singles seen to October 24. There were two on October 31. That was the end of all passage until the early spring passage as only singles noted from November 3 to January 9. For the early spring passage there were two on January 16 with singles to February 23. For the main spring passage there were two on March 2 and March 6 with one on March 10. There were two on March 13 and March 18 with singles to March 24. There were two on March 27 with four on April 10, then two seen to April 26. There were no later records.

#### American Redstart (*Setophaga ruticilla*)

A quite common fall passage migrant; there were lesser numbers in the spring. Early fall records: *there were singles on August 4 and August 9 with three on August 11*, then one seen on August 16. There were four on August 19 with two to September 1. There were three on September 9 with four on September 19 and 15 on September 22, then nine seen on October 3 with four on October 6. There were 27 on October 11 with ten on October 13, six on October 21 and three on October 24. That was the end of the fall passage. There were no winter sightings. For the spring passage there were singles on March 30 and April 3 with two on April 14 and four on April 24, then two seen on April 30 and May 1. Finally for the spring passage there were two on May 22. For the early fall passage there were singles on August 7 and August 10.

#### Prothonotary Warbler (*Protonotaria citrea*)

This was a vagrant. Early fall records: *there was one at the Sand Farm on August 1 with two at the Nursery on August 9*. For this year in the fall there was one at the Nursery on August 29 with in the spring one by Lake Apopka north of the Lust Road pump house on April 14.

#### Worm-eating Warbler (*Helmitheros vermivora*)

A rare passage migrant in both the fall and the spring so for the fall passage there was one at the Nursery on August 19 with two there on September 22. The count of two is still (2013) the highest count for Zellwood. For the spring passage at the Nursery there were singles on April 24 and April 30.

#### Swainson's Warbler (*Limnothlypis swainsonii*)

This was a vagrant. There was one on the southern border on August 16 with one at the Sand Farm on September 1.

#### Ovenbird (*Seiurus aurocapilla*)

A common fall passage migrant, there was only a trace of passage through the winter and the spring. There were no early fall records proper to the previous survey year. For the early fall passage there were singles on August 22, August 29 and September 1 with five on

September 9 and 30 on September 16, then 14 seen on September 19 with ten on September 22. That was the early fall passage. For the main fall passage there were 37 on September 28 with 14 on October 3. There were 20 on October 6 with 47 on October 11, then 45 seen on October 13 with 29 on October 21, 13 on October 24, nine to October 31, five on November 7, two on November 14 and one on November 17. There were three on November 21 with singles to November 28. That closed the main fall passage. This was also the end of all passage for the year. From December 1 to April 30 singles seen with counts of two on December 7, February 28 and March 24.

#### Northern Waterthrush (*Seiurus noveboracensis*)

A very common fall passage migrant with a smaller spring passage; there was also a noticeable presence during the winter. For the fall passage there were three on August 26 with five on August 29, seven on September 1, 19 on September 9, 23 on September 12, 55 on September 16, 58 on September 22 and 188 on September 28, then 53 seen on October 3 with 51 on October 6. The count of 188 is still (2013) the highest count for Zellwood. This count is so high that I am detailing the two previous high counts; there were 38 on September 21, 2000 and 102 on September 26, 2002. There were 69 on October 11 with 71 on October 13, then 64 seen on October 21 with 16 on October 24, 14 on October 31, 12 on November 3 and eight to November 10. There were 11 on November 14 with four on November 17. There were six on November 21 with eight on November 23 and nine on November 28, then six seen on December 1 with four on December 5. That was the end of the fall passage. For the winter passage there were eight on December 7 with three on December 12. There were four on December 16 with five on December 19, then four seen on December 22 with two on December 27. There were six on December 30 and January 2 with ten on January 6, then six seen on January 9. That completed the winter passage. For the early spring passage there were seven on January 16 with eight on January 19, ten on January 26 and 13 on January 30, then ten seen on February 2 with four on February 6. There were 11 on February 8 and February 16 with 12 on February 23, then three seen on February 28. That ended the early spring passage. For the main spring passage there were seven on March 2 with five on March 6 and four on March 10. There were nine on March 13 with three on March 16. There were four on March 18 with seven on March 20 and March 27, then four seen on March 30 with one on April 3. Now the heavier passage starts; there were 11 on April 6 with 19 on April 14 and 26 on April 20, then 17 seen on April 26 with two on April 30 and one on May 1. Finally for the main spring passage there were singles on May 15 and May 22.

As this species is not meant to sing in Florida I have been keeping a record of those that do. This year there were three on April 20 with one on April 24, five on April 26, one on April 30,

one on May 15 and one on May 22. All it seems to take is for two or more to be in close proximity in the late spring and they will set up temporary territories.

#### Louisiana Waterthrush (*Seiurus motacilla*)

A quite common passage migrant in both the fall and the spring; very exceptionally one wintered this year. Early fall records: *there was one by the Pole Road extension on June 23, it was singing! That was an exceptionally early record. Later there were singles on July 24 and July 29 with three on August 1, four on August 4, five on August 9 and 12 on August 11, then seven seen to August 19. There were nine on August 22 with 68 on August 26, then 13 seen on August 29 with ten on September 1. The count of 68 was the highest count for Zellwood but the highest count is now (2013) that of 98 on August 27, 2010. Note the closeness in the dates. There were 29 on September 9 with five on September 16, two on September 19 and one on September 22. Finally for the early fall passage there were three on September 28. That was the end of all passage in the fall. One did turn up at the Sand Farm on October 24 and very exceptionally it stayed through the winter to January 6. It stayed in one short stretch of a vegetated ditch that was on the northern side of the road that went to the west from the Sand Farm Bridge. Also unexpected there was one at the Sand Farm on February 8. For the actual spring passage there was one on March 2 with six on March 10, then two seen to March 16. There were six on March 18 with 14 on March 20 and 34 on March 27, then 13 seen on March 30 with ten on April 6, six on April 14 and singles to April 20. That completed the main spring passage. For the early fall passage there were singles on July 31 and August 7 with four on August 10, then three seen on August 15. None were noted as singing this year. This proved to be a most unusual year for this species.*

#### Common Yellowthroat (*Geothlypis trichas*)

There was a major fall passage this year; there were smaller numbers in the winter and the spring. Breeding has still to be proved. Early fall records: *there were singles on July 2 and July 24 with three on August 9, then two seen to August 29. There were six on September 1 with 38 on September 9, 43 on September 12, 82 on September 16 and 856 on September 22, then 314 seen on September 28 with 187 on October 3 and 140 on October 6. The count of 856 is still (2013) the highest count for Zellwood; the two previous high counts were those of 321 on October 2, 2002 and 706 on October 5, 2003. On September 22 604 of the 856 were along the canal that runs to the west from the Sand Farm Bridge. On September 28 221 were also along that canal. There were 352 on October 11 with 215 on October 13, 139 on October 17 and 119 on October 21. There were 159 on October 24 with 135 on October 27, 107 on November 3, 94*

on November 7 and 62 on November 10. There were 88 on November 14 with 104 on November 17, then 77 seen on November 21 with 63 on November 23, 61 on November 28 and 31 on December 1. That was the end of this major event; it was also the end of the fall passage. It is surprising that so many events finish at the regular break points between two seasons. Numbers were now lower so for the winter passage there were 40 on December 5 with 64 on December 7, 71 on December 16 and 83 on December 19, then 60 seen on December 22. There were 70 on December 27 with 79 to January 2 and 101 on January 6, then 59 seen on January 9 with 40 on January 16. That completed the winter passage. For the early spring passage there were 62 on January 19 with 84 on January 26 and 112 on February 2, then 94 seen on February 8 with 67 on February 13 and 39 on February 16. There were 43 on February 20 with 58 on February 23, then 33 seen on February 28. That closed the early spring passage. For the late spring passage there were 43 on March 2 with 74 on March 6, then 58 seen on March 13 with 44 on March 16. There were 50 on March 18 with 72 on March 20, then 61 seen on March 24 with 40 on March 30, 18 on April 6, 13 on April 10, 11 on April 14 and seven on April 17. There were 14 on April 20 and April 26 with eight on April 30 and three on May 1. There were also six on May 15. That ended the late spring passage. There was one on May 29 with one on June 5 these are probably best treated as summer sightings. Finally for the early fall passage there was one on July 1; this was by Lake Apopka north of the Lust Road pump house.

#### Hooded Warbler (*Wilsonia citrina*)

This was an uncommon passage migrant; there were sightings in both the fall and the spring. For the fall passage there was a female at the Sand Farm on August 16. There was also a male at the Nursery on August 29 and September 1. Those were the fall sightings. For the spring passage there was a male at the Nursery on April 14 with a male at the Sand Farm on April 26.

#### Wilson's Warbler (*Wilsonia pusilla*)

There were an exceptional number of sightings this year; normally this is a vagrant. For the early fall passage there was one at the Nursery on September 22. For the main fall passage there was one at the Sand Farm on October 17. There was also one on the eastern border north of the McDonald Canal on November 17 with one at the Sand Farm on November 21. That was the main fall passage. For the winter passage there was one by the Hooper Farms Road gate on December 30. For the early spring passage there was one by the Lust Road gate on January 16, January 24 and January 26. Finally there was one at the Sand Farm on January 26. The count of two for January 26 is still (2013) the highest count for Zellwood. This comes to a total of seven birds.

### Yellow-breasted Chat (*Icteria virens*)

A summer visitor with just the trace of a fall passage; singing males were located as follows: there were five at the Sand Farm with one at the Nursery, one on the northern border, one by Lake Apopka west of the Laughlin Road extension, two by Pole Road, three by Lust Road, two near Fish Ponds Road and one by the Hooper Farms Road. This comes to a total of 16 singing males; breeding success not known. There had been 103 "pairs" in 2004 but only 16 "pairs" located in 2005, 2006 and 2007. Early fall records: *there were 23 on June 13 with 12 to June 28 and eight on July 2. There were 13 on July 4 with six to July 11, five on July 14, two on July 18 and one on July 21. There were three on July 24 with two on August 1.* For this year there were singles at the Sand Farm on September 1, September 22, October 3 and October 11. Later there was one by Hooper Farms Road on November 23. Those were the fall passage sightings. There were no further records until the spring. For the early spring passage there was one by the Lust Road gate on February 6. For the main spring passage there were singles at the Sand Farm on March 2 and March 6. There was one by the Lust Road gate on March 16 with one at the eastern end of the McDonald Canal on March 24. There was also one by the Lake Level Canal on March 27. Now the main passage started; there was one singing on April 10 with four on April 14, then two seen on April 17 with one to April 26. There were also three on April 30 and May 1. That was the end of the main spring passage. For the summer passage there were three on May 15 with seven to May 29, eight to June 19 and nine on June 26, then four seen to July 6 with three to July 17, two on July 20 and singles to August 7.

### Scarlet Tanager (*Piranga olivacea*)

This was a vagrant. For the late fall passage there was a female at the Nursery on October 11.

### Eastern Towhee (*Pipilo erythrophthalmus*)

A resident with the greatest numbers at the Sand Farm; in the early fall there was what appeared to be a post-breeding gathering. Two more northerly races were seen this year so there was some level of migration. Early fall records: *for the post-breeding gathering there were 47 on June 13 with 84 on June 20, then 56 seen on June 23. There were 58 on June 28 with 63 on July 2 and 75 on July 4, then 66 seen on July 7 with 63 on July 11. There were 65 on July 14 with 106 on July 18, then 70 seen on July 21. There were 100 on July 24 with 102 on July 29 and 130 on August 1, then 116 seen on August 9 with 97 on August 11, 91 on August 16, 75 on August 19 and 48 on August 22. There were 64 on August 26 with 107 on August 29, then 49 seen on September 1 with 43 on September 9, 33 on September 16 and ten to September 22. That was*

the end of the post-breeding gathering although it was effectively over after August 29. For the fall passage there were 35 on September 28 with 32 on October 6 and 27 on October 11. There were 35 on October 13 with 20 on October 17 and 16 on October 21. There were 21 on October 24 with 18 to October 31, 17 on November 3, 15 on November 7 and three on November 10. There were 18 on November 14 with 16 on November 17. There were 17 on November 21 with 27 on November 23, then 12 seen on November 28 with six on December 1. That closed the fall passage. For the winter passage there were eight on December 5 with 13 on December 7, then 12 seen on December 12 with eight on December 16. There were 18 on December 19 with 14 on December 22 and 11 on December 27. There were 15 on December 30 with 25 on January 6, then 21 seen on January 9. That completed the winter passage. For the early spring passage there were 39 on January 16 with 31 on January 19, 30 on January 26 and 29 on January 30. There were 48 on February 2 with 44 on February 8, 36 on February 13 and 33 on February 16. There were 41 on February 20 and February 23 with 58 on February 28, then 33 seen on March 6 with 25 on March 10. That concluded the early spring passage. For the main spring passage there were 31 on March 13 with 41 on March 16, 51 on March 20, 57 on March 24, 73 on March 30 and 76 on April 6, then 68 seen on April 14 with 59 on April 20 and 36 on April 24. That was the main spring passage. For the summer passage there were 55 on April 26 with 61 on April 30, 69 on May 15 and 80 on May 22, then 68 seen on May 29 with 46 on June 5. There were 58 on June 12 with 61 on June 19 and 102 on June 26, then 53 seen on July 1. That ended the summer passage. For the early fall passage there were 58 on July 3 with 73 on July 6, then 65 seen on July 11 with 49 on July 14. There were 91 on July 17 with 90 on July 23, 65 on July 28, 60 on August 3 and 56 on August 7. There were 72 on August 10 *with 69 on August 17, 39 on August 21 and 24 on August 25*. This year there were individuals of two other races seen: there was one of the race *P.e.rileyi* at the Sand Farm on February 20 and March 6 with for the race *P.e.erythrophthalmus*: one by Lake Apopka to the south of the Hooper Farms Road extension on February 16; two by the Lake Level Canal on March 16 with one there on March 30.

#### Bachman's Sparrow (*Aimophila aestivalis*)

This was a vagrant. There was one at the Sand Farm on January 16. This is probably best treated as an early spring record.

### Chipping Sparrow (*Spizella passerina*)

This was a rare passage migrant. For the fall passage there was one by the Hooper Farms Road gate on October 17 and October 21. For the early spring passage there was one at the Nursery on February 2.

### Clay-colored Sparrow (*Spizella pallida*)

An uncommon passage migrant and winter visitor; it always seems strange to me that this western species is a more frequent visitor than the eastern Chipping Sparrow. For the fall passage there was one by the Hooper Farms Road gate on November 14 and November 17. There were three at the Sand Farm on November 21 with two there on November 23. Finally for the fall passage there was one by the Lust Road gate on November 28. For the winter passage there was one at the Sand Farm on December 1 and December 7 with two there on December 12 and December 19, then one seen on December 22. There were also two at the Nursery on December 27. I did not record locations after that date. There were seven on December 30 with three on January 2 and two to January 9. That closed the winter passage. For the early spring passage there were three on January 16 and January 19 with singles to February 2. That was the early spring passage. Finally there was a late individual at the Sand Farm on April 10.

### Field Sparrow (*Spizella pusilla*)

An uncommon winter visitor and spring passage migrant this year. For the winter passage there were singles on December 27, December 30, January 2, January 6, January 9 and January 16. For the early spring passage there were two on January 19 with seven on February 2 that was it. For the late spring passage there were singles on March 6, March 10, March 20 and March 30. It is likely that most if not all the sightings came from the Sand Farm.

### Vesper Sparrow (*Pooecetes gramineus*)

An uncommon passage migrant and winter visitor; there were no large flocks this year. For the fall passage there were two on November 14 with eight on November 23, then two seen on November 28. That was the fall passage. For the winter passage there were two from December 1 to December 7 with four on December 12 and seven on December 16, then six seen on December 19 with four on December 22. There were seven on December 27 and

January 2 with ten on January 6, then four seen on January 9. That completed the winter passage. For the early spring passage there were nine on January 16 with ten on January 24, then one seen on January 26. There were three on January 30 and February 2 with six on February 6, then five seen on February 8 with three on February 13. There were eight on February 16 with five on February 20 and four to February 28. That closed the early spring passage. For the late spring passage there were six on March 2 with four on March 10 and two on March 13. There were six on March 16 with five on March 18, four to March 27 and singles to April 6.

#### Lark Sparrow (*Chondestes grammacus*)

This is a near annual vagrant. For the winter passage there was one at the Sand Farm on December 7.

#### Savannah Sparrow (*Passerculus sandwichensis*)

A common passage migrant and winter visitor; the greatest numbers by far were seen during the early spring passage. For the fall passage there were two on October 3 with six on October 11, then four seen on October 17 with one on October 21. There were two on October 24 with 11 to October 31 and 27 on November 3, then 15 seen on November 7 with three on November 10. There were 20 on November 14 with 22 on November 21 and 29 on November 23 and November 28, then 27 seen on December 1. That was the fall passage. For the winter passage there were 67 on December 5 with 59 on December 7, 56 on December 12 and 52 on December 16. There were 125 on December 19 with 131 on December 27, then 50 seen on December 30. There were 113 on January 2 with 132 on January 6, then 90 seen on January 9. That completed the winter passage. For the early spring passage there were 156 on January 16 with 307 on January 19, 385 on January 24 and 446 on January 26, then 235 seen on January 30 with 185 on February 2 and 106 on February 6. There were 135 on February 8 with 155 on February 13, then 73 seen on February 20 with 48 on February 23 and 33 on February 28. That concluded the early spring passage. Whilst the count of 446 was a very high count the actual high count is that of 860 on December 8, 1998. For the late spring passage there were 61 on March 2 with 45 on March 6, 31 on March 13, 22 on March 16, 19 on March 20, 14 on March 27 and nine on March 30. That decline lasted a month. There were 22 on April 3 with 15 on April 6, 12 on April 10 and four on April 14. There were 26 on April 17 with 18 on April 20 and 17 on April 24. There were 22 on April 26 with six on May 1. That ended the late spring passage.

Grasshopper Sparrow (*Ammodramus savannarum*)

An uncommon passage migrant; there were no winter records. For the fall passage there was one on November 28. For the early spring passage there were singles on January 6, January 9 and January 16 with three on January 19, then singles seen on January 26, February 6 and February 8. For the late spring passage there were singles on March 16 and April 10, both these sightings were by the Lust Road gate.

Henslow's Sparrow (*Ammodramus henslowii*)

This was a vagrant. For the fall passage there was one near the Hooper Farms Road gate on November 3. For the early spring passage there was one at the Sand Farm on February 2.

Song Sparrow (*Melospiza melodia*)

A better year for this species; there were sightings from the fall to the spring; numbers were generally higher than normal. For the fall passage there were singles on October 11, October 13 and October 17 with two to October 24 and four on October 27, then two seen to November 3. There were three on November 7 with two to November 17. There were five on November 21 and November 23 with two on November 28 and one on December 1. That was the fall passage. For the winter passage there were three on December 5 with four on December 7, five to December 16 and six on December 19, then five seen on December 27 with four to January 2. That completed the winter passage. For the early spring passage there were eight on January 6 with six on January 16, three to January 26, two to February 2 and singles to February 16. That was the early end of the early spring passage. For the late spring passage there were singles on March 2, March 10, March 13 and March 16 with later two on March 30. Finally for the late spring passage there were singles on April 3 and April 14.

Lincoln's Sparrow (*Melospiza lincolnii*)

This was a very uncommon passage migrant and winter visitor. For the fall passage there were singles by the Hooper Farms Road gate on October 17, November 7, November 14, November 23 and November 28. For the winter passage there were also singles by the Hooper Farms Road gate on December 7, December 12 and December 16. Later there was one there on January 9. I have no idea how many birds involved in the above sightings. That ended the winter passage. For the early spring passage there was one by the Lake Level Canal on January

30. There was one at the Sand Farm on February 2 and February 8. There were no later records for the early spring passage. For the late spring passage there were singles at the Sand Farm on March 10 and March 20.

#### Swamp Sparrow (*Melospiza georgiana*)

There was a very heavy fall passage with decreasing numbers to the spring. For the fall passage there were two on October 11 with four on October 17, 35 on October 24 and 249 on October 27, then 173 seen on October 31. There were 200 on November 3 with 324 on November 7, then 220 seen on November 10. There were 296 on November 14 with 970 on November 17 and 1,126 on November 21, then 368 seen on November 23 with 251 on December 1, 182 on December 7, 166 on December 12, 161 on December 16 and 137 on December 19. When there is a mega influx it often overflows into the next passage as it did here. The count of 1,126 is still (2013) the highest count for Zellwood. The previous high count was only that of 725 on December 2, 2002. For the balance of the winter passage there were 175 on December 22 with 119 on December 27 and 97 on December 30. There were 110 on January 2 with 194 on January 6, then 102 seen on January 9 with 99 on January 16. That completed the winter passage. For the early spring passage there were 109 on January 19 with 100 on January 26 and 97 on January 30. There were 131 on February 2 with 91 on February 8, 56 on February 16, 51 on February 23 and 30 on February 28. That concluded the early spring passage. For the late spring passage there were 41 on March 2 with 62 on March 6, then 43 seen on March 13 with 40 on March 16 and 19 on March 18. There were 51 on March 20 with 69 on March 24, then 53 seen on March 30 with 45 on April 6 and 28 on April 10. There were 83 on April 14 with 80 on April 20, 64 on April 26 and nine on April 30. A number of species have this stronger last influx it is as if this influx gathers up all the stragglers.

#### White-throated Sparrow (*Zonotrichia albicollis*)

This was a very rare passage migrant this year. For the fall passage there was one by the Lust Road gate on November 28. For the early spring passage there was one at the Sand Farm on January 16 with another at the Nursery on February 13.

#### White-crowned Sparrow (*Zonotrichia leucophrys*)

A quite common passage migrant and winter visitor; this was one of the better years. For the fall passage there were three on November 3 with eight on November 7, 14 on

November 14 and 15 on November 21, then 12 seen on November 23. That was the extent of the fall passage. For the winter passage there were 14 on November 28 with 19 on December 1, then three seen on December 5. There were six on December 7 with 19 on December 12, then 12 seen on December 19 with nine on December 27 and seven to January 2. That completed the winter passage. For the early spring passage there were 15 on January 6 with 22 on January 9, then 18 seen on January 16 with four on January 19 and two on January 24. There were 11 on January 26 with 16 on February 2, then 15 seen on February 8 with eight on February 13. There were 17 on February 16 with 19 on February 20, 22 on February 23 and 32 on February 28, then six seen on March 2 with three on March 6. That concluded the early spring passage. For the late spring passage there were 16 on March 10 with 14 on March 16, eight on March 24 and two to April 3. There were three on April 10 with two on April 14 and one on April 17. Finally for the late spring passage there were two on April 20.

#### Northern Cardinal (*Cardinalis cardinalis*)

A common resident; the greatest numbers were recorded during the summer months. Early fall records: *there were 79 on July 11 with 91 on July 14 and 113 on July 18, then 110 seen on July 24 with 92 on August 1 and 52 on August 4. There were 93 on August 9 with 74 on August 11 and three on August 15. There were 69 on August 16 with 70 on August 19 and 79 on August 26, then 57 seen on August 29. There were 65 on September 1 with 68 on September 9, 71 on September 12, 75 on September 16, 81 on September 22 and 127 on September 28, then 84 seen on October 3 with 82 on October 11, 56 on October 17, 47 on October 21 and 42 on October 24. This influx nearly lasted two months; I do not know why there was such an event at this time of the year. There were 57 on October 27 with 37 on October 31, 30 on November 7 and 22 on November 10. There were 33 on November 14 with 45 on November 17, then 33 seen on November 23 with 32 on November 28, 21 on December 1 and 20 on December 5. It seems that many of the fall passages end on December 5 and the winter passages end on January 16. In any case that was the end of the fall passage. For the winter passage there were 25 on December 7 with 28 on December 12 and 35 on December 16, then 28 seen on December 19 with 17 on December 22. There were 18 on December 27 with 23 on December 30, 24 on January 2 and 67 on January 6, then 34 seen on January 9. That completed the winter passage. For the early spring passage there were 80 on January 16 with 47 on January 19 and 28 on January 24. There were 59 on January 26 with 77 on February 2, then 49 seen on February 6. There were 50 on February 8 with 70 on February 13, then 59 seen on February 16 with 53 on February 20. There were 110 on February 23 with 44 on February 28. That was the end of the early spring passage. For the main spring passage there were 49 on March 2 with 92 to March 10, 104 on March 13, 118 on March 16, 128 on March 18, 144 on March 24 and 228 on March 30, then 106 seen on April 3. There were 141 on April 6 with 286 on April 10 and 307*

on April 14, then 260 seen on April 20 with 214 on April 26, 202 on April 30 and 68 on May 1. The count of 307 was the highest count for Zellwood but the highest count is now (2013) that of 344 on April 9, 2008. That was also the end of main spring passage. For the summer passage there were 150 on May 15 with 188 on May 22, then 147 seen on May 29 with 120 on June 5 and 90 on June 12. There were 97 on June 19 with 126 on June 26, then 113 seen on July 1 with 89 to July 6 and 80 on July 11. That ended the summer passage. For the early fall passage there were 138 on July 17 with 79 on July 20, 66 on July 23, 60 on July 31 and 50 on August 3. There were 51 on August 7 with 64 on August 10, *then 56 seen on August 15 with 49 on August 17.*

#### Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant. For the fall passage there were two at the Sand Farm on October 17. This count of two was the highest count for Zellwood but the high count is now (2013) that of three on October 21, 2009. For the spring passage there was one at the Nursery on April 24.

#### Blue Grosbeak (*Guiraca caerulea*)

Exceptionally there was a strong fall passage; there were again winter records. There was a gap in the sightings from February 7 to March 19; this gap appears to be an annual event. The summer visitors arrived in mid-April with the first song on April 14 (two birds), I have no idea how many pairs there were this year. Early fall records: *there were 15 on June 16 with 16 on June 20 and 24 on June 28, then 14 seen to July 7 with nine on July 11. There were 14 on July 14 with 31 on July 18, then 19 seen on July 21. There were 20 on July 24 and July 29 with 22 on August 1, then 20 seen to August 11 with 18 on August 16, 11 on August 19, seven to September 1 and four to September 9. There were 69 on September 12 with 22 on September 16, four on September 19 and one on September 22. The count of 69 was the highest count for Zellwood but the highest count is now (2013) that of 72 on October 1, 2006. Of the 69 all but one were by the Hooper Farms Road gate. That closed the early fall passage. For the late fall passage there were two on September 28 with 11 on October 3, then three seen on October 6 with singles to October 17. There were three on October 21 with two on October 24 and one on October 27. There were four on October 31 with five on November 3, then two seen to November 17 with singles to November 23. That was the late fall passage. This species is not meant to winter in the United States but it does so at Zellwood. For the winter passage this year there were four on November 28 and December 1 with singles on December 5, December 7, and December 12. Later there were singles on December 27, January 2 and January 6. That completed the winter passage. For the early spring passage there were singles on January 19, January 26 and February 6 that was it. For the main spring passage there were singles on March*

20, March 24 and April 3 with two on April 10, five on April 14, six to April 24, ten on April 26 and 17 on April 30, then eight seen on May 1. That was the end of the main spring passage so for the summer passage there were 27 on May 15 with 21 on May 22. There were 23 on May 29 with 24 to June 12, then 25 seen on June 19 and July 1 with 19 on July 3, 16 on July 6 and 15 on July 11. That closed the summer passage. For the early fall passage there were 22 on July 14 with 23 on July 17, then 21 seen on July 23 with 17 on July 31, 13 on August 3 and ten on August 7. There were 19 on August 10 *with 13 on August 15 and eight on August 17.*

#### Indigo Bunting (*Passerina cyanea*)

A summer visitor and fall passage migrant, there were sightings through the year with the exception of the period February 14 to March 5. Early fall records: *there were 32 on July 11 with 29 on July 14, 28 to July 24 and 16 on July 29. There were 24 on August 1 with 25 on August 4, then ten seen on August 9 with nine on August 11,* five on August 16 and three to August 22. There were four on August 26 with singles to September 9. There were nine on September 12 with singles to September 19. There were three on September 22 with six on September 28, 15 on October 3, 32 on October 6, 66 on October 11 and 72 on October 17, then 42 seen on October 21 with 16 to October 31, 14 on November 3, three on November 7 and two on November 10. There were three on November 14 with four on November 17, then three seen on November 21 with one on November 23. There were five on November 28 with singles to December 5. That was the fall passage. For the winter passage there were two on December 16 with four on December 19, then two seen on December 22 with one on December 27. There were three on January 2 and January 6 with one on January 16. That completed the winter passage. For the early spring passage there was one on January 19 with three on January 26. Later there was one on February 13. That was the early end to the early spring passage. For the main spring passage there were four on March 6 with two on March 16 and singles to April 17. There were two on April 20 with three to April 26 and ten on April 30. I have no idea how this influx progressed. That was the end of the main spring passage. For the summer passage there were 29 on May 15 with 26 on May 22 and 22 on May 29. There were 27 on June 5 with 23 on June 12 and 18 on June 19. There were 25 on June 26 with 18 on July 1, 16 to July 6 and 15 on July 11. That concluded the summer passage. For the early fall passage there were 18 on July 14 and July 17 with 24 to July 23 and 25 on July 28, then 18 seen on July 31 with 12 on August 3, 11 on August 7, nine on August 10 *and six to August 17.*

### Painted Bunting (*Passerina ciris*)

Present in very low numbers for most of the year; there were two gaps as none seen from August 20 to October 2 and from February 9 to March 1. It is strange but the Blue Grosbeak and the Indigo Bunting share this early spring gap. This was a non-breeding summer visitor with adult or immature males on territory. Early fall records: *there were singles from July 2 to July 14 with two on July 18, then one seen on July 21. There were three on July 24 with two on July 29 and singles to August 4.* For this year there was one on August 19. That was the early end of the early fall passage. For the main fall passage there were singles on October 3 and October 6 with two on October 11, then singles seen to October 31. There were two on November 3 with singles to November 28. That is hardly worth the term "fall passage". For the winter passage there was one on December 5 with two on December 7, then singles seen to December 22. There were two on December 30 with singles to January 16. That completed the winter "passage". For the early spring "passage" there were singles from January 19 to February 8. For the main spring passage there were singles on March 2 and March 8 with two on March 16, then singles seen to April 30. That is almost certainly the worst set of records for this species. The summer was a little better as there were two on May 15 and May 22 with singles to June 12. There were also two on June 19. That was the summer passage. For the early fall passage there were three on June 26 and July 1 with two to July 11 with singles to July 17. There were two on July 20 and July 23 with three on July 28, then singles seen to August 10.

### Dickcissel (*Spiza americana*)

This is normally at best a rare migrant and an occasional breeding species. It is not meant to breed in Florida but it does. *In 2004 there were potentially five pairs by Hooper Farms Road, there was at least one female present. The last individual was seen on July 4.* For this year there were two on September 8 and September 9. Later there were singles on October 13, October 17 and November 21. That was quite a good fall passage. Everything was different this summer as there was what amounted to a huge invasion by this species. It started with just two on April 24 but there were 64 on April 30 with 82 on May 1, 136 on May 15 and 143 on May 22, then 92 seen on May 29 with 89 on June 5, 88 on June 19, 69 on June 26, 61 on July 1, 54 on July 3, 45 on July 6 and 44 on July 11. The count of 143 is still (2013) the highest count for Zellwood. There were 46 on July 14 with 56 on July 7, then 40 seen on July 20 with 23 on July 23, 14 on July 28 and four on July 31. There were five on August 3 with one on August 7. Included were single immatures on August 3 and August 7. To take the highest count for each colony there were 48 males and 4 females by Laughlin Road on May 15, 59 males and two females by Lust Road on May 22 (there were four females there on May 15), 18 males by Airport Road on May 22 (there were two females on May 15), one by Pole Road on May 1 and 17 males and two females at Hooper Farms Road on May 22. This appears to come to a total

population of 143 males and 12 females. The females are very secretive so the low number is to be expected. This is one of the highlights of the survey as a whole.

#### Bobolink (*Dolichonyx oryzivorus*)

A common spring passage migrant; there were lesser numbers in the fall. For the fall passage there were two on August 19 and August 26 with five on August 29, 12 on September 1, 47 on September 9, 82 on September 12 and 90 on September 16, then 22 seen on September 19 with seven on September 22. There were 47 on September 28 with six on October 6. Later there was one at the Sand Farm on October 21 with one by Hooper Farms Road on November 21. The latter was not quite a winter record. For the spring passage there were 15 on April 10 with two on April 14. There were four on April 17 with 78 on April 20, 710 on April 24 and 1,735 on April 26, then 845 seen on April 30 with 515 on May 1. Later there were three on May 15 with six on May 22. Finally there was one at the Sand Farm on June 5.

#### Red-winged Blackbird (*Agelaius phoeniceus*)

For much of the year with the exception of the breeding season there was a roost at the Sand Farm Cattail Marsh. In the early fall in both 2004 and 2005 there were huge post-breeding gatherings. Perhaps because of these huge gatherings higher than normal numbers were seen through the rest of the year. I have no information on the size of the breeding population but it was unlikely to exceed 750 pairs i.e. 3,000 birds when the young fledged. Now to the first of the post-breeding gatherings: *there were 810 on June 6 with 980 on June 9, 2,300 on June 13, 3,400 on June 16, 8,300 on June 20, 11,850 on June 23, 47,000 on July 2, 67,000 on July 4, 82,000 on July 7 and 133,000 on July 11, then 129,000 seen on July 14 with 85,000 on July 18. There were 90,000 on July 21 with 144,000 on July 24 and 182,000 on July 29, then 134,500 seen on August 1 with 64,000 on August 4. There were 208,000 on August 9 with 117,000 on August 11, 85,000 on August 16, 44,000 on August 19, 5,300 on August 22 and 1,000 on August 26. That was the end of this spectacular event. To put everything into perspective the previous high counts were 4,015 on August 11, 2002 and 115,000 on September 16, 2003. The count of 208,000 was the highest count for Zellwood but see the 2005 post-breeding gathering. In 2005 there were also huge post-breeding gatherings of Common and Boat-tailed Grackles. Now back to this year for the remains of the early fall passage there were 1,120 on August 29 with 2,600 on September 1, then 1,500 seen on September 12 with 1,100 on September 16. There were 2,250 on September 19 with 3,200 on September 28 and 3,900 on October 3, then 650 seen on October 6. That ended the early fall passage. For the main fall passage there were 1,070 on October 11 with 1,150 on October 17, then 600 seen on October 21. There were 1,060 on October 24 with*

3,500 on October 27, then 3,600 seen on October 31 and November 7 with 3,500 on November 10 and 1,200 on November 14. There were 3,500 on November 17 with 3,700 on November 21 and 5,400 on November 23, then 3,800 seen on November 28. That closed the main fall passage. For the winter passage there were 5,400 on December 1 with 6,000 on December 5, then 2,400 seen on December 7. There were 3,350 on December 12 with 3,800 on December 16 and 4,800 on December 19, then 3,700 seen on December 27 with 3,250 on December 30, 2,600 on January 2, 800 on January 6 and 650 on January 9. That completed the winter passage. For the early spring passage there were 810 on January 16 with 1,200 on January 19 and 3,250 on January 24, then 3,150 seen on January 26 with 2,490 on February 2, 1,800 on February 6 and 1,200 on February 8. There were 2,100 on February 13 with 2,350 on February 16 and 2,500 on February 20, then 1,500 seen on February 23 with 1,300 on February 28. That concluded the early spring passage. For the late spring passage there were 1,600 on March 2 with 2,800 on March 6, then 1,850 seen on March 10. There were 2,600 on March 13 with 3,700 on March 16 and 3,800 on March 18, then 2,400 seen on March 20 with 1,600 on March 24, 1,250 on March 27 and 900 on March 30. There were 1,800 on April 3 with 1,000 on April 6, 900 on April 10, 850 on April 14 and 450 on April 17. That ended the late spring passage. There was probably a major overlap with the summer passage as that event this year only covered one month. For the summer passage there were 950 on April 20 with 700 on April 24, 550 on April 30 and 300 on May 1. There were 850 on May 15 with 800 on May 22 and 750 on May 29. Those were the few records for the summer passage. Now the post-breeding gathering starts (last year it started on June 6). There were 1,550 on June 5 with 4,500 on June 12, 6,300 on June 19, 17,500 on June 26, 26,000 on July 1, 32,000 on July 3, 86,000 on July 6, 137,000 on July 11, 245,000 on July 14 and 303,000 on July 17, then 285,000 seen on July 20 with 52,000 on July 23 and 3,700 on July 28. There were 134,000 on July 31 with 58,000 on August 3, 26,000 on August 7, 18,500 on August 10, *13,100 on August 15 and 8,400 on August 17. The count of 303,000 is still (2013) the highest count for Zellwood. There were 103,000 on August 21 with 33,700 on August 25. There were 76,000 on August 28 with 86,000 on August 31 and 101,000 on September 4, then 53,000 seen on September 7 with 25,200 on September 12, 17,700 on September 19, 15,800 on September 22, 6,500 on October 2, 1,650 on October 12 and 820 on October 16.* That was the end of multiple post-breeding gatherings. There was no early fall passage this year. Two things in particular amaze me about these events, just where did all these birds come from as this is not the fall migration season and where did 200,000 go between July 20 and July 23 for instance.

#### Eastern Meadowlark (*Sturnella magna*)

A resident with the greatest numbers at the Sod Farm and the Sand Farm, they were hard to find during their molt. Early fall records: *there were 14 on June 20 with ten on June 28,*

*nine on July 4, six on July 7, four on July 11, three to July 18, two to July 29 and singles to August 11. I suspect that all I am recording here is the gradual cessation of song.* For this year there was one on August 26. Later there were six on September 9 with two on September 16 and one on September 19. That was the early fall passage. For the main fall passage there were three on September 22 with four on September 28, nine on October 6 and 28 on October 11, then singles seen to October 24. There were two on October 27 with six on October 31, then five seen on November 7 with three on November 10. There were ten on November 14 with seven on November 17, six on November 23 and four on November 28. That was the main fall passage; there was every indication of passage. For the winter passage there were eight on December 1 with four on December 7 and one on December 12. There were five on December 16 with three on December 19 and two on December 22. There were six on December 27 and December 30 with four to January 9. That completed the winter passage. For the early spring passage there were eight on January 16 with seven on January 19, six on January 24 and three on January 26. There were five on January 30 with six on February 2 and February 6, then two seen on February 8. There were four on February 13 with six on February 16 and eight on February 23, then three seen on February 28. That concluded the early spring passage. For the main spring passage there were seven on March 2 with 11 on March 6, 20 on March 13 and 22 on March 16, then ten seen on March 18 with four to March 24. There were 18 on March 27 with two on March 30. There were six on April 3 with 16 on April 6, then 12 seen on April 14 with ten on April 20, nine on April 24 and seven on April 26. That was the end of the main spring passage. For the summer passage there were 12 on April 30 with 18 on May 1. Later there were five on May 15 with 13 on May 22, then six seen on May 29. There were 12 on June 5 with 22 on June 12, then 15 seen on June 19 with nine on July 1, eight to July 14, seven on July 17, five on July 20, four on July 23 and singles to August 10.

#### Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

This was a vagrant. For the late fall passage there was an adult male by Pole Road on November 23.

#### Common Grackle (*Quiscalus quiscula*)

For the bulk of the year this species was present in small numbers but then there was the post-breeding gathering in 2005. This species was only involved in the post-breeding gathering in 2004 in a minor way; it was not involved in the earlier years. Early fall records: *for the post-breeding gathering there were 130 on July 18 with 8,200 on July 21, 17,200 on July 24, 19,100 on July 29 and 23,000 on August 1, then 3,000 seen on August 4 with 750 on August 9,*

185 on August 11, 80 on August 16, 50 on August 22, 23 on August 26 and six on August 29. That was the end of the post-breeding gathering although the event was really over after August 1. The count of 23,000 was the highest count for Zellwood but for the new high count see the 2005 post-breeding gathering. To show just how unique these events are the previous high count was only that of 960 on November 17, 2002! For the remains of the early fall passage there were 66 on September 1 with 131 on September 9, then 17 seen on September 16 with three on September 19 and one on September 22 that was it. For the main fall passage there were six on September 28 with four on October 3 and two on October 6. There were six on October 11 with 19 on October 17, then five seen on October 21 with two on October 24. There were six on October 27 and October 31 with 11 on November 3 and 78 on November 7, then 72 seen on November 14 with eight on November 17. That was the very early end to the main fall passage. For the winter passage there were 12 on November 21 with 23 on November 23, 34 on December 1 and 116 on December 5, then 17 seen on December 7 with 13 on December 12, nine on December 16 and eight on December 19. There were 24 on December 22 with 12 on December 30, eight to January 9 and one on January 16. That completed the winter passage. For the early spring passage there were 12 on January 19 with six on January 24 and five on January 26. There were eight on January 30 with nine to February 6, 18 on February 13 and 21 on February 20, then 15 seen on February 28 with eight on March 2 and five on March 6. That concluded the early spring passage. For the main spring passage there were 12 on March 10 and March 13 with 20 on March 16 and 42 on March 18, then 17 seen on March 20. There were 18 on March 24 with 30 on March 27, then 17 seen on March 30 with six on April 3. There were 30 on April 6 with 22 on April 10, 16 on April 14 and seven on April 17. That closed the main spring passage so for the summer passage there were 19 on April 20 with ten to April 26 and three on April 30. There were four on May 1 with 24 on May 15 and 28 on May 29, then 26 seen on June 5 with nine on June 12. The summer passage was over taken by the post-breeding gathering. For the post-breeding gathering there were 4,000 on June 19 with 32,800 on June 26, 67,000 on July 1, 75,000 on July 3, 102,000 on July 6, 105,000 on July 11, 110,000 on July 14 and 117,000 on July 17, then 37,000 seen on July 20 with 17,000 on July 23, 1,200 on July 31 and 400 to August 10. That was the end of the post-breeding gathering. The count of 117,000 is still (2013) the highest count for Zellwood.

#### Boat-tailed Grackle (*Quiscalus major*)

A common resident there appeared to be a significant fall passage; the main event was however the post-breeding gatherings in 2004 and 2005. Early fall records: *for the post-breeding gathering there were 490 on May 23 and May 26 with 1,660 on May 30, 2,800 on June 2, 6,040 on June 6, 8,430 on June 9, 12,100 on June 13, 20,400 on June 16, 32,400 on June 20, 40,750 on June 23, 44,500 on July 28, 51,000 on July 2, 58,000 on July 4, 63,000 on July 7,*

81,000 on July 11, 90,400 on July 14 and 97,000 on July 18, then 80,400 seen on July 24 with 78,500 on July 29, 27,100 on August 1, 9,000 on August 4, 1,000 on August 9 and 250 on August 11. The roost at this point moved to Duda so I do not know whether or not the gathering continued there. At the Sand Farm this was the end of this event. The count of 97,000 was the highest count for Zellwood but see the gathering in 2005. For the early fall passage there were ten on August 15 with 60 on August 16, 115 on August 19 and 2,500 on August 22, then 95 seen on August 29 with 85 on September 9, 80 on September 12 and 65 on September 16. There were 150 on September 19 with 60 on September 22. That was the early fall passage. For the main fall passage there were 1,750 on September 28 with 6,840 on October 3, then 450 seen on October 6 with 320 on October 11. There were 650 on October 13 with 250 on October 17. There were 350 on October 21 with 700 on October 24 and 2,300 on October 31, then 1,750 seen on November 3 with 380 on November 7. There were 660 on November 10 with 1,300 on November 14 and 2,250 to November 23, then 2,500 seen on December 1 and December 5 with 850 on December 7. That closed the main fall passage. For the winter passage there were 950 on December 12 with 2,000 on December 16, then 1,400 seen on December 19 with 960 on December 22 and 850 on December 27. There were 1000 on December 30 with 850 on January 2, 580 on January 9 and 465 on January 16. That completed the winter passage. For the early spring passage there were 650 on January 19 with 1,100 on January 24, then 660 seen on January 26 with 450 on January 30. There were 470 on February 2 with 710 on February 6, then 425 seen on February 8 with 400 on February 13. There were 445 on February 16 with 80 on February 20. There were 130 on February 23 with 390 on February 28 and 450 on March 2, then 370 seen on March 6. That concluded the early spring passage. For the summer passage (there is no late spring passage as this species breeds so early) there were 380 on March 10 with 170 on March 13. There were 310 on March 16 with 370 on March 18, then 105 seen on March 20 with 80 on March 24 and 75 on March 27. There were 200 on March 30 with 220 on April 6, then 105 seen on April 10 with 65 on April 14. There were 100 on April 17 with 140 on April 20, then 130 seen to April 26. There were 160 on April 30 with 150 on May 15 and 105 on May 22. That ended the summer passage; please take a look at this passage again before you look at the next event. For the post-breeding gathering there were 255 on May 29 with 530 on June 5, 3,350 on June 12, 6,050 on June 19, 20,700 on June 26, 51,000 on July 1, 73,000 on July 3, 113,000 on July 6, 163,000 on July 11 and 167,000 on July 14, then 107,000 seen on July 17 with 35,000 on July 20, 28,000 on July 23, 1,200 on July 28, 120 on July 3, 40 on August 3 and ten on August 7. The count of 167,000 is still (2013) the highest count for Zellwood. There were 2,560 on August 10 with 100 on August 17 and nine on August 21. That ended the post-breeding gathering. Of interest there was a near complete albino at the Sand Farm on August 29.

## The Icterid post-breeding gatherings

This text will attempt to show the, for Florida, staggering numbers that eventually joined the roost at the Sand Farm Cattail Marsh. These events started in the summer of 2002 after the cattail marsh was established. Initially numbers were “low” so for the first two years I am only going to summarize the records.

### Red-winged Blackbird

From July 25, 2002 to October 6, 2002                      Peak count of 10,375 on September 15, 2002.  
 From July 23, 2003 to October 5, 2003                      Peak count of 115,000 on September 16, 2003.

### Common Grackle

No post-breeding gatherings for these two years.

### Boat-tailed Grackle

From June 10, 2002 to July 28, 2002                      Peak count of 4,050 on July 21, 2002  
 From July 21, 2003 to October 5, 2003                      Peak count of 7,300 on September 16, 2003

The closeness of the dates for both of the Red-winged Blackbird years is remarkable. The Boat-tailed Grackle is just as interesting with a minor event in the first year with a date that was totally different but with the second year the date was as the same as that for Red-winged Blackbird.

The following is a table detailing the records for 2004.

Date	Red-winged Blackbird	Common Grackle	Boat-tailed Grackle	Totals
5.30.2004			1,660	1,660
6.2.2004			2,800	2,800
6.6.2004	810		6,040	6,850
6.9.2004	980		8,430	9,410
6.13.2004	2,300		12,100	14,400
6.16.2004	3,400		20,400	23,800
6.20.2004	8,300		32,400	40,700
6.23.2004	11,850		40,750	52,600
6.28.2004	11,350		44,500	55,850
7.2.2004	47,000		51,000	98,000
7.4.2004	67,000		58,000	125,000
7.7.2004	82,000		63,000	145,000

<b>Date</b>	<b>Red-winged Blackbird</b>	<b>Common Grackle</b>	<b>Boat-tailed Grackle</b>	<b>Totals</b>
7.11.2004	133,000		81,000	214,000
7.14.2004	129,000		90,400	219,400
7.18.2004	85,000		97,000	182,000
7.21.2004	90,000	8,200	No count - fog	98,200 +
7.24.2004	144,000	17,200	80,400	241,600
7.29.2004	182,000	19,100	78,500	279,600
8.1.2004	134,500	23,000	27,100	184,600
8.4.2004	64,000	3,000	9,000	76,000
8.9.2004	208,000	750	1,000	209,750
8.16.2004	85,000			85,000
8.19.2004	44,000			44,000
8.22.2004	5,300		2,500	7,800
8.26.2004	1,000			1,000

Unlike the first two years the pattern is now very different, both the Red-winged Blackbird and the Boat-tailed Grackle started much earlier although the Common Grackle did share the start date for the first two years. There may be some unknown significance to the July 21-25 start dates. In 2004 there is no correlation between the three peak counts dates. One other item of interest is the number of influxes. Both the Common Grackle and the Boat-tailed Grackle had a single influx covering their respective “gatherings” whereas the Red-winged Blackbird had a total of three influxes. Finally there is one other very clear change with 2004 these gatherings are no longer running through September. Each of these species left the roost separately, Boat-tailed Grackles first, and then the Common Grackles followed by the Red-winged Blackbird. Hence on July 21 only the Boat-tailed Grackle was affected by the fog.

The following is a table detailing the records for 2005.

<b>Date</b>	<b>Red-winged Blackbird</b>	<b>Common Grackle</b>	<b>Boat-tailed Grackle</b>	<b>Totals</b>
6.5.2005	1,550	26	530	2,106
6.12.2005	4,500	9	3,350	7,859
6.19.2005	6,300	4,000	6,050	16,350
6.26.2005	17,500	32,800	20,700	71,000
7.1.2005	26,000	67,000	51,000	144,000
7.3.2005	32,000	75,000	73,000	180,000
7.6.2005	86,000	102,000	113,000	301,000
7.11.2005	137,000	105,000	163,000	405,000
7.14.2005	245,000	110,000	167,000	522,000
7.17.2005	303,000	117,000	107,000	527,000
7.20.2005	285,000	37,000	35,000	357,000

Date	Red-winged Blackbird	Common Grackle	Boat-tailed Grackle	Totals
7.23.2005	52,000	17,000	28,000	97,000
7.28.2005	3,700	700	1,200	5,600
7.31.2005	134,000	1,200	120	135,320
8.3.2005	58,000	400	40	58,440
8.7.2005	26,000	25	10	26,035
8.10.2005	18,500	400	2,560	21,460

This time all three species started this event in early June which agrees with 2004. Both the Common Grackle and the Boat-tailed Grackles continued to have just one influx. This time the Red-winged Blackbird had two. The peak counts for the Red-winged Blackbird and the Common Grackle were on the same date and the Boat-tailed Grackle's peak count was only three days earlier.

This analysis covers the years 2002 to 2005 I have included the earlier years so that this year's events can be put into perspective. I cannot imagine what is actually happening here, the sheer numbers involved and the speed with which they come and go. Just what kind of catchment area do you have to collect 303,000 Red-winged Blackbirds, 117,000 Common Grackles and 167,000 Boat-tailed Grackles? The total of 167,000 Boat-tailed Grackles has to mean a breeding population of some 50,000 pairs. I did see parties of this species flying in high from the west, but the numbers were not great. Between July 28 and July 31 in 2005 a total of 130,000 Red-winged Blackbirds arrived. Between July 20 and July 23 in 2005 a total of 233,000 Red-winged Blackbirds left, they had not just changed their roost site they had gone. None of these events are described in the Florida literature.

#### Shiny Cowbird (*Molothrus bonariensis*)

Normally this is a vagrant but there was a major visitation in the early fall. For the spring passage there was a female by the Hooper Farms Road gate on May 1. For what may be construed as the early fall passage there a pair at the junction of Airport Road and Hooper Farms Road on June 19, the male was singing; also on June 19 there was a pair by the McDonald Canal. On June 26 the pair was again present at the junction of Hooper Farms Road and Airport Road but this time there was another pair by the dead tree part way down Airport Road. There was also a male by the Lust Road gate with a male at the McDonald Canal/Laughlin Road junction. On July 1 the four birds in the Airport Road/Hooper Farms Road area were still present with a pair by the Lust Road gate, the male at the McDonald Canal/Laughlin Road junction, a female by Canal Road and a male at the eastern end of the McDonald Canal. On July 3 a total of 13 seen! The four by Airport/Hooper Farms Road, the pair by the Lust Road gate, a pair at the McDonald Canal/Laughlin Road junction, the female by Canal Road, a juvenile by Interceptor Road, a female at the Workshops and a pair by the Laughlin Road gate. On July 6

the pair was at the junction of Airport Road/Airport Road but only the male seen down Airport Road. There was now a male with the juvenile by Interceptor Road and the female was at the Workshops. On July 11 the only ones seen were two pairs by Interceptor Road. On July 14 the pair was again seen by Airport Road/Hooper Farms Road. On July 20 there was a female by Interceptor Road with seven males at the Workshops. On July 23 and July 28 there was a male by Interceptor Road. I have tried to estimate the number of birds; it would seem that at least 25 birds passed through the area! The count of 13 is still (2013) the highest count for Zellwood.

#### Brown-headed Cowbird (*Molothrus ater*)

Seen in every month of the year but normally in very low numbers; there was in the spring a major passage. Early fall records: *there were four on June 20 with five on June 23, nine on June 28, 11 on July 2 and 15 on July 4, then five seen on July 7 with four on July 11 and three on July 14. There were six on July 18 with two to July 29, then singles seen to August 9. At least eight pairs bred that year and the bulk of the birds in the first influx were juveniles.* For this year there were two on August 15 with singles to August 19. There were seven on August 26 with one on September 1. There was one on September 16 and September 19. That was the extent of the early fall passage. For the main fall passage there were 12 on October 3 with 16 on October 11. There was also one on November 3. There were two on November 17 with four on November 21 and 12 on November 23. That closed the main fall passage. For the winter passage there was one on December 16 with 20 later on December 30, then 15 seen on January 2 with five on January 6 and one on January 9. That completed the winter passage. For the early spring passage there were two on January 16 with eight to January 26 and 146 on January 30, then 15 seen on February 2. Now the heavy passage gets underway. There were 68 on February 6 with 156 on February 8, 520 on February 16 and 3,150 on February 20, then 400 seen on February 23. The count of 3,150 was a joint high count as there were 3,150 on February 5, 1999; however the highest count is now (2013) that of 3,600 on February 27, 2009. That concluded the early spring passage. For the late spring passage there were 550 on February 28 with 1,300 on March 2 and 2,250 on March 10, then 117 seen on March 18 with singles to March 30. That ended this event and the late spring passage. For the summer passage there were eight on April 10 with one on April 14. There were three on April 17 with 21 on April 20, then five seen on April 24 with two on April 30 and one on May 1. There were two on June 5 and June 12 with six on June 19, then four seen on July 26 with one on July 1. There was a juvenile seen on June 19. That ended the summer passage so for the early fall passage there were five on July 3 with six on July 11, then four seen on July 14 with three on July 17. There was a juvenile on July 3. There were eight on July 20 with singles to July 31. There were three on August 10 *with singles to August 25.*

### Orchard Oriole (*Icterus spurius*)

A summer visitor; Zellwood is right at the southern limit of the known breeding range. Early fall records: *there were 11 on June 20 with ten on June 23, six on June 28 and singles to July 4. There were two on July 7 and July 14 with one on July 21. There were three juveniles on July 29. I thought there were nine adult or immature males on territory in 2004.* For this year there was one on August 16. There were no further sightings until the spring. It is not possible to separate out any spring passage. So for the summer passage there were singles from April 24 to May 1 with seven on May 15, ten on May 29 and 16 on June 12, then nine seen on June 19. There were 11 on June 26 with 24 on July 1 (this total included some juveniles), then nine seen to July 14 with five on July 17, four on July 23 and one on July 28. The count of 24 was the highest count for Zellwood but the highest count is now (2013) that of 28 on June 19, 2009. I did not estimate the size of the breeding population this year.

### Baltimore Oriole (*Icterus galbula*)

This was a vagrant. For the early fall passage there was an adult male by Lake Apopka to the south of the Hooper Farms Road extension on September 19. For the spring passage there was a female at the Nursery on April 14.

### House Finch (*Carpodacus mexicanus*)

An irregular visitor; the situation has improved since. For the late fall passage there were two on November 17, there being singles by Canal Road and at the Nursery. For the winter passage there were two by Canal Road on December 5. These counts of two represented the first records for Zellwood; the highest count now (2013) stands at 27 on July 11, 2012. That fits in perfectly with the July counts of this year. There were no further sightings until the early fall passage. There was a female by Airport Road on July 4 with what was probably the same bird by the Hooper Farms Road gate on July 14.

### American Goldfinch (*Spinus tristis*)

A common fall passage migrant with good numbers for the winter and early spring passages; there were much lower numbers in the late spring. For the fall passage there was one on November 10 with seven on November 14, 20 on November 17, 30 on November 21, 41 on November 23 and 136 on November 28, then 72 seen on December 1 with 14 on December 5. The count of 136 was the highest count for Zellwood but the highest count is now (2013) that of 196 on February 20, 2008. That was the end of the fall passage. For the winter passage there

were 28 on December 7 with 35 on December 12, then 18 seen on December 16 with 17 on December 19 and nine on December 22. There were 34 on December 27 with 48 on December 30, then 32 seen on January 2 with 12 on January 6. That completed the winter passage. For the early spring passage there were 20 on January 9 with 33 on January 16, then ten seen on January 19 with eight on January 24. There were 28 on January 26 with 29 on February 2, then nine seen to February 8 with eight to February 16 and six on February 20. There were nine on February 23 with 15 on February 28, then four seen on March 2. That closed the early spring passage. For the late spring passage there were seven on March 6 with four to March 16 and three on March 18. There were five on March 20 with two on March 27 and singles to April 6. Finally for the late spring passage there were two at the Sand Farm on April 24. Perhaps unusually this species has the highest numbers in the fall, the winter or the early spring passages. The fall as it was this year may have the heaviest passage more often than the other seasons.

#### House Sparrow (*Passer domesticus*)

This is a declining species; all the sightings were from the northern border. Early fall record: *there were two on July 8*. For the late fall passage there was one on October 17. For the main spring passage there were two on April 20 with singles on April 26, May 1 and May 15. For the early fall passage there were singles on July 23 and August 7.

## **Table A**

### **The Spreadsheet - August 15, 2004 to August 14, 2005.**

This table gives full details of the species seen and the numbers counted on a daily basis during this survey year. Because of the number of visits the table had to be broken down into parts, they are in chronological order. Where brackets are used this is to indicate a count that was made at Duda i.e. outside the survey area

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	1	.	1	2	1	1	2	2	3	3	3	5	8	14	10
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	4	36	40	28	40	39	13	.	31	35	23	20	22	19	17	15
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	32	55	71	65	50	80	143	.	102	102	59	48	42	41	6	21
2	American Bittern	.	2	.	1	.	1	1	.	1	4	.	1	2	2	4	3
2	Least Bittern	.	1	1	.	.	.	1	.	.	1	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	4	15	11	13	15	14	16	.	19	32	16	22	13	27	12	16
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	34	21	7	24	6	10	14	.	19	12	7	29	25	27	30	36
2	Snowy Egret	30	42	9	54	106	71	22	.	39	33	34	14	111	33	221	572
2	Little Blue Heron	35	98	38	42	95	50	40	.	37	91	106	78	80	43	64	90
2	Tricolored Heron	15	18	9	34	19	9	12	.	12	17	8	5	9	6	6	10
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	130	1,530	705	1,045	1,130	1,110	835	.	650	510	6,400	1,200	3,200	1,690	4,150	3,500
2	Green Heron	10	236	42	51	29	6	6	.	16	40	15	16	21	16	12	8
2	Black-crowned Night-Heron	.	.	2	1	.	.	.	.	1	1	2	1	5	16	15	16
2	Yellow-crowned Night-Heron	1	2	.	.	1	.	.	.	6	.	.	.	1	1	1	1
2	White Ibis	760	450	24	10	63	60	48	.	250	257	790	280	320	210	210	545
2	Glossy Ibis	90	110	480	300	560	75	5	.	160	420	610	450	445	90	460	1,360
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	2	1	.	.	.	.	.	.	.	.	7	.	.	.
7	Black Vulture	.	9	7	16	5	1	3	6	2	1	1	1	1	1	3	4
7	Turkey Vulture	35	110	194	68	365	84	132	.	24	27	20	16	26	11	24	17
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	1	.	4	2	.	.	.	.	.	2	5	2	2	2	4
3	Fulvous Whistling-Duck	.	30	.	1	.	.	.	5	10	13	27	49	44	3	11	2
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	5	7	18	3	6	.	27	4	36	17	2	86	31	4	7
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	1	1	8	4	.	.	3	3	1	3	8	3	2	3	18
3	Mottled Duck	.	7	41	96	68	5	.	85	42	35	46	62	71	8	16	22
3	Blue-winged Teal	.	.	5	44	.	.	2	160	290	600	410	410	215	885	1,025	45
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	2	2	2	2	10	.
3	Northern Pintail	.	.	.	.	.	.	.	.	1	.	.	1	1	1	.	2
3	Green-winged Teal	.	.	.	.	.	.	.	30	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Osprey	9	18	31	19	19	23	22	.	28	35	31	11	15	16	9	19
7	Swallow-tailed Kite	.	128	82	80	66	52	23	.	10	.	.	.	.	.	.	.

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	.	1	2	.	1	3	.	1	.	3	.	1	3	2	2	2
7	Northern Harrier	.	.	.	.	.	1	1	1	.	2	1	2	2	4	1	8
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	1	1	.	.	1	1	1	1
8	Cooper's Hawk	1	25	15	5	8	5	15	.	3	6	1	6	1	5	4	1
8	Red-shouldered Hawk	9	68	76	47	42	45	65	.	43	29	26	26	19	24	22	26
8	Broad-winged Hawk	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	3	9	8	12	11	16	14	.	13	10	12	9	9	7	7	11
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	1	.	.	.	4	5	7	13
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	1	1	4	3	.	5
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	1	.	2	2
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	5	11	23	7	1	6	.	3	4	1	6	7	1	4	7
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	113	134	74	43	47	41	.	21	56	15	14	18	7	7	12
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	1	24	6	17	7	8	10	.	6	2	2	2	1	3	2	2
4	Common Gallinule	130	145	140	165	115	105	115	.	150	155	135	110	145	160	150	110
1	American Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	1	1	.	.	.	.	.	.	.	.	1	.	4
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	11	.	.	1	1	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	.	2	.	9	8	9	4	1	3	12	1	2	3	3	8	1
4	Black-necked Stilt	.	.	.	.	3	.	.	.	.	.	8	.	.	.	5	4
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	.	.	2	4	.	.	2	2	5	6	4	9	5	9	4
4	Lesser Yellowlegs	1	7	1	13	160	43	.	.	60	48	26	140	100	208	160	18
4	Solitary Sandpiper	1	.	.	1	3	.	.	.	13	17	6	3	2	5	1	1
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	1	1	.	1	2	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	12	6	.	35	3	10	20	.	1	1	3	.	.
4	Western Sandpiper	.	.	.	8	2	.	.	1	1	2	.	.	.	.	.	.
4	Least Sandpiper	.	.	.	44	2	.	.	16	15	32	6	3	11	23	2	2
4	White-rumped Sandpiper	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	2	2	3	9	.	.	80	250	120	3	16	4	9	1	40
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	2	.	1	7	.	.	6	1	4	.	6	16	6	5	6

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.	.	2	.	3	6	4	13	37
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	35	30	.	.	.	1	.	.	.	.	.	.	1	1	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	10	.	.	1	2	.	.
5	Least Tern	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	7	.	.	.	.	.	.	.	.	3	.	.	10	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	.	3	1	1	3	3	1	.	1	1	6	4	1	1	3	3

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove			1	19			4				2					
8	Mourning Dove	38	85	41	150	185	122	34		42	178	28	21	10	12	103	9
8	Common Ground-Dove	5	14	16	17	10	10	15		7	12	11	3	1	4	9	4
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo	1	4	1	2	1		1							1	2	1
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl		5	1	3	4	1	1		2	7	5	1	6	5	4	3
8	Eastern Screech-Owl									1					1		
8	Great Horned Owl			1		1					1		1				
8	Burrowing Owl																
8	Barred Owl				1					1	1		1			1	
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk		3								8	13	1	1			
8	Chuck-will's-widow			1													
8	Eastern Whip-poor-will											1			1		1
7	Chimney Swift		2	5	2	10	58	12		5	3	34	34	11	15	9	34
8	Ruby-throated Hummingbird				1					1							
8	Black-chinned Hummingbird																
5	Belted Kingfisher	1	2		1	2	1	1	1	3	1	1	2	2	1		2
8	Red-headed Woodpecker							1			2				2		
8	Red-bellied Woodpecker	1	15	19	12	18	14	18		15	20	20	15	23	21	32	24
8	Yellow-bellied Sapsucker														1		
8	Downy Woodpecker	1	3	10	4	6	8	10		6	10	11	10	9	17	33	8
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker		2	1	2	1	2			1	1	1	1	1	2	3	2
8	Pileated Woodpecker		1	1	2	1	6	1		1	5	8	4	9	3	3	3

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	1	.	2	.	.	.	.	.	.	.	1	1	1
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	1	1	1	2	1	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	.	1	.	.	1	1	1	1	2	3	2
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	11
8	Vermillion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	3	5	.	3	3	1	.	1	1	.	.	.	1	1	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	28	.	1	7	3	44	10	.	9	1	.	1	5	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	1	3	3	3	5	4	3	4	3	4	3	6	2	3	3	3
8	White-eyed Vireo	.	2	.	1	2	3	3	.	6	4	4	13	18	11	27	13
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	1	2	1	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	5	13	25	16	24	31	27	.	25	30	28	35	32	57	45	27
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	1	.	.	2	4	.	.	.	2	.	.
7	Fish Crow	.	2	4	6	4	80	1	.	.	2	3	.	.	3	.	.
7	Purple Martin	.	.	.	.	.	1	.	.	2	.	.	.	.	.	.	.
7	Tree Swallow	.	.	.	1	3	1	1	.	.	.	1	.	25	1	30	2
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	3
7	Bank Swallow	.	.	6	7	45	12	11	3	9	.	2	2	7	1	2	7

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
7	Cliff Swallow	.	.	.	1	4	3	1	1	1	.	.	.	.	.	.	1
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	78	18	1,230	1,160	305	265	78	110	705	27	450	160	275	154	420	110
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	1	4	1	4	2	3	.	3	4	2	1	2	2	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	2	29	27	27	29	22	20	.	24	21	16	17	23	33	23	18
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	3	20	29
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	1
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	3
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2	.
8	Blue-gray Gnatcatcher	.	.	5	1	3	14	20	.	17	37	27	63	118	134	167	38
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	1	2	.	.	6
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	1
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	3
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	1	14	16	17	15	14	8	.	16	16	4	16	15	31	36	24
8	Brown Thrasher	.	6	2	1	8	2	5	.	13	15	5	6	6	7	16	9
7	European Starling	.	1	6	8	1	5	.	5	4	4	.	.	.	1	.	.
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	2	.	1	.	1	.	5	4	.	4	5	2	2	1

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
7	Yellow Warbler	1	14	30	17	65	46	23	.	19	27	22	15	7	19	2	1
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	1	.	.	.	.	1	.	.	.	1	1	1
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	2	1	.	1	1	1	2	2	1	2	2
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	1
7	Prairie Warbler	.	10	14	13	9	10	16	.	12	13	8	13	5	10	12	9
7	Palm Warbler	.	.	.	.	.	.	.	.	.	1	.	2	.	7	22	29
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	2	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	1	.	.	3	.	.	2	2	2	4	10	2	.	1
8	American Redstart	.	1	4	2	2	.	2	.	3	2	.	4	15	1	9	4
8	Prothonotary Warbler	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	1	.	.	.	.	.	.	.	.	.	2	.	.	.
8	Swainson's Warbler	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	1	.	1	1	.	5	3	30	14	10	37	14	20
7	Northern Waterthrush	.	.	.	.	3	5	7	.	19	23	55	41	58	188	53	51
7	Louisiana Waterthrush	.	7	7	9	68	13	10	.	29	3	5	2	1	2	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	.	.	2	2	6	.	38	43	82	49	856	314	187	140
8	Hooded Warbler	.	1	.	.	.	1	1	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	1	.	.	.	.	.	1	.	1	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
7	Eastern Towhee	6	91	75	48	64	107	49	.	43	20	33	10	10	35	26	32
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	1
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	3	69	70	38	79	57	65	.	68	71	75	46	81	127	84	60
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	4	18	11	4	7	.	7	4	4	69	22	4	1	2	11	3
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	2	5	3	3	4	.	1	.	1	9	1	1	3	6	15	32
8	Painted Bunting	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	1
7	Dickcissel	.	.	.	.	.	.	.	2	2	.	.	.	.	.	.	.
7	Bobolink	.	.	2	.	2	5	12	1	47	82	90	22	7	47	3	6
7	Red-winged Blackbird	20	85,000	44,000	5,300	1,000	1,120	260	.	930	1,500	1,100	2,250	850	3,200	3,900	650
6	Eastern Meadowlark	.	.	.	.	1	.	.	.	6	1	2	1	3	4	1	9
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	1	80	41	50	23	6	66	.	131	6	17	3	1	6	4	2
7	Boat-tailed Grackle	10	60	115	2,500	60	95	15	.	85	80	65	150	60	1,750	6,840	450

Table A. Part 1.

Hab	SPECIES	8/15	8/16	8/19	8/22	8/26	8/29	9/1	9/8	9/9	9/12	9/16	9/19	9/22	9/28	10/3	10/6
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed	2	1	1	.	7	.	1	.	.	.	1	1	.	.	12	.
8	Orchard Oriole	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	44	79	77	90	89	78	80	29	95	96	85	94	105	117	106	109
	<b>TOTAL INDIVIDUALS</b>	1,555	88,986	48,018	11,931	5,193	4,150	2,519	572	4,727	5,238	11,184	6,150	7,754	10,041	19,000	8,722

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	20	12	5	5	3	3	5	1	4	7	2	7	5	7	8	9
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	67	1
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	31	36	10	n/c	17	15	43	58	76	136	154	134	370	180	216	156
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	25	22	20	3	22	4	36	29	32	14	42	34	24	39	43	39
2	American Bittern	5	6	6	5	5	2	9	8	2	17	19	9	15	10	12	9
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	22	14	23	8	14	12	29	18	44	14	28	33	29	38	35	32
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	42	126	168	125	180	410	800	700	915	520	695	335	1,155	1,480	1,755	1,456
2	Snowy Egret	806	570	675	825	865	1,025	2,260	1,555	2,585	2,160	2,225	2,510	1,920	2,005	1,560	1,365
2	Little Blue Heron	52	230	169	75	130	320	405	245	445	285	366	310	375	500	520	735
2	Tricolored Heron	17	18	13	36	116	100	292	250	290	235	368	385	355	347	315	315
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	285	1,050	340	520	405	850	550	620	385	670	885	430	205	280	345	360
2	Green Heron	8	6	5	6	8	9	12	8	14	11	11	9	13	11	12	10
2	Black-crowned Night-Heron	63	208	8	4	5	.	10	10	9	34	71	83	88	40	124	85
2	Yellow-crowned Night-Heron	3	1	1	1	1	.	1	1	.	.	.	.	.	.	.	.
2	White Ibis	570	175	865	460	980	2,400	1,620	890	1,925	2,110	3,775	5,650	4,295	4,250	3,380	3,435
2	Glossy Ibis	290	340	140	240	340	107	770	780	470	815	580	1,605	1,695	2,910	2,465	3,825
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	1	3	.	.	.	.	.	1	.	1	1	3	.
7	Black Vulture	.	7	3	1	3	1	3	3	1	7	1	2	3	5	3	5
7	Turkey Vulture	17	9	9	8	36	11	187	19	16	19	21	30	16	33	97	32
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	2	.	2	2	.	.	.	.	.	.	23	.	.	5	23
3	Fulvous Whistling-Duck	2	2	4	2	.	.	.	.	.	.	315	95	.	9	2	20
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	28	12	13	4	2	1	25	13	3	8	8	1	3	3	5	4
3	Gadwall	.	.	.	.	2	.	2	.	2	2	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	24	9	2	2	103	.	13	1	11	13	5	11	11	6	2	2
3	Mottled Duck	40	32	7	6	72	9	56	21	59	96	85	102	64	60	8	6
3	Blue-winged Teal	570	125	21	30	16	.	2	4	2	3	48	1	12	.	9	6
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	8	3	.	36	8	.	6	.	4	1	.	.	.	.	.	.
3	Northern Pintail	2	2	.	2	1	.	1	1	4	5	4	.	2	.	.	.
3	Green-winged Teal	4	.	.	8	2	.	.	.	.	5	5	.	2	.	.	1
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	1	.	.	.	1	.	.	.	6	.	8	1	2	2	.	2
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	6	3	.	.	.	32	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	1	.	.	.	.	.	12	6	7	120	3	.	10,500	120	5	780
5	Osprey	15	14	3	4	13	10	12	7	20	24	20	16	13	23	23	18
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	4	2	3	1	2	2	5	3	4	6	2	2	2	4	4	5
7	Northern Harrier	11	6	10	5	9	11	9	5	22	22	23	42	56	108	158	228
8	Sharp-shinned Hawk	1	1	2	.	1	.	1	2	1	9	11	5	4	1	5	2
8	Cooper's Hawk	2	2	.	1	4	3	2	2	3	3	2	3	1	1	2	2
8	Red-shouldered Hawk	28	28	25	21	30	34	47	21	47	29	40	42	35	29	38	31
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	10	5	10	6	7	8	7	6	7	8	7	10	11	12	11	18
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	18	13	15	13	18	19	14	17	22	17	24	26	20	20	13	15
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	3	1	3	.	1	.	1	1	1	.	.	1	.	1	.	1
7	Peregrine Falcon	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	14	1	16	2	5	2	3	3	7	3	3	3	10	1	4	12
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	34	65	44	54	32	35	56	45	25	54	51	52	55	29	50	27
2	Virginia Rail	1	1	.	.	.	6	.	3	.	.	1	2	3	2	1	1
2	Sora	31	56	65	134	78	26	177	71	65	118	121	100	186	92	91	54
2	Purple Gallinule	2	2	1	3	1	3	2	1	1	2	.	1	1	2	1	2
4	Common Gallinule	190	300	190	200	140	155	160	150	160	205	265	260	275	264	235	250
1	American Coot	88	18	16	620	420	6	1	15	127	29	18	23	35	100	15	51

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	2	1	.	3	2	.	2	.	.	.	1	.	1	.	.	2
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	12	.	3	.	.	14	7
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.
4	American Golden-Plover	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	5	1	1	3	1	5	2	19	37	26	38	5	4	8	18	20
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	20	14	20	8	23	.	1	.	1	.	9	.	.	1	.	.
4	Lesser Yellowlegs	114	110	75	46	194	1	2	1	4	.	68	1	.	1	.	.
4	Solitary Sandpiper	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	2	1	.	2	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	12	36	27	82	90	.	.	.	.	.	33	1	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	1	28	18	10	24	.	.	.	.	.	1	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	3	3	3	.	16	.	.	1	.	.	6	.	.	.	.	.
4	Curlew Sandpiper	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	5	18	46	3	28	.	.	.	.	.	1	.	.	.	.	.

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
6	Buff-breasted Sandpiper	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	3	1	4	5	2	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	4	14	78	35	65	.	9	.	.	.	5	.	.	.	.	.
4	Wilson's Snipe	37	26	47	118	55	20	28	38	49	26	48	16	24	61	28	23
4	American Woodcock	.	1	.	.	1	.	.	.	1	.	4	1	1	.	1	.
4	Wilson's Phalarope	1	1	.	1	1	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	2	1	1
5	Ring-billed Gull	.	.	.	.	.	.	.	26	38	38	23	7	160	5	39	56
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	2	1	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	.	.	.	.	2	2	.	.	1	2	7	14
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	2	.	.	1	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	8	29	14	1	13	6	6	14
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.
8	Eurasian Collared-Dove	2	6	3	3	2	1	2	2	1	1	2	1	2	1	1	3

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	94	8	21	15	6	15	7	10	32	14	21	51	6	19	20	26
8	Common Ground-Dove	6	9	9	3	6	6	3	2	2	1	2	7		1	3	4
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo				1												
8	Yellow-billed Cuckoo	1		3	2	1		1	2	1							
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	2	2	4	3	6	2	1	1	6	4	1	2	4	6	5	4
8	Eastern Screech-Owl																
8	Great Horned Owl		1	1	2	2	2	2	1	2	1	2	1	2	2	1	2
8	Burrowing Owl																
8	Barred Owl		1	1			1		1			1		2	1	2	1
7	Long-eared Owl																
7	Short-eared Owl									1	1		1	1		1	
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will	2	1		1												
7	Chimney Swift	6,800	12	9	14			2									
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher		3	5	6	7	8	21	24	12	13	19	17	12	14	14	11
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	27	13	20	23	13	19	17	18	12	9	20	17	10	12	12	8
8	Yellow-bellied Sapsucker		1	6	2	4	2	2	4	2	2			1		1	2
8	Downy Woodpecker	19	10	17	15	11	14	7	3	6	2	4	12	3	5	4	5
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	1	2	3	3	2	2				1	2	2	1	1	1
8	Pileated Woodpecker	2	3	3	2	1	5	2	1	1			1	1	1	1	2

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	1	2	1	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	1	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	4	2	3	2	2	2	1	2	2	1	2	2	1	.	1	1
7	Eastern Phoebe	20	21	85	81	223	264	215	207	210	117	206	237	143	161	157	112
8	Vermillion Flycatcher	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	1	.	1	.	1	2
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Western Kingbird	.	.	.	.	.	1	.	1	1	9	5	4	4	3	10	15
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	1	1	1	4	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	2	1	3	2	3	2	3	1	3	3	1	2	1	2	1
8	White-eyed Vireo	13	17	18	21	13	12	6	7	5	2	3	3	1	1	3	1
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	2	3	4	.	.	1	1	1	9	2
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	1	3	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	26	17	35	42	22	23	21	24	19	11	18	18	18	10	18	4
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	2	.	.	2	.	.	1	.	2	.	.	.	.	.	1
7	Fish Crow	.	.	.	.	5	.	13	.	14	3	.	4	1	1	.	2
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	315	60	30	20	15	12	4	40	80	66	42	49	180	200	43	39
7	Northern Rough-winged Swallow	28	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	12	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
7	Cliff Swallow	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	184	3	162	12	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	2	2	1	1	1	1	2	1	1	1	1	1	1	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	20	17	17	18	14	17	17	13	10	5	11	17	5	8	16	6
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	154	90	274	252	352	408	286	236	248	127	155	161	139	131	82	76
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	2	3	6	6	6	23	10	7	8	5	14	9	7	9	13	12
7	Marsh Wren	8	5	39	15	15	174	77	119	115	70	93	80	52	36	48	39
8	Golden-crowned Kinglet	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	3	4	1	4	3	2	6	3	24	4	11	11	15	9	20	6
8	Blue-gray Gnatcatcher	56	84	60	75	45	66	50	36	49	33	49	42	34	31	34	18
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	1	.	2	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	1	1	1	3	.	1	2	1	.	4	.
8	Wood Thrush	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	1	1	2	7	.	3	3	3
8	Gray Catbird	117	114	142	174	122	117	87	62	47	27	60	31	31	21	31	22
8	Northern Mockingbird	23	15	29	39	36	12	18	11	12	5	13	8	12	15	12	10
8	Brown Thrasher	6	5	7	8	5	3	3	.	2	1	2	1	1	.	2	1
7	European Starling	.	4	.	.	.	.	15	.	20	.	3	60	.	5	105	11
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	1	2	1	.	.	.	.	4	1
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	17	29	1	3	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	1	1	2	1	2	1	2	1	2	12	3	6	5	10
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	3	8	22	12	3	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
7	Yellow Warbler	1	1	1	2	.	.	.	.	1	.	1	1	1	.	.	.
8	Chestnut-sided Warbler	.	.	.	1	1	1	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	1	3	.	2	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	1	2	1	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	1	1	1	2	2	22	40	10	250	41	57	200	100	170	135	87
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	2	.	.	2	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	1	1	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	4	2	1	1	.	.	.	.	.	1	1	.	.	.	.	1
8	Pine Warbler	1	.	.	.	.	1	2	2	1	2	3	1	.	.	2	2
7	Prairie Warbler	3	3	3	3	3	.	1	.	1	.	1	1	1	.	1	1
7	Palm Warbler	97	200	300	290	251	302	348	219	330	105	175	235	175	170	90	115
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	1	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	1	2	1	1	1	.	2	1	1	1	1	.	.	.	.	1
8	American Redstart	27	10	2	6	3	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	47	45	19	29	13	9	9	3	5	1	2	1	3	1	1	1
7	Northern Waterthrush	69	71	28	64	16	12	14	12	8	8	11	4	6	8	9	6
7	Louisiana Waterthrush	.	.	.	.	1	1	.	.	1	1	1	1	1	1	1	1
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	352	215	139	119	159	135	83	107	94	62	88	104	77	63	61	31
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	1	.	.	.	.	.	.	.	.	1	1	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2.

Ha	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
7	Eastern Towhee	27	35	20	16	21	18	18	17	15	3	18	16	17	27	12	6
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	1	1	3	2	1	1
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	2	.	.	8	2	2
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	6	2	4	1	2	11	11	27	15	3	20	13	22	29	29	27
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	1	1	1	2	2	4	2	2	3	2	2	2	5	5	2	1
7	Lincoln's Sparrow	.	.	1	.	.	.	.	.	1	.	1	.	.	1	1	.
7	Swamp Sparrow	2	1	4	3	35	249	173	200	324	220	296	970	1,126	368	202	251
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	3	8	6	14	8	15	12	14	19
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	82	47	56	47	42	48	37	28	30	22	33	45	20	33	32	21
8	Rose-breasted	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	1	1	1	3	2	1	4	5	2	.	2	2	1	1	4	4
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	56	39	72	42	16	8	16	14	3	2	3	4	3	1	5	1
8	Painted Bunting	2	.	1	1	1	1	1	2	1	1	1	1	1	.	1	.
7	Dickcissel	.	1	1	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Bobolink	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.
7	Red-winged Blackbird	1,070	850	1,150	600	1,060	3,500	3,600	3,250	3,600	3,500	1,200	3,500	3,007	5,004	3,008	5,400
6	Eastern Meadowlark	28	1	1	1	1	2	6	4	5	3	10	7	5	6	4	8
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	6	3	19	5	2	6	6	11	78	4	72	8	12	23	16	34
7	Boat-tailed Grackle	320	650	250	350	700	210	2,300	1,750	380	660	1,300	450	2,250	2,250	2,050	2,500

Table A. Part 2.

Hab	SPECIES	10/11	10/13	10/17	10/21	10/24	10/27	10/31	11/3	11/7	11/10	11/14	11/17	11/21	11/23	11/28	12/1
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	16	.	.	.	.	.	1	.	.	.	.	2	4	12	.	.
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	1	7	20	30	41	136	72	
8	House Sparrow	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	120	121	119	118	120	88	104	101	110	101	115	109	110	106	115	116
	<b>TOTAL INDIVIDUALS</b>	13,785	6,529	6,379	6,305	7,900	11,391	15,273	12,179	14,069	13,166	14,660	18,897	29,692	22,068	18,275	22,636

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	5	16	13	10	8	8	9	10	8	6	7	5	7	9	15	3
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	8	.	.	.	.	16	.	.	15	.	14	.	.	.	.	1
1	Brown Pelican	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	153	246	165	322	180	248	179	440	500	350	238	120	380	460	323	149
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	39	60	51	43	44	47	46	58	56	57	79	58	70	56	63	50
2	American Bittern	12	7	10	15	15	17	18	26	10	13	13	11	15	6	12	8
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	34	24	46	69	52	34	52	23	35	36	36	31	33	41	25	36
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	2,390	1,705	680	783	227	121	225	185	186	35	30	14	92	26	23	72
2	Snowy Egret	2,145	1,320	440	735	381	417	385	330	449	117	204	100	137	104	59	151
2	Little Blue Heron	665	685	237	220	173	77	184	180	175	84	64	53	77	68	43	78
2	Tricolored Heron	261	194	103	103	36	23	44	38	31	25	15	11	8	17	13	29
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	130	235	187	235	205	575	235	162	290	187	310	66	310	175	330	126
2	Green Heron	11	13	16	19	11	9	10	10	11	17	16	10	13	13	15	20
2	Black-crowned Night-Heron	62	59	50	31	37	20	67	1	35	4	15	1	6	3	13	7
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	4,020	5,730	1,420	695	142	163	168	145	156	60	85	63	80	39	113	100
2	Glossy Ibis	3,360	2,635	335	240	234	116	128	73	115	124	104	144	102	102	90	119
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	5	5	1	.	.	.	2	.	.	.	.	.	.	.	.	1
7	Black Vulture	4	3	15	27	18	3	8	4	4	1	1	3	3	3	7	5
7	Turkey Vulture	7	25	24	12	30	28	43	40	65	20	26	45	36	88	87	32
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	8	32	.	32	.	2	15	18	28	185	90	15	15	2	39	43
3	Fulvous Whistling-Duck	10	5	6	18	18	3	5	130	6	207	240	4	24	25	120	133
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	2	.	2	.	8	2	2	2	14	13	1	3	8	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	2	2	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	4	.	.	.	.	.	.	.	.	6	.	.	.	.	12	12
3	American Black Duck	.	.	.	.	.	.	.	.	.	2	1	.	.	2	1	.
3	Mallard	1	1	.	2	2	2	1	3	1	3	3	4	1	2	1	2
3	Mottled Duck	4	9	2	7	5	14	8	9	7	14	11	8	8	14	8	13
3	Blue-winged Teal	8	8	8	2	8	8	35	310	100	105	113	32	12	26	160	225
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	3	4	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	2	12	.	2	.	8	8
3	Green-winged Teal	.	7	.	7	2	.	2	6	3	16	18	1	3	2	3	31
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	3	3	2	.	2	2	.	1	2	39	3	15	4	.	.	8
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	6	.	.	.	.	.	.	.	6	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	11	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	4	.	2	11	1	8	6	2	5	.	.	1	1	5	5	1
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	3,400	8,700	50	3	170	1	.	.	.	13,250	13,250	.	110	.	.	.
5	Osprey	28	24	15	19	8	13	9	10	15	17	12	11	13	23	24	14
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	9	7	6	7	7	10	6	5	3	3	6	6	22	10	33	10
7	Northern Harrier	226	[nc]	305	195	201	202	169	197	192	189	170	152	154	164	155	135
8	Sharp-shinned Hawk	4	3	5	3	6	3	6	3	3	2	3	2	3	1	1	2
8	Cooper's Hawk	3	2	1	3	2	3	1	3	2	3	2	3	2	1	.	3
8	Red-shouldered Hawk	32	26	25	30	21	22	20	28	39	21	35	41	35	27	27	22
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	20	21	15	23	24	15	22	22	15	12	16	16	16	24	17	12
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	12	18	15	14	17	12	9	17	14	12	11	15	13	13	9	14
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	1	.	.	.	.	1	.	.	.	.	.	.	1	2	1	1
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	2	1	27	.	14	11	5	.	12	2	25	.	12	18	2	12
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	26	31	27	33	34	44	15	40	35	36	63	37	35	17	61	20
2	Virginia Rail	3	4	4	3	3	6	2	3	5	4	5	2	.	2	1	2
2	Sora	71	55	64	69	86	66	71	109	36	41	37	33	40	7	29	16
2	Purple Gallinule	1	2	1	1	1	2	2	1	2	2	2	2	2	1	2	1
4	Common Gallinule	180	190	280	280	185	240	265	170	210	270	245	200	210	245	245	260
1	American Coot	73	42	71	130	75	110	260	220	265	200	190	120	130	190	160	160

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	1	1	.	.	1	2	1	1	1	.	1	.
2	Sandhill Crane	1	.	.	5	44	.	1	.	.	.	.	.	.	1	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	20	21	73	25	148	39	20	15	14	26	17	167	76	300	137	57
4	Black-necked Stilt	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	1
4	Lesser Yellowlegs	.	2	.	8	1	2	2	3	.	2	1	.	.	1	1	3
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	30	19	31	17	10	9	20	16	3	6	7	13	26	3	12	10
4	American Woodcock	3	3	1	1	1	2	1	3	1	.	1	1	2	.	2	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	12	1	.	.	2	13	4	4	19	2	5	11	.	.	1
5	Ring-billed Gull	5	60	176	94	520	871	870	510	760	1,210	7,400	1,900	950	3,400	530	31
5	Herring Gull	.	.	1	2	1	1	2	2	1	2	1	2	2	4	1	1
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	2	4	.	.	22	.	.	2	2	.	.	.	1	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	2	8	15	15	6	8	11	6	10	11	38	7	24	1	5	5
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	1	1	1	2	2	2	1	1	3	2	5	7	3	6	2

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove									2							
8	Mourning Dove	18	12	15	18	15	5	7	25	23	28	28	34	5	13	8	10
8	Common Ground-Dove	2	1	4	1	7	8	2	5	5	13	7	3	5	3	4	7
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani							1			1	1		1		1	5
8	Barn Owl	2	1	3	4	4	4	3	1	4	5	4	2	2	1	2	6
8	Eastern Screech-Owl																
8	Great Horned Owl	1	1	3	1	1	1	1	1	1	1	1	1	1	5	1	10
8	Burrowing Owl																
8	Barred Owl	4	2	1	1	1	1	2		1	4	1		1	1	1	2
7	Long-eared Owl																
7	Short-eared Owl				1	4	4	2	3	4	6	7	1	1	6	3	3
8	Northern Saw-whet Owl																
8	Lesser Nighthawk	1															
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will	1	1	1	1		1		1	1	2			1	1		1
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	11	15	9	8	8	5	5	6	8	8	10	8	7	12	5	7
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	16	19	16	13	11	19	12	21	20	25	24	19	17	20	20	14
8	Yellow-bellied Sapsucker		1	2	3	2	1	1			1	1	1	1	3	3	
8	Downy Woodpecker	4	4	2	4	5	5	5	4	3	4	8	4	5	4	6	6
8	Hairy Woodpecker												1				
8	Red-cockaded Woodpecker																
8	Northern Flicker	1	2	3	4	1	3	2	3	3	1	2	1	1	1	2	3
8	Pileated Woodpecker	1	2	1	2	1	3	1	3	2	2	4	3	1	1	3	2

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	2	5	1	3	1	4	1	6	5	8	3	2	7	7	3	6
7	Eastern Phoebe	114	136	108	94	92	74	78	58	84	78	63	87	57	90	72	73
8	Vermillion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	1	2	2	2	1	1	2	4	3	2	1	.	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	1	1	.	.	.	.	.	1	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	2	1	2	1	1	2	.	.	2	2	.	1	.	.	.
8	Western Kingbird	10	21	27	9	7	13	15	18	16	22	17	3	6	4	2	4
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	5	1	1	.	.	.	3	4	1	1	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	1	1	1	3	2	3	1	2	2	1	2	2	4	3	1	2
8	White-eyed Vireo	3	2	2	1	3	1	1	2	2	3	3	1	1	1	3	1
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	5	1	1	.	2	2	2	3	3	1	1	5	10	2	1	4
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	9	9	11	17	5	8	14	13	10	16	13	21	17	13	30	20
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	2	.	.	2	1	.	.	1	1	.
7	Fish Crow	7	7	2	1	140	32	11	2	2	.	2	8	2	360	30	141
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	4	26	12	3	3	62	40	60	10	61	42	2	40	20	130	300
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	3	4	1	2	2	1	1	1	2	1	1	1	.	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	16	7	10	11	11	11	9	13	11	16	19	20	17	16	17	13
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	64	68	72	34	43	64	29	60	48	96	53	33	43	24	64	57
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	12	10	10	8	13	12	4	10	10	14	10	4	13	5	12	10
7	Marsh Wren	41	29	34	42	47	47	28	31	23	50	21	5	33	17	37	24
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	11	4	31	10	10	6	9	10	10	15	6	15	10	12	15	7
8	Blue-gray Gnatcatcher	40	33	39	28	35	48	44	39	50	42	37	38	47	37	37	50
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	2	.	9	2	1	3	1	.	1	2	3	3	2	.	.	1
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	3	8	5	14	36	32	.	438	320	425	290	1,840	3,200	2,180	3,002	2,855
8	Gray Catbird	15	27	27	15	20	26	17	23	51	51	30	41	45	40	80	32
8	Northern Mockingbird	11	11	14	12	9	12	14	10	13	18	13	15	8	23	16	14
8	Brown Thrasher	.	.	1	.	.	.	.	.	.	.	.	.	.	1	1	.
7	European Starling	2	1	2	10	1	47	2	12	2	2	4	5	2	3	8	10
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	1	4	2	3	3	4	.	1	.	1	2	.	1	.	.	.
8	Cedar Waxwing	.	.	.	.	.	3	3	.	.	15	2	.	.	.	6	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	3	4	3	4	9	5	4	5	4	8	4	6	3	3	4	2
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	85	150	250	210	65	110	195	120	80	240	85	86	200	140	165	65
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	1	1	.	1	1	1	1	1	1	.	1	1	.	.	.
8	Pine Warbler	2	2	2	.	2	2	2	1	1	2	.	2	1	.	.	2
7	Prairie Warbler	3	1	2	.	.	1	1	1	4	1	1	2	2	1	.	2
7	Palm Warbler	80	185	300	265	320	335	315	330	235	335	325	145	410	315	625	405
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	1	1	.	1	1	1	.	1	1	1	2	1	.	.	1
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	2	.	.	1	1	.	1	1	1	1	.	1	.	1	1
7	Northern Waterthrush	4	8	3	4	5	4	2	6	6	10	6	7	8	6	10	13
7	Louisiana Waterthrush	.	1	.	1	.	1	.	1	.	1	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	40	64	62	71	83	60	70	79	79	101	59	40	62	59	84	67
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	1	.	.	.	1	.	1	2	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
7	Eastern Towhee	8	13	12	8	18	14	11	15	12	25	21	39	31	20	30	29
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	1	2	1	2	1	2	7	3	2	2	3	3	.	.	1
7	Field Sparrow	.	.	.	.	.	.	1	1	1	1	1	1	2	.	.	.
7	Vesper Sparrow	2	2	4	7	6	4	7	3	7	10	4	9	3	10	1	3
7	Lark Sparrow	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	67	59	56	52	125	94	131	50	113	132	90	156	307	385	446	235
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	1	1	1	3	.	2	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	3	4	5	5	6	3	5	4	4	8	3	6	3	3	3	2
7	Lincoln's Sparrow	.	1	1	1	.	.	.	.	.	.	1	.	.	.	.	1
7	Swamp Sparrow	160	182	166	161	137	175	119	97	110	194	102	99	109	63	100	97
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	White-crowned Sparrow	3	6	19	8	12	2	9	7	7	15	22	18	4	2	11	7
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	20	25	28	35	28	17	18	23	24	67	34	80	47	28	59	47
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	1	1	1	.	.	.	1	.	1	1	.	.	1	.	1	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	1	.	.	2	4	2	1	.	3	3	.	1	1	.	3	.
8	Painted Bunting	1	2	1	1	1	1	.	2	1	1	1	1	1	1	.	1
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	6,000	2,400	3,350	3,800	4,800	3,500	3,700	3,250	2,600	800	650	810	1,200	3,250	3,150	1,800
6	Eastern Meadowlark	2	4	1	5	3	2	6	6	4	4	4	8	7	6	3	5
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	116	17	13	9	8	24	3	12	3	8	8	1	12	6	5	8
7	Boat-tailed Grackle	2,500	850	950	2,000	1,400	960	850	1,000	850	530	580	465	650	1,100	660	450

Table A. Part 3.

Hab	SPECIES	12/5	12/7	12/12	12/16	12/19	12/22	12/27	12/30	1/2	1/6	1/9	1/16	1/19	1/24	1/26	1/30
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	.	1	.	.	.	20	15	5	1	2	1	8	8	8	146
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	14	28	35	18	17	9	34	48	32	12	20	33	10	8	28	27
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	<b>109</b>	<b>115</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>117</b>	<b>111</b>	<b>111</b>	<b>115</b>	<b>128</b>	<b>122</b>	<b>112</b>	<b>118</b>	<b>105</b>	<b>110</b>	<b>113</b>
	<b>TOTAL INDIVIDUALS</b>	<b>27,062</b>	<b>26,788</b>	<b>10,784</b>	<b>11,689</b>	<b>11,022</b>	<b>9,596</b>	<b>9,543</b>	<b>9,581</b>	<b>8,900</b>	<b>20,656</b>	<b>26,077</b>	<b>7,814</b>	<b>10,040</b>	<b>14,100</b>	<b>12,080</b>	<b>9,378</b>

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	7	11	10	15	13	12	14	18	16	18	23	18	19	20	18	23
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	1	14	13	1	15	4	6	4	1	10	2	4	4	.	14	19
1	Brown Pelican	.	.	3	1	2	1	1	.	.	.	.	.	.	.	1	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	540	385	370	260	506	424	224	357	265	360	332	534	380	215	239	520
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	99	74	68	94	93	111	148	81	84	93	61	75	66	74	65	69
2	American Bittern	7	11	11	10	2	7	4	8	3	7	8	9	4	2	10	7
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	40	32	47	53	42	40	46	39	39	54	59	24	76	71	61	45
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	41	29	40	9	15	11	11	4	4	8	14	16	17	5	7	10
2	Snowy Egret	108	192	102	102	53	18	16	5	2	7	8	25	15	4	2	4
2	Little Blue Heron	53	92	69	90	60	70	47	40	63	77	69	73	90	65	68	53
2	Tricolored Heron	22	27	15	12	19	13	5	6	8	15	7	20	18	8	20	15
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	535	215	185	80	153	295	530	285	335	105	140	50	385	205	140	630
2	Green Heron	19	14	20	16	14	20	33	13	20	30	21	39	31	21	47	28
2	Black-crowned Night-Heron	5	6	5	20	6	20	8	2	6	3	5	12	19	14	20	23
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	180	83	60	43	49	52	46	105	105	88	78	143	750	390	980	1,320
2	Glossy Ibis	163	167	129	235	153	79	227	177	115	128	150	158	475	193	153	95
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	1	1	.	.	.	.	.	.	.	.	2	.	.	1	.
7	Black Vulture	14	1	2	1	1	1	2	9	4	7	4	13	3	4	2	14
7	Turkey Vulture	24	19	20	34	127	38	36	39	635	180	48	72	27	20	15	24
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	44	20	71	.	16	24	4	11	45	3	18	.	.	.	.	.
3	Fulvous Whistling-Duck	70	6	8	2	29	26	46	33	30	3	5	11	12	.	2	6
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	4	6	8	4	12	2	6	6	3	2	2	3	4	4	2	4
3	Gadwall	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	16	21	34	12	1	24	48	.	2	6	4	.	42	38	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	1	2	1	1	1	1	2	2	1	1	2	2	2	3	3	1
3	Mottled Duck	8	5	4	9	7	8	9	11	15	9	19	14	15	20	10	14
3	Blue-winged Teal	90	190	220	125	220	150	180	4	125	146	79	14	80	25	14	8
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	6	8	12	.	.	1	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	3	7	6	12	6	20	40	.	6	5	2	1	6	14	2	5
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	4	.	.	.	.	.	.	.	.	.	.	2	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	9	4	2	2	1	5	2	2	4	7	4	5	.	1	.	.
1	Red-breasted Merganser	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
1	Ruddy Duck	87	1	2,450	.	.	23,000	60	.	3	4,500	4,600	.	5,200	.	12,400	8,800
5	Osprey	30	20	30	26	27	18	25	15	25	22	27	37	50	72	42	33
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	2

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	16	10	36	13	28	9	17	24	24	25	28	15	12	17	5	13
7	Northern Harrier	148	152	146	115	127	131	184	149	149	164	161	165	114	124	122	113
8	Sharp-shinned Hawk	3	4	2	3	2	3	1	6	7	5	4	.	5	5	.	3
8	Cooper's Hawk	4	4	2	2	1	1	.	1	4	1	1	1	1	3	2	1
8	Red-shouldered Hawk	21	21	22	21	22	15	12	9	11	13	12	12	7	7	12	11
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	17	20	14	17	13	13	15	13	19	19	15	17	11	13	15	9
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	17	12	12	11	12	6	7	12	8	15	8	10	10	19	14	12
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	1	.	.	1	1	1	1	.	.	1	1	.	.	.	.
7	Peregrine Falcon	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	.	7	.	1	.	.	.	.	1	.	1	.	.	.	1
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	57	52	74	31	26	11	10	20	4	25	10	10	4	6	21	12
2	Virginia Rail	1	.	2	7	9	5	1	4	.	.	.	1	1	.	.	.
2	Sora	18	13	20	16	14	5	22	8	17	27	7	12	6	10	7	6
2	Purple Gallinule	4	2	3	3	5	3	2	5	2	4	4	3	3	3	9	5
4	Common Gallinule	190	275	270	200	260	100	205	160	165	110	165	100	135	160	170	180
1	American Coot	165	185	165	150	75	40	103	50	50	49	50	67	50	50	64	86

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	.	.	.	.	.	.	.	.	.	.	1	1	.	2	.
2	Sandhill Crane	.	5	.	80	.	16	.	.	19	2	.	16	4	4	4	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	155	82	113	300	59	105	33	10	65	37	20	13	6	29	10	3
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	1	.	1	.	1	1	.	.	.	1	1	.	.	.
4	Lesser Yellowlegs	.	3	2	.	1	1	1	1	.	1	1	2	.	1	.	2
4	Solitary Sandpiper	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	1
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	6	2	40	4	1	3	11	1	4	.	2	.	9	12	8	2
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	3	.	.	.	.	.	2	.	.	3	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	5	15	1	2	.	4	1	.	.	.	.	.	1	.	.	.
5	Ring-billed Gull	480	700	18,000	900	840	3,650	60	1,850	620	680	730	110	685	380	1,440	1,500
5	Herring Gull	1	4	1	1	.	4	1	2	4	2	4	1	3	.	1	1
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	2	.	.	.	.	1	1	4	1	2	.	16	6	12	5	16
5	Royal Tern	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	26	4	18	18	3	14	35	2	17	8	23	11	7	12	9	8
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	8	4	5	3	1	1	1	1	1	2	1	2	1	3	3	4

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	23	14	14	13	16	14	19	14	9	34	16	35	45	53	36	50
8	Common Ground-Dove	2	4	3	3	6	6	12	9	9	10	10	15	8	9	6	21
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani	4	6														
8	Barn Owl	4	1	4	3	3	4	6	5	3	2	3	3	5	8	2	4
8	Eastern Screech-Owl												1				
8	Great Horned Owl	1	2	1	1	1	3	1	1		1	2	3	2	1	1	2
8	Burrowing Owl																
8	Barred Owl	1	1	1	1	2	3	1		1	1	1	7	1		5	1
7	Long-eared Owl																
7	Short-eared Owl	2	4	4	2	2	2	1	2	2	1	2	1	2			1
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow															1	1
8	Eastern Whip-poor-will	1														1	
7	Chimney Swift																
8	Ruby-throated Hummingbird																1
8	Black-chinned Hummingbird																
5	Belted Kingfisher	9	10	8	3	6	6	1	9	6	5	4	6	6	10	6	8
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	26	16	18	16	14	7	19	10	12	11	13	16	23	10	19	21
8	Yellow-bellied Sapsucker	1	1					1	1	2	1	1	1	1	2		
8	Downy Woodpecker	7	2	6	8	9	4	2	3	2	4	13	3	11	9	10	5
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	6	6	3	2	3	2	2	4	1	2	2	4	4	1	2
8	Pileated Woodpecker	2	2	3	2	1	2	1	1	1	1	1	1	2	1	3	2

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	5	2	3	4	1	2	2	.	.	.	1	2	2	5	1	.
7	Eastern Phoebe	81	53	50	34	46	39	47	28	66	81	58	59	49	71	56	24
8	Vermillion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	1	1	1	1	1	.	.	.	.	1	.	2	.	.	2	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	1	.	4	1	5	.	6	1	.	3	.	8	17	1	4	9
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	4	4	2	2	3	1	1	3	3	1	1	1	1	1	1	1
8	White-eyed Vireo	6	6	7	10	5	7	6	6	5	13	6	8	3	7	5	3
8	Bell's Vireo	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	2	2	4	5	1	3	2	4	2	1	3	3	1	2	1	1
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	27	19	11	12	6	12	19	11	12	21	13	11	20	27	29	22
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	3	1	1	1	1	1	.	1	1	4	2	1	1	2	.	1
7	Fish Crow	106	1	405	55	66	10	16	4	44	54	30	18	58	52	49	59
7	Purple Martin	1	.	.	.	.	.	2	2	6	3	5	4	2	13	3	1
7	Tree Swallow	210	530	750	820	305	1,300	340	125	150	1,100	155	12,000	305	3,500	1,750	310
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	4	2	12	9	18	14	7	24	29
8	Carolina Chickadee	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	3	5	4	2	3	2	5	2	1	2	2	2	1	1	4
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	18	17	25	15	13	14	18	12	16	24	21	17	17	31	22	30
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	63	50	48	50	34	26	39	19	29	49	44	22	35	34	27	42
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	15	12	16	17	18	15	14	6	8	15	15	11	13	13	16	29
7	Marsh Wren	39	19	47	25	30	25	16	14	11	18	10	10	7	13	14	23
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	18	10	9	12	8	7	6	6	8	8	18	10	7	9	6	6
8	Blue-gray Gnatcatcher	55	42	32	52	28	37	28	33	45	44	61	30	28	60	35	14
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	1	1	1	2	.	.	.	.	.	.	.	.	.	.	.	1
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	2,560	2,650	1,250	810	2,400	775	450	450	760	500	425	200	280	1,000	175	85
8	Gray Catbird	54	43	74	58	44	48	34	19	29	51	33	46	48	36	40	36
8	Northern Mockingbird	18	19	14	11	8	11	8	9	10	12	19	14	20	22	18	23
8	Brown Thrasher	1	.	1	1	.	1	2	1	1	3	3	1	7	3	6	2
7	European Starling	2	2	2	3	1	.	2	1	.	.	.	.	2	6	1	1
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	2	.	.	.	.	20	1	.	40	3	5	4	15	10
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	7	9	3	3	6	3	1	2	1	3	2	1	.	1	1	1
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	1	1	.	.	1	1	3	5	9	39	52	10	25

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	165	1,075	1,360	2,690	2,760	3,820	1,570	775	1,260	1,890	950	1,030	720	480	785	350
8	"Audubon's Warbler"	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	2	1	.	.	.	.	.	.	.	.	.	.	1	.	.	1
8	Pine Warbler	1	.	1	.	.	2	1	.	2	1	1	1	2	5	.	1
7	Prairie Warbler	2	1	1	1	1	2	.	2	1	.	3	.	1	.	1	1
7	Palm Warbler	460	295	265	485	325	580	320	120	435	280	305	220	185	190	345	270
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	1	.	.	.	.	.	1	.	2	2	1	2	1	2	1	1
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	1	1	1	1	1	1	2	.	.	1	1	.	.	1	2
7	Northern Waterthrush	10	4	11	9	11	6	12	3	7	5	4	9	3	4	7	1
7	Louisiana Waterthrush	.	.	1	.	.	.	.	.	1	.	6	2	2	6	14	12
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	112	61	94	67	39	43	58	33	43	74	48	58	44	50	72	61
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	1	1	.	.	1	.	.	1
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
7	Eastern Towhee	48	33	44	36	33	41	41	58	29	33	25	31	41	33	51	57
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	7	.	.	.	.	.	.	.	.	1	1	.	.	.	1	.
7	Vesper Sparrow	3	6	5	3	8	5	4	4	6	2	4	2	6	5	4	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	185	106	135	155	72	73	48	33	61	45	24	31	22	15	19	5
7	Grasshopper Sparrow	.	1	1	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Henslow's Sparrow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	2	.	1	1	1	.	.	.	1	.	1	1	1	.	.	.
7	Lincoln's Sparrow	1	.	1	.	.	.	.	.	.	.	1	.	.	.	1	.
7	Swamp Sparrow	131	33	91	54	56	49	51	30	41	62	33	43	40	19	51	69
7	White-throated Sparrow	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	16	6	15	8	17	19	22	32	6	3	16	5	14	6	.	8
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	77	49	50	70	59	53	110	44	49	92	92	104	118	128	105	144
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	.	.	1	.	.	.	.	.	4	.	.	2	1	.	.
8	Painted Bunting	1	.	1	.	.	.	.	.	1	1	.	.	2	1	1	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	2,490	1,800	1,200	2,100	2,350	2,005	1,500	1,300	1,600	2,800	1,850	2,600	3,700	3,800	2,400	1,600
6	Eastern Meadowlark	6	6	2	4	6	5	8	3	7	11	5	20	22	10	4	4
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	9	9	5	18	8	21	7	15	8	5	12	12	20	42	17	18
7	Boat-tailed Grackle	470	710	425	400	445	80	130	390	450	370	380	170	310	370	105	80

Table A. Part 4.

Hab	SPECIES	2/2	2/6	2/8	2/13	2/16	2/20	2/23	2/28	3/2	3/6	3/10	3/13	3/16	3/18	3/20	3/24
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	15	68	156	60	520	3,150	400	550	1,300	5	2,250	45	1	117	1	1
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	29	9	9	8	8	6	9	15	4	7	4	4	4	3	5	1
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	<b>121</b>	<b>112</b>	<b>115</b>	<b>107</b>	<b>107</b>	<b>108</b>	<b>108</b>	<b>105</b>	<b>106</b>	<b>108</b>	<b>111</b>	<b>115</b>	<b>118</b>	<b>106</b>	<b>115</b>	<b>114</b>
	<b>TOTAL INDIVIDUALS</b>	<b>11,206</b>	<b>11,079</b>	<b>29,682</b>	<b>11,403</b>	<b>12,963</b>	<b>40,997</b>	<b>7,973</b>	<b>7,865</b>	<b>9,734</b>	<b>14,877</b>	<b>14,106</b>	<b>18,963</b>	<b>15,236</b>	<b>12,732</b>	<b>22,664</b>	<b>17,365</b>

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	19	25	19	19	26	16	25	21	14	17	13	.	20	11	7	16
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	80	124	65	95	38	38	36	60	49	24	39	3	6	2	5	1
1	Brown Pelican	.	.	.	1	1	1	1	1	.	2	6	6	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	310	253	250	224	211	279	117	108	80	51	99	100	55	41	17	16
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	40	30	59	40	39	74	93	97	66	56	70	49	29	39	41	35
2	American Bittern	6	4	4	7	7	5	6	1	2	2	.	.	.	.	.	.
2	Least Bittern	.	.	.	4	1	1	1	1	4	1	4	.	.	5	5	7
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	47	45	48	33	57	33	36	52	41	47	46	43	38	27	42	43
2	Great White Heron	1	2	1	1	.	.	.	.	.	1	1	1	.	.	.	.
2	Great Egret	8	41	9	50	13	23	23	128	15	35	35	52	32	15	24	35
2	Snowy Egret	6	35	8	29	31	43	30	109	29	17	26	24	8	9	6	11
2	Little Blue Heron	55	57	58	50	25	25	38	47	21	35	45	31	27	36	47	54
2	Tricolored Heron	7	5	11	11	9	11	25	59	14	13	10	11	10	5	9	9
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	205	365	170	185	260	245	225	220	235	230	85	55	75	100	125	145
2	Green Heron	26	33	27	15	16	21	25	28	19	20	35	15	22	28	32	56
2	Black-crowned Night-Heron	17	31	25	44	26	42	11	27	15	15	11	8	8	9	5	3
2	Yellow-crowned Night-Heron	.	.	1	1	2	2	1	2	3	1	1	2	.	.	.	1
2	White Ibis	2,510	5,970	330	240	260	125	130	110	33	49	67	100	10	5	11	37
2	Glossy Ibis	330	430	41	61	75	79	97	310	83	45	69	9	83	52	38	71
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	2	.	1	3	.	.	1	.	1	.	2
7	Black Vulture	14	5	14	1	8	3	3	16	4	1	1	.	8	1	7	7
7	Turkey Vulture	8	12	17	13	5	3	4	17	4	12	4	.	5	7	6	9
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	5	.	1	10
3	Fulvous Whistling-Duck	.	28	11	3	3	2	3	4	36	4	7	1	5	.	.	1
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	1	2	2	2	2	3	.	3	1	3	8	.	3	1	7	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	2	1	1	1	.	2	1	.	2	.	1	.	1	1	.	.
3	Mottled Duck	13	17	12	8	8	5	8	4	11	3	8	.	15	4	1	2
3	Blue-winged Teal	13	8	20	10	.	.	.	3	8	3	1	2	.	1	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	550	1	1	.	.	.	5	.	.	.	.	3	.	.	.
5	Osprey	51	16	22	21	15	31	43	46	39	44	57	.	35	22	17	34
7	Swallow-tailed Kite	1	.	.	.	2	.	.	.	.	.	1	1	.	1	6	19

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	19	10	13	11	6	10	7	6	6	7	5	3	2	1	.	1
7	Northern Harrier	114	42	59	53	35	30	21	14	12	6	4	.	.	.	.	.
8	Sharp-shinned Hawk	2	2	2	3	1	1	.	1	.	.	.	.	.	.	.	.
8	Cooper's Hawk	1	.	1	.	1	2	.	1	2	2	1	1	3	2	3	1
8	Red-shouldered Hawk	12	6	8	4	8	4	6	8	4	6	9	7	9	8	6	4
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	7	7	11	8	10	9	7	7	7	6	8	6	3	5	3	3
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	11	9	11	6	8	1	6	.	1	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	3	5	7	11	7	9	7	12	19	10	4	18	26	23	21
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	17	9	15	2	9	14	12	4	5	7	3	.	7	1	6	7
2	Virginia Rail	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	7	10	14	16	3	2	9	6	1	1	1	.	.	.	.	.
2	Purple Gallinule	10	11	12	18	22	21	28	56	25	30	37	5	19	24	30	37
4	Common Gallinule	140	130	175	184	240	120	215	230	150	130	110	60	80	80	110	95
1	American Coot	76	98	74	54	33	9	1	1	1	2	.	.	.	.	1	.

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	1	1	1	.	.	.	.	.	.	.	1	1	2	.	.
2	Sandhill Crane	2	.	2	2	2	2	.	.	2	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	1	2	3	2	7	3	4	2	3	2	1	1	1	8	2	3
4	Black-necked Stilt	11	10	4	9	2	5	2	10	7	13	12	4	2	.	11	4
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	1	3	1	1	2	2	.	2	3	2	.	.	.	.
4	Lesser Yellowlegs	.	13	7	6	5	2	6	5	6	5	10	3	.	.	.	.
4	Solitary Sandpiper	1	.	1	3	5	2	5	6	7	10	3	1	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	1	.	.	1	.	.	1	2	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	1	.	.	2	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	.	.	.	.	.	.	.	.	.	2	50	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	3	1	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	4	.	1	1	.	.	.	.	.

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Wilson's Snipe	3	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	2	1	1	1	4	.	1	4	1	1	6	.	.	4
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	185	2,300	500	400	230	136	820	250	24	21	55	25	2	.	.	.
5	Herring Gull	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	1	1	1	.	.	.	1	.	2	1	.	.	.	2	.	.
5	Caspian Tern	6	5	6	6	5	6	8	13	7	19	13	7	.	1	.	1
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	7	6	14	9	9	7	17	6	2	4	7	1	.	.	.	.
5	Least Tern	.	.	.	3	.	.	5	1	.	.	1	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	2	2	2	4	3	1	1	6	1	4	1	.	2	2	4	4

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	.	.	.	.	.	.	.	.	.	.	1	2	.	.	.	.
8	Mourning Dove	52	132	41	26	100	115	90	87	10	117	78	21	16	26	32	29
8	Common Ground-Dove	9	10	9	14	11	14	9	36	19	31	28	8	30	40	43	63
8	Cockatiel	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	.	.	.	.	.	.	.	1	1	2	6	2	14	13	13	11
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	4	4	4	6	4	4	5	4	3	5	6	.	1	6	2	2
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	1	1	1	3	3	1	1	2	1	1	1	.	1	.	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	1	1	.	1	.	3	.	.	4	.	1	.	1	1	.	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	1	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	.	.	.	.	.	.	.	4	3	10	11	12	5	3	7	1
8	Chuck-will's-widow	1	13	1	9	6	4	4	8	9	3	4	.	9	2	3	6
8	Eastern Whip-poor-will	1	2	2	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	2	.	4	3	3	4	3	16	14	12	4	1	11	5	6	4
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	10	9	3	1	.	1	.	2	1	.	.	.	.	.	.	.
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	12	23	12	21	28	27	14	24	15	20	19	4	20	19	16	15
8	Yellow-bellied Sapsucker	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	6	4	4	3	7	7	5	6	2	4	6	1	7	3	4	3
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	2	2	3	1	2	1	2	4	2	1	1	4	1	1	1	2
8	Pileated Woodpecker	1	1	1	3	2	2	1	2	2	1	4	1	1	2	1	1

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	8	10	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermillion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	1	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	1	1	1	3	10	11	11	8	11	9	6	8	2	.	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	3	3	1	2	2	1	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	.	1	.	2	2	8	3	1	7	2	22	5	.	3	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	1	1	2	1	3	2	3	2	2	3	1	1	1	3	3	4
8	White-eyed Vireo	7	4	6	5	5	2	4	3	2	5	3	1	4	1	4	6
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	1	1	.	.	1	1	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	1	1	.	.	1	.	.	.	.	1	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	27	25	14	25	20	24	18	21	14	20	18	12	11	13	3	12
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	1	1	3	.	1	1	1	1	2	2	.	2	.	.
7	Fish Crow	43	60	19	17	20	13	19	13	12	10	23	6	9	13	7	64
7	Purple Martin	4	2	8	9	6	1	3	2	2	3	2	2	5	5	85	17
7	Tree Swallow	275	200	210	650	215	570	210	700	17	17	44	6	.	1	.	.
7	Northern Rough-winged Swallow	.	.	1	.	.	.	1	.	1	.	.	.	.	.	3	.
7	Bank Swallow	.	.	4	.	2	.	3	3	2	.	4	2	.	1	1	.

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Barn Swallow	52	40	74	58	46	245	390	67	152	57	87	87	58	82	.	73
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	2	.	1	2	3	4	3	2	3	1	1	1	2	.	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	17	24	19	8	36	19	20	32	17	27	24	14	26	35	17	22
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	33	34	28	18	19	9	9	1	.	2	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	17	23	11	11	13	13	8	8	5	8	.	.	.	.	.	.
7	Marsh Wren	20	24	35	15	20	47	34	36	31	36	7	1	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	5	5	3	2	4	1	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	4	5	.	.	1	.	.	.	1	.	.	.	.	1	.	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	80	5	1	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	15	28	8	15	17	48	26	74	23	41	7	2	1	.	1	1
8	Northern Mockingbird	11	17	26	16	35	19	22	20	19	19	14	12	18	16	21	25
8	Brown Thrasher	3	3	4	4	4	2	3	3	3	5	4	1	2	5	1	4
7	European Starling	11	1	2	1	1	9	10	3	7	1	2	2	3	2	13	10
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	42	2	1	.	8	8	.	.	.	11	3	8	176	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	8	5	.	2	1	2	.	1	1	4	1	.	1	1	1	1

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	1	.	2	1	.	.	.	.	.
8	Yellow-rumped Warbler	167	31	14	1	1	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	2	2	1	.	.	.	2	1	1	.	.	.	.	.	.	.
7	Palm Warbler	345	360	270	195	122	162	69	17	28	13	3	1	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	2	2	2	1	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	2	1	.	.	4	2	.	2	2	.	.	.	.	.	.	.
8	American Redstart	.	1	1	.	.	2	.	1	4	1	2	2	.	2	.	.
8	Prothonotary Warbler	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	1	1	.	.	.	.	1	.	.	.	.	.
7	Northern Waterthrush	7	4	1	11	6	19	6	26	10	17	2	1	1	1	.	.
7	Louisiana Waterthrush	34	13	4	10	2	6	1	1	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	28	40	16	18	13	11	7	14	11	14	8	3	6	.	1	1
8	Hooded Warbler	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	1	.	.	1	4	2	1	.	1	3	3	3	7	7	8
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
7	Eastern Towhee	45	73	37	76	54	68	38	59	36	55	61	25	69	80	68	46
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	4	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	14	9	22	15	12	4	26	18	17	22	4	6	.	.	.	.
7	Grasshopper Sparrow	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	2	1	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	35	43	31	45	28	83	32	80	28	64	9	.	.	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	2	.	2	.	3	2	1	2	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	112	228	106	141	286	307	128	260	125	214	202	68	150	188	147	120
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Blue Grosbeak	.	.	1	.	2	5	6	5	6	10	17	8	27	21	23	24
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	1	1	.	1	.	1	1	2	3	3	10	3	29	26	22	27
8	Painted Bunting	.	1	.	.	.	.	1	1	1	1	1	.	2	2	1	1
7	Dickcissel	.	.	.	.	.	.	.	.	2	.	64	82	136	143	92	89
7	Bobolink	.	.	.	.	15	2	4	78	710	1,735	845	515	3	6	.	1
7	Red-winged Blackbird	1,250	900	1,800	1,000	900	850	450	950	700	500	550	300	850	800	750	1550
6	Eastern Meadowlark	18	2	6	16	9	12	5	10	9	7	12	18	5	13	6	12
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	30	17	6	30	22	16	7	19	10	10	3	4	24	20	28	26
7	Boat-tailed Grackle	75	200	190	220	105	65	100	140	130	130	160	40	150	105	255	430

Table A. Part 5.

Hab	SPECIES	3/27	3/30	4/3	4/6	4/10	4/14	4/17	4/20	4/24	4/26	4/30	5/1	5/15	5/22	5/29	6/5
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	1	1	.	8	1	3	21	5	5	2	1	1	.	.	.	2
8	Orchard Oriole	.	.	.	.	.	.	.	1	1	1	1	1	7	2	10	4
8	Baltimore Oriole	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	2	.	1	1	.	.	.	2	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	2	.	1	.	.	1	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	112	113	112	108	109	113	98	110	112	111	114	92	81	84	71	78
	<b>TOTAL INDIVIDUALS</b>	7,379	13,434	5,251	4,723	4,050	4,376	4,008	5,041	3,376	4,345	3,498	1,981	2,566	2,310	2,359	3,530

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	17	10	10	9	7	7	9	11	7	4	11	6	8	7	8	3
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	28	16	17	12	35	20	28	22	21	32	35	24	20	24	29	20
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	51	58	46	59	47	61	58	61	68	51	68	70	71	70	76	68
2	American Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
2	Least Bittern	6	16	12	16	28	11	13	4	2	2	1	4	2	3	1	1
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	16	31	15	24	23	15	19	25	35	17	26	20	20	24	32	23
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	17	23	33	62	25	20	22	21	10	8	14	14	12	6	16	12
2	Snowy Egret	19	16	17	186	185	160	32	9	10	12	25	16	19	24	17	20
2	Little Blue Heron	46	30	37	54	23	34	55	48	76	51	72	47	30	53	39	41
2	Tricolored Heron	21	11	8	8	14	7	11	9	9	11	14	13	14	8	10	16
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	520	500	860	840	845	790	925	1165	1330	1590	1915	1865	2025	2100	1305	1405
2	Green Heron	68	131	123	77	77	64	85	76	83	67	70	68	66	72	45	32
2	Black-crowned Night-Heron	3	2	3	3	7	7	7	2	3	4	2	2	2	2	2	2
2	Yellow-crowned Night-Heron	2	.	1	1	1	1	2	2	1	3	2	2	1	1	2	1
2	White Ibis	18	58	325	210	325	545	144	235	700	1035	107	36	92	80	215	370
2	Glossy Ibis	310	21	482	190	63	125	61	110	95	395	72	16	37	13	52	28
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	1	.	2	.	.	1	.	1	.	.	.	.	.	.	.	.
7	Black Vulture	4	8	15	7	1	6	3	8	3	23	5	2	2	12	47	6
7	Turkey Vulture	5	16	22	36	25	21	27	110	27	27	105	134	39	163	49	72
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	4	4	2	4	4	7	6	.	2	1	1	2	.	5	.	.
3	Fulvous Whistling-Duck	.	.	1	1	.	2	2	.	.	.	.	8	.	.	.	1
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	6	4	2	3	5	.	.	5	4	.	.	5	3	.	4	2
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	1	1	.	.	1	1	.	.	.	.	1	.	.	.	.
3	Mottled Duck	2	4	5	2	1	5	3	3	1	.	8	5	.	.	3	3
3	Blue-winged Teal	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Osprey	41	44	57	88	102	63	65	32	32	75	36	62	47	77	68	73
7	Swallow-tailed Kite	10	207	274	104	41	480	322	809	856	667	393	446	486	341	182	46

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	1	1	1	1	.	.	1	1	1	1	1	1	.	2	2	1
7	Northern Harrier	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Cooper's Hawk	.	4	2	2	1	3	2	6	10	9	16	10	14	13	12	4
8	Red-shouldered Hawk	6	6	3	7	3	4	9	7	15	13	11	14	19	16	24	32
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	1	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	6	7	7	7	4	3	6	5	9	5	9	5	8	11	15	14
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	18	18	28	17	23	17	26	20	18	25	19	22	56	15	9	7
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	4	1	9	9	10	2	8	6	21	25	56	141	175	183	182	236
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	24	19	26	27	14	29	22	17	22	15	11	18	16	15	8	6
4	Common Gallinule	115	150	110	150	160	160	170	200	135	250	190	180	150	165	190	190
1	American Coot	.	.	.	.	.	.	.	.	.	1	1	1	2	2	1	1

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	1	.	1	1	.	.	1	1	.	1	1	.	1	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
2	Whooping Crane	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	2	1	7	3	2	1	1	1	2	1	1	1	1	2	1	5
4	Black-necked Stilt	2	.	.	1	2	2	1	1	2	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
4	Lesser Yellowlegs	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.	1
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	.	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	4	1	.	.	.	.	.	.	.	.	.	.	6	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
5	Least Tern	.	.	1	4	4	1	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	10	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	3	1	2	4	4	4	3	6	4	6	1	3	2	4	4

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove						1				2	4			3		
8	Mourning Dove	41	32	75	90	143	95	110	160	320	144	360	215	200	153	178	230
8	Common Ground-Dove	50	29	53	44	60	43	53	33	36	16	24	12	18	9	11	17
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo	7	6	7	5	6	9	9	4	3	2			1	1	2	3
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	4	7	2	2	2	2	2	4	3	8	8	4	4	8	6	6
8	Eastern Screech-Owl																
8	Great Horned Owl															1	1
8	Burrowing Owl																
8	Barred Owl		2	1				1							1	7	
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk	3	1	9	1	5	4	2	5	1	2	1	1	2	1	1	
8	Chuck-will's-widow	5	4	9	1												
8	Eastern Whip-poor-will																
7	Chimney Swift	6	5	4	11	13	2		8	16	2	46	2	2	1	34	2
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher										2	3	1	3			
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	13	14	22	11	12	10	15	18	15	10	7	8	8	7	13	14
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	1	9	5	7	2	3	2	2	4	2	3	2	5	5	2	6
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	1	2	1	1	2	2	1	2	1	1	2	2	2	2	1
8	Pileated Woodpecker	1	1	2	1	1	1	1	2	1	1	1	1	1	4	5	3

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermillion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	1	2	3	5	2	3	1	1	1	1	3	4	2	3	1	4
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	2	1	1	.	.	2	.	1	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	3	2	1	4	3	3	3	1	3	1	5	3	1	1	2	8
8	White-eyed Vireo	3	3	3	4	3	2	3	3	4	3	3	1	2	4	4	4
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	9	13	16	22	19	7	10	15	18	14	17	18	20	9	17	17
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
7	Fish Crow	5	236	280	35	12	46	10	28	7	15	21	175	225	110	35	23
7	Purple Martin	51	37	73	5	21	1	4	.	.	.	.	1	2	.	.	.
7	Tree Swallow	.	.	.	.	.	1	1	.	.	.	.	1	.	.	.	.
7	Northern Rough-winged Swallow	.	1	1	1	.	1	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	1	.	.	.	1	.	.	.	1	1	1	2	1	.	.	.

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
7	Cliff Swallow	.	.	.	.	1	.	.	.	.	.	2	3	3	.	1	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	81	62	128	90	79	140	145	55	70	200	260	202	138	24	105	20
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	.	4	1	1	3	1	1	1	1	2	2	2	2	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	29	33	28	22	23	23	18	23	25	15	13	14	17	14	13	23
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	34	18	18	17	66	61	103	39	81	16	48	16	14	26	7	28
8	Brown Thrasher	5	4	7	9	6	7	4	3	4	2	3	4	2	2	12	7
7	European Starling	260	128	46	97	26	60	190	680	470	8	216	8	1	5	1	.
7	Common Myna	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	3	2	4	12
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	.	.	.	.	.	.	.	.	.	1	1	.	2	1	5	16
7	Palm Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	4
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	7	8	9	3	4	4	3	3	3	2	1	.	.	.	1	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6.

Hab	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
7	Eastern Towhee	58	61	102	53	58	73	65	49	91	42	90	65	55	60	56	72
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	90	97	126	113	89	89	80	85	138	79	66	54	60	50	51	64
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	24	25	18	25	19	16	15	22	23	18	21	16	17	13	10	19
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	23	18	25	18	16	16	15	18	18	24	24	25	18	12	11	9
8	Painted Bunting	1	2	3	3	1	2	2	1	1	2	2	3	1	.	1	1
7	Dickcissel	82	88	69	61	54	45	44	46	56	40	23	14	4	5	2	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	4500	6300	17500	26000	32000	86000	137000	245000	303000	285000	52000	3700	134000	58000	26000	18500
6	Eastern Meadowlark	22	15	4	9	8	7	8	8	7	5	4	1	1	1	1	1
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	9	4000	32800	67000	75000	102000	105000	110000	117000	37000	17000	700	1200	400	25	400
7	Boat-tailed Grackle	3350	6050	20700	51000	73000	113000	163000	167000	107000	35000	28000	1200	120	40	10	2560

Table A. Part 6.

Ha	SPECIES	6/12	6/19	6/26	7/1	7/3	7/6	7/11	7/14	7/17	7/20	7/23	7/28	7/31	8/3	8/7	8/10
7	Shiny Cowbird	.	4	6	9	13	6	4	2	.	8	1	1	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	2	6	4	1	5	3	6	4	3	8	1	.	1	.	.	3
8	Orchard Oriole	16	9	11	24	7	9	4	9	5	1	4	1	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>TOTAL SPECIES</b>	75	74	78	76	72	75	72	73	72	72	74	74	73	67	73	73
	<b>TOTAL INDIVIDUALS</b>	10204	18758	74745	14703	182894	304481	408087	526375	532054	362134	10159	9746	139,60	62492	29292	2483

Totals for 7/23: 101,596 7/31: 139,608

## Table B

### Habitat usage on a daily basis

This table is a daily summary of the number of birds using the different described habitats. By each species in Table A I have given a “Hab”itat code using codes 1 to 8. This code indicates what I perceive as each species’ preferred habitat at Zellwood. It is the “Hab” code that has been used to collate the numbers using each habitat on a daily basis. Detailed below are the preferred habitats together with a brief description of the same.

#### Habitat 1      Deep water

This covers a field that is deep flooded to its banks or the deeper areas of an otherwise shallow flooded field. The species in this category are the grebes, pelicans, cormorants, diving ducks and the American Coot.

#### Habitat 2      Wetlands

This covers what are sometimes described as marsh birds but in reality they use a variety of habitats from damp fields to the edge of open sheets of water. The species in this category are the herons, egrets, ibis, Wood Stork, Limpkin, the cranes and the rails. The only exception is the Cattle Egret which is to be found in the short grassed areas.

#### Habitat 3      Shallow water

This category includes the surface feeding ducks and geese. The title says it all this relates to those fields that are shallow flooded in whole or in part. There will often be loafing areas.

#### Habitat 4      Mud and water

This relates to the muddy shores of flooded fields and any muddy ridges out in the middle of the fields. The drier areas will be used by the plovers but the other shorebirds will use the wet mud or the shallow water, the depth of water used depending on their leg length. The only shorebirds that are excluded are the Killdeer, Upland Sandpiper and the Buff-breasted Sandpiper; these prefer a short grass habitat.

#### Habitat 5 Over water

This category covers those species that feed over water. This includes such diverse species as the gulls and terns along with the Bald Eagle, Osprey and Belted Kingfisher. The gulls and terns may feed over the water but they require loafing and roosting areas preferably a muddy island in the middle of a flooded field. It is also possible that some will roost out in the middle of Lake Apopka. The Bald Eagle, the Osprey and the kingfisher all use snags or utility poles for perches and roosting.

#### Habitat 6 Short Grass

This habitat rarely exists now; at times the Sod Farm approaches that type of habitat. The species in this category are the Cattle Egret, Killdeer, Upland Sandpiper, Buff-breasted Sandpiper, American Pipit and the Eastern Meadowlark.

#### Habitat 7 Weedy fields

In 1998 the term weedy field meant just that but now it covers any well vegetated field that is not flooded. The habitat varies from groves of Elderberry inter mixed with other plants to fields with tall grass or vines. This category covers such diverse species as the Swallow-tailed Kite and Barn Swallow that hunt over the fields to the sparrows that search the ground for seeds.

#### Habitat 8 The eastern and northern borders of woodland and scrub

Many woodland species had moved out into the fields but they are now retreating to their basic habitat. Included in this category are those species that utilize the wood and scrub borders more than they do the fields. This category has a diverse list of species; one can check the "hab" code on the spreadsheet in Table A to see which species are included here or in Habitat 7.

Habitat	1	2	3	4	5	6	7	8
15-Aug-04	37	980	0	133	45	130	153	77
16-Aug-04	92	1132	44	156	59	1532	85,538	433
19-Aug-04	111	765	54	143	33	705	45,830	377
22-Aug-04	94	623	171	262	20	1054	9309	398
26-Aug-04	92	945	77	312	23	1139	2118	487
29-Aug-04	120	351	11	149	28	1119	1974	398
1-Sep-04	157	216	2	151	23	839	735	396
8-Sep-04	2	0	310	110	2	1	129	18
9-Sep-04	135	587	350	505	31	660	2124	335
12-Sep-04	140	966	685	405	49	523	1872	598
16-Sep-04	85	1605	507	190	35	6403	1992	367
19-Sep-04	71	912	539	287	14	1203	2781	343
22-Sep-04	69	1058	424	295	22	3206	2220	460
28-Sep-04	68	484	934	426	32	1697	5780	620
3-Oct-04	37	1052	1071	347	11	4159	11,575	748
6-Oct-04	46	2676	100	222	23	3510	1599	546
11-Oct-04	166	1948	678	393	19	318	9407	856
13-Oct-04	88	1819	187	555	19	1053	2182	626
17-Oct-04	51	2183	47	510	11	342	2311	924
21-Oct-04	628	1980	92	508	11	524	1633	929
24-Oct-04	463	2760	209	643	22	407	2590	806
27-Oct-04	28	4455	10	176	20	857	4965	880
31-Oct-04	97	6445	105	200	38	558	7110	720
3-Nov-04	115	4585	40	192	34	644	6022	547
7-Nov-04	255	6790	85	215	71	429	5376	848
10-Nov-04	306	6387	133	231	113	700	4906	390
14-Nov-04	227	8313	470	440	80	933	3633	564
17-Nov-04	199	11,087	233	279	43	442	5860	754
21-Nov-04	10,968	10,187	94	300	203	214	7213	513
23-Nov-04	448	11,717	78	327	59	294	8565	580
28-Nov-04	354	10,338	31	264	96	371	6143	678
1-Dec-04	1041	11,360	62	273	119	389	8904	488
5-Dec-04	3685	13,067	35	215	55	153	9418	434
7-Dec-04	9073	12,469	64	215	128	264	4051	524
12-Dec-04	354	3434	16	312	227	263	5499	679
16-Dec-04	530	3021	70	306	145	268	6801	548
19-Dec-04	480	1477	35	197	550	359	7502	422
22-Dec-04	440	1116	37	253	932	620	5713	485
27-Dec-04	500	1373	68	288	916	261	5627	510
30-Dec-04	731	1165	481	192	543	184	5317	968
2-Jan-05	851	1282	147	214	803	308	4471	824
6-Jan-05	13,909	600	559	278	1272	218	2616	1204
9-Jan-05	13,781	690	507	254	7469	333	2260	783
16-Jan-05	319	513	65	215	1939	241	2133	2389
19-Jan-05	702	641	68	239	1029	394	3177	3790

Habitat	1	2	3	4	5	6	7	8
24-Jan-05	720	447	81	249	3451	481	6018	2653
26-Jan-05	566	500	352	261	598	470	5689	3644
30-Jan-05	373	660	467	274	69	188	4026	3321
2-Feb-05	909	719	242	196	570	696	4625	3249
6-Feb-05	678	726	266	281	763	303	3940	4122
8-Feb-05	3081	598	364	313	18,094	300	3913	3019
13-Feb-05	523	727	165	204	963	384	4516	3921
16-Feb-05	705	467	292	264	904	218	4625	5488
20-Feb-05	23,597	370	256	105	3709	405	7643	4912
23-Feb-05	558	478	336	218	141	571	3261	2410
28-Feb-05	512	436	67	164	1906	298	2968	1514
2-Mar-05	423	407	227	169	697	407	5076	2328
6-Mar-05	5037	475	175	111	744	153	5341	2841
10-Mar-05	5072	440	131	168	816	165	5473	1841
13-Mar-05	703	564	46	103	198	83	15,615	1651
16-Mar-05	5721	1514	161	145	770	413	4999	1513
18-Mar-05	360	796	104	173	503	248	8502	2046
20-Mar-05	12,801	1413	33	179	1511	155	5155	1417
24-Mar-05	9519	1623	38	185	1579	637	2828	956
27-Mar-05	525	3050	29	156	279	224	2455	661
30-Mar-05	1080	6685	56	154	2347	369	2098	645
3-Apr-05	468	607	46	191	561	179	2859	340
6-Apr-05	434	585	25	206	454	203	2467	349
10-Apr-05	348	558	13	253	267	276	1691	644
14-Apr-05	417	451	12	131	192	260	2240	673
17-Apr-05	273	472	12	230	905	234	1473	409
20-Apr-05	293	941	14	257	325	232	2330	649
24-Apr-05	210	315	58	172	82	247	1965	327
26-Apr-05	152	319	13	165	100	239	2745	612
30-Apr-05	227	391	25	194	143	98	1910	510
1-May-05	158	303	3	75	37	74	1096	235
15-May-05	113	265	29	82	45	81	1359	592
22-May-05	93	219	7	80	26	121	1309	455
29-May-05	71	255	9	121	17	133	1358	395
5-Jun-05	68	373	14	99	40	160	2377	399
12-Jun-05	96	556	12	117	47	544	8449	383
19-Jun-05	84	360	13	150	46	516	17,235	354
26-Jun-05	73	1093	13	110	59	871	72,062	464
1-Jul-05	80	868	10	151	93	852	144,531	450
3-Jul-05	89	796	10	162	106	855	180,377	499
6-Jul-05	88	1021	15	162	64	798	301,906	427
11-Jul-05	95	481	12	172	65	934	405,851	477
14-Jul-05	94	569	8	201	33	1174	523,823	473
17-Jul-05	96	1068	7	141	33	1339	528,622	748
20-Jul-05	88	1645	1	250	79	1596	358,069	406

<b>Habitat</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
23-Jul-05	115	473	9	191	40	1920	98,185	663
28-Jul-05	101	398	21	181	64	1867	6678	436
31-Jul-05	101	486	3	151	57	2027	136,341	442
3-Aug-05	103	485	5	166	79	2103	59,179	372
7-Aug-05	114	621	7	190	70	1307	26,567	416
10-Aug-05	92	790	6	191	74	1411	21,744	524

**Table C****Days the site visited, hours spent surveying, the number of species seen together with the number of birds seen**

The hours shown below relate to completed  $\frac{1}{4}$  hours i.e. a count of 11 hours 23 minutes has been treated as a count of 11 hours 15 minutes i.e. 11.25 hours.

<b>Date</b>	<b>Field work hours</b>	<b>Total species</b>	<b>Number of birds</b>
8.15.04	4.50	44	1,555
8.16.04	13.25	79	88,986
8.19.04	13.25	77	48,018
8.22.04	13.75	90	11,931
8.26.04	13.50	89	5,193
8.29.04	13.50	78	4,150
9.1.04	13.50	80	2,519
9.8.04	4.50	29	572
9.9.04	12.25	95	4,727
9.12.04	13.00	96	5,238
9.16.04	13.75	85	11,184
9.19.04	14.00	94	6,150
9.22.04	13.75	105	7,754
9.28.04	14.00	117	10,041
10.3.04	13.50	106	19,000
10.6.04	13.50	109	8,722
10.11.04	13.50	120	13,785
10.13.04	13.75	121	6,529
10.17.04	13.50	119	6,379
10.21.04	13.75	118	6,305
10.24.04	13.75	120	7,900
10.27.04	14.00	88	11,391

<b>Date</b>	<b>Field work hours</b>	<b>Total species</b>	<b>Number of birds</b>
10.31.04	12.75	104	15,273
11.3.04	12.75	101	12,179
11.7.04	13.00	110	14,069
11.10.04	13.00	101	13,166
11.14.04	13.00	115	14,660
11.17.04	13.00	109	18,897
11.21.04	13.00	110	29,692
11.23.04	13.00	106	22,068
11.28.04	13.00	115	18,275
12.1.04	13.00	116	22,636
12.5.04	13.00	109	27,062
12.7.04	13.00	115	26,788
12.12.04	13.25	110	10,784
12.16.04	13.00	110	11,689
12.19.04	13.00	110	11,022
12.22.04	13.50	117	9,596
12.27.04	13.25	111	9,543
12.30.04	13.00	111	9,581
1.2.05	13.50	115	8,900
1.6.05	13.00	128	20,656
1.9.05	13.25	122	26,077
1.16.05	12.50	112	7,814
1.19.05	13.00	118	10,040
1.24.05	13.00	105	14,100
1.26.05	13.25	110	12,080
1.30.05	13.00	113	9,378
2.2.05	13.00	121	11,206
2.6.05	13.25	112	11,079
2.8.05	13.50	115	29,682
2.13.05	13.50	107	11,403
2.16.05	13.50	107	12,963
2.20.05	13.25	108	40,997
2.23.05	13.50	108	7,973
2.28.05	13.25	105	7,865
3.2.05	13.25	106	9,734
3.6.05	13.00	108	14,877
3.10.05	13.25	111	14,106
3.13.05	13.50	115	18,963
3.16.05	13.00	118	15,236
3.18.05	13.25	106	12,732
3.20.05	13.25	115	22,664
3.24.05	13.50	114	17,365
3.27.05	13.00	112	7,379

Date	Field work hours	Total species	Number of birds
3.30.05	13.75	113	13,434
4.3.05	14.25	112	5,251
4.6.05	14.00	108	4,723
4.10.05	13.50	109	4,050
4.14.05	13.75	113	4,376
4.17.05	13.25	98	4,008
4.20.05	13.75	110	5,041
4.24.05	13.50	112	3,376
4.26.05	13.50	111	4,345
4.30.05	14.00	114	3,498
5.1.05	4.75	92	1,,981
5.15.05	13.75	81	2,566
5.22.05	14.00	84	2,310
5.29.05	12.00	71	2,359
6.5.05	12.25	78	3,530
6.12.05	12.50	75	10,204
6.19.05	13.50	74	18,758
6.26.05	13.25	78	74,745
7.1.05	14.00	76	147,035
7.3.05	13.00	72	182,894
7.6.05	13.25	75	304,481
7.11.05	12.75	72	408,087
7.14.05	13.75	73	526,375
7.17.05	13.50	72	532,054
7.20.05	13.50	72	362,134
7.23.05	13.00	74	101,596
7.28.05	13.50	74	9,746
7.31.05	13.00	73	139,608
8.3.05	13.00	67	62,492
8.7.05	14.00	73	29,292
8.10.05	13.25	73	24,832

Total days = 94      Total hours = 1,261.25

Table D which follows deals with all the species seen during the first 7 years. It seems important to show that although the list is long with some exceptional records the amount of fieldwork needed to find these birds was also extensive. I am therefore including below a summary of the number of days the site visited and the number of hours spent on fieldwork for each of the 7 years.

<b>Survey Year</b>	<b>No. visits</b>	<b>Total visits</b>	<b>No. hours</b>	<b>Total hours</b>
8.15.98-8.14.99	88	88	1,000	1,000
8.15.99-8.14.00	104	192	1,207	2,207
8.15.00-8.14.01	104	296	1,328	3,535
8.15.01-8.14.02	104	400	1,345	4,880
8.15.02-8.14.03	105	505	1,367	6,247
8.15.03-8.14.04	104	609	1,380	7,627
8.15.04-8.14.05	94	703	1,261	8,888

**Table D****Systematic List of all species seen August 15, 1998 to August 14, 2012**

This list covers all the species seen during the 14 years of the survey. As well as listing the species details are given of the highest daily count for each species as at August 14, 2005 and August 14, 2012 together with the date on which the high count occurred. When the same high count occurred on more than one date only the first is given.

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Pacific Loon			1	12.11.05
Common Loon	1	11.18.01	3	12.8.06
Pied-billed Grebe	750	11.18.98	945	11.26.10
Horned Grebe	3	11.11.98	4	12.21.11
Red-necked Grebe			1	11.24.06
Eared Grebe	4	1.1.99	4	1.1.99
Sooty Shearwater	1	8.15.04	1	8.15.04
American White Pelican	4,370	1.29.99	4,370	1.29.99
Brown Pelican	6	4.30.05	6	4.30.05
Neotropic Cormorant			1	6.3.09
Double-crested Cormorant	7,800	2.22.04	7,800	2.22.04
Anhinga	148	2.23.05	873	7.2.10
American Bittern	60	3.24.04	105	12.30.09
Least Bittern	28	7.3.05	76	7.9.08
Gray Heron	1	12.17.03	1	12.17.03
Great Blue Heron	395	12.3.98	395	12.3.98
Great White Heron	2	3.30.05	3	6.22.08
Great Egret	2,390	12.5.04	2,390	12.5.04
Snowy Egret	2,585	11.7.04	2,585	11.7.04

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Little Blue Heron	735	12.1.04	735	12.1.04
Tricolored Heron	385	11.17.04	466	7.13.11
Reddish Egret	1	3.21.00	1	3.21.00
Cattle Egret	6,400	9.16.04	6,400	9.16.04
Green Heron	236	8.16.04	242	8.23.08
Black-crowned Night-Heron	208	10.13.04	241	3.20.11
Yellow-crowned Night-Heron	21	6.6.04	28	4.24.11
White Ibis	5,970	3.30.05	11,210	6.17.11
Glossy Ibis	3,825	12.1.04	3825	12.1.04
White-faced Ibis	2	11.11.01	3	3.5.10
Roseate Spoonbill	30	6.26.02	139	10.2.11
Wood Stork	1,130	11.18.98	1,130	11.18.98
Black Vulture	127	7.10.02	1,340	2.28.07
Turkey Vulture	635	3.2.05	2,800	2.11.09
White-faced Whistling-Duck	1	5.7.00	1	5.7.00
Black-bellied Whistling-Duck	185	1.6.05	1,660	2.5.10
Fulvous Whistling-Duck	840	10.22.03	840	10.22.03
Greater White-fronted Goose	3	10.28.01	3	10.28.01
Snow Goose	90	12.18.98	90	12.18.98
Ross's Goose	2	12.7.98	2	12.7.98
Canada Goose	3	10.29.98	3	10.29.98
Egyptian Goose			3	7.23.06
Black Swan	1	6.10.02	1	6.10.02
Muscovy Duck	1	6.5.99	4	11.18.05
Wood Duck	86	9.22.04	316	9.9.11
Gadwall	222	11.22.99	812	12.16.11
Eurasian Wigeon			1	11.19.10
American Wigeon	186	12.18.98	186	12.18.98
American Black Duck	3	12.7.98	6	12.26.10
Mallard	103	10.24.04	103	10.24.04
Mottled Duck	197	8.20.99	397	9.2.11
Blue-winged Teal	10,500	11.2.98	10,500	11.2.98
Cinnamon Teal	3	1.19.99	3	1.19.99
Northern Shoveler	770	1.27.99	770	1.27.99
Northern Pintail	420	12.16.98	420	12.16.98
"Common Teal"			1	1.22.06
Green-winged Teal	12,565	12.18.98	12,565	12.18.98
Canvasback	5	12.7.98	5	12.7.98

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Redhead	18	1.3.02	18	1.3.02
Ring-necked Duck	11,900	12.3.98	11,900	12.3.98
Greater Scaup	5	12.8.98	22	12.19.10
Lesser Scaup	279	1.12.99	3,300	1.23.09
Black Scoter			2	11.22.06
Bufflehead	11	12.16.04	34	12.31.10
Common Goldeneye	1	12.30.02	2	11.22.05
Hooded Merganser	100	1.12.99	100	1.12.99
Red-breasted Merganser	6	1.7.99	14	3.15.09
Ruddy Duck	23,000	2.20.05	34,000	1.4.06
Osprey	102	7.3.05	201	7.11.12
Swallow-tailed Kite	856	7.17.05	1,642	8.3.12
White-tailed Kite	1	6.30.00	1	6.30.00
Snail Kite	1	7.16.99	1	7.16.99
Mississippi Kite	1	5.5.04	1	5.5.04
Bald Eagle	36	2.8.05	109	11.13.05
Northern Harrier	305	12.12.04	305	12.12.04
Sharp-shinned Hawk	11	11.14.04	26	11.30.07
Cooper's Hawk	25	8.16.04	45	8.25.06
Red-shouldered Hawk	76	8.19.04	133	9.29.06
Broad-winged Hawk	1	10.6.98	3	9.29.06
Short-tailed Hawk	1	9.30.99	1	9.30.99
Swainson's Hawk	1	12.27.99	2	11.11.07
Red-tailed Hawk	94	3.14.00	175	11.30.07
Rough-legged Hawk	3	2.23.00	3	2.23.00
Golden Eagle	1	1.8.99	1	1.8.99
Crested Caracara	1	7.27.99	1	7.27.99
Eurasian Kestrel	1	2.26.03	1	2.26.03
American Kestrel	38	11.5.03	38	11.5.03
Merlin	5	10.6.04	8	9.30.07
Peregrine Falcon	4	10.12.99	4	10.12.99
Ring-necked Pheasant	1	5.6.02	1	5.6.02
Common Peafowl			1	9.10.06
Wild Turkey	1	6.6.00	13	10.21.09
Gray Partridge	2	9.14.03	2	9.14.03
Northern Bobwhite	69	7.4.03	105	6.1.08
Yellow Rail	1	3.9.03	1	3.9.03
Black Rail	1	6.4.03	1	6.4.03

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Clapper Rail	1	11.28.03	1	11.28.03
King Rail	236	8.10.05	523	8.23.06
Virginia Rail	9	2.16.05	9	2.16.05
Sora	186	11.21.04	415	11.28.08
Purple Gallinule	97	4.25.04	97	4.25.04
Common Gallinule	1,890	10.21.98	6,600	9.18.11
American Coot	16,720	11.18.98	24,900	11.7.10
Limpkin	5	5.14.01	6	3.8.09
Sandhill Crane	126	2.16.04	375	1.16.09
Whooping Crane	8	3.21.00	8	3.21.00
Black-bellied Plover	346	12.3.98	346	12.3.98
American Golden-Plover	6	10.26.99	6	10.26.99
Wilson's Plover			1	9.10.08
Semipalmated Plover	134	5.15.02	134	5.15.02
Piping Plover	1	5.10.02	1	5.10.02
Killdeer	1,935	2.9.03	2,815	1.2.09
Black-necked Stilt	368	9.17.98	432	8.4.10
American Avocet	75	1.11.99	75	1.11.99
Greater Yellowlegs	415	12.16.98	415	12.16.98
Lesser Yellowlegs	1,195	12.16.98	1,195	12.16.98
Solitary Sandpiper	17	9.9.04	76	5.7.06
Willet	8	7.27.99	8	7.27.99
Spotted Sandpiper	13	5.15.02	13	5.15.02
Upland Sandpiper	6	4.20.99	6	4.20.09
Whimbrel	1	5.1.99	2	4.30.08
Long-billed Curlew	1	6.25.99	1	6.25.99
Hudsonian Godwit			1	6.22.11
Marbled Godwit	2	11.25.98	3	8.19.11
Ruddy Turnstone	8	5.6.02	8	5.6.02
Red Knot	12	5.14.01	12	5.14.01
Sanderling	5	5.20.02	5	5.20.02
Semipalmated Sandpiper	1,540	5.23.02	1,540	5.23.02
Western Sandpiper	965	9.11.98	1,250	9.7.11
Least Sandpiper	2,450	12.31.98	2,450	12.31.98
White-rumped Sandpiper	37	5.23.02	118	5.21.11
Baird's Sandpiper	2	8.6.00	2	8.6.00
Pectoral Sandpiper	690	9.16.01	965	9.12.08
Sharp-tailed Sandpiper	1	9.26.02	1	9.26.02

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Dunlin	210	11.13.98	210	11.13.98
Curlew Sandpiper	1	9.2.98	1	9.2.98
Stilt Sandpiper	490	10.21.98	490	10.21.98
Buff-breasted Sandpiper	23	9.11.98	23	9.11.98
Ruff	2	11.25.98	2	11.25.98
Short-billed Dowitcher	670	10.29.98	670	10.29.98
Long-billed Dowitcher	1,890	1.12.99	1,890	1.12.99
Wilson's Snipe	1,090	1.4.04	1,090	1.4.04
American Woodcock	7	1.13.02	12	12.7.05
Wilson's Phalarope	21	9.2.98	21	9.2.98
Red-necked Phalarope	2	9.28.04	5	8.22.08
Red Phalarope	1	9.16.01	1	9.16.01
Pomarine Jaeger	2	5.6.01	2	5.6.01
Parasitic Jaeger			1	8.20.08
Laughing Gull	114	4.11.01	174	2.14.10
Franklin's Gull	21	12.4.98	21	12.4.98
Little Gull	1	1.7.01	1	1.7.01
Bonaparte's Gull	404	1.10.02	1,013	1.17.10
Ring-billed Gull	18,000	2.8.05	18,000	2.8.05
Herring Gull	88	2.3.99	88	2.3.99
Thayer's Gull	1	3.31.04	1	3.31.04
Lesser Black-backed Gull	2	12.11.98	2	12.11.98
Great Black-backed Gull			1	1.27.06
Gull-billed Tern	4	4.20.99	4	4.20.99
Caspian Tern	208	2.10.99	208	2.10.99
Royal Tern	1	12.16.98	8	8.22.08
Sandwich Tern	2	7.11.01	4	5.7.07
Roseate Tern			1	5.20.08
Common Tern	6	5.10.04	103	10.31.07
Arctic Tern	2	5.23.02	3	10.31.07
Forster's Tern	514	3.31.04	611	1.16.08
Least Tern	54	7.19.00	92	6.10.09
Bridled Tern			6	8.20.08
Sooty Tern	1	6.12.05	16	8.22.08
Black Tern	500	9.2.98	532	8.24.08
Black Skimmer	120	2.3.99	120	2.3.99
Rock Pigeon	106	6.25.99	106	6.25.99
Eurasian Collared-Dove	36	6.7.99	36	6.7.99

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Diamond Dove			1	8.6.10
White-winged Dove	24	9.19.01	35	8.12.09
Mourning Dove	2,120	7.8.01	2,370	7.30.08
Common Ground-Dove	111	5.21.03	111	5.21.03
Budgerigar	1	7.23.99	1	7.23.99
Cockatiel	1	9.2.02	1	9.2.02
Black-billed Cuckoo	1	5.10.99	1	5.10.99
Yellow-billed Cuckoo	23	5.4.03	52	6.8.06
Smooth-billed Ani	1	6.26.03	1	6.26.03
Groove-billed Ani	6	2.6.05	6	2.6.05
Barn Owl	16	10.12.03	25	12.22.06
Eastern Screech-Owl	2	12.20.98	3	2.1.09
Great Horned Owl	10	1.30.05	10	1.30.05
Burrowing Owl	1	6.18.03	1	6.18.03
Barred Owl	7	3.13.05	11	10.8.06
Long-eared Owl	1	1.11.04	1	1.11.04
Short-eared Owl	7	1.9.05	9	12.29.06
Northern Saw-whet Owl	1	11.5.02	1	11.5.02
Lesser Nighthawk	1	12.16.98	1	12.16.98
Common Nighthawk	1,233	9.11.02	1,233	9.11.02
Chuck's-will's-widow	16	5.23.04	16	5.23.04
Eastern Whip-poor-will	3	9.13.00	7	3.15.09
Chimney Swift	6,800	10.11.04	8,100	9.24.08
Ruby-throated Hummingbird	2	10.13.02	2	10.13.02
Black-chinned Hummingbird	1	12.19.99	1	12.19.99
Belted Kingfisher	24	11.3.04	45	11.1.09
Red-headed Woodpecker	3	9.10.03	3	9.10.03
Red-bellied Woodpecker	48	4.27.03	91	10.1.06
Yellow-bellied Sapsucker	6	10.17.04	10	12.13.06
Downy Woodpecker	33	10.3.04	49	3.28.07
Hairy Woodpecker	1	3.13.99	1	3.13.99
Red-cockaded Woodpecker	1	6.23.03	1	6.23.03
Northern Flicker	8	10.19.99	16	10.8.06
Pileated Woodpecker	9	9.22.04	12	11.4.07
Olive-sided Flycatcher	1	4.20.05	1	4.20.05
Eastern Wood-Pewee	6	9.24.00	7	9.27.06
Yellow-bellied Flycatcher	1	10.11.04	1	10.11.04
Acadian Flycatcher	4	9.10.03	4	9.10.03

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Alder Flycatcher	1	9.14.03	1	9.14.03
Willow Flycatcher	1	7.27.99	1	7.27.99
Least Flycatcher	20	1.19.04	23	12.19.07
Eastern Phoebe	416	10.26.03	416	10.26.03
Vermillion Flycatcher	2	3.4.02	2	3.4.02
Ash-throated Flycatcher	10	2.2.04	16	12.14.07
GreatCrested Flycatcher	18	7.3.02	45	5.16.07
Brown-crested Flycatcher	1	1.14.01	2	3.1.06
Tropical Kingbird	1	12.9.01	1	12.9.01
Cassin's Kingbird	2	2.29.04	2	2.29.04
Western Kingbird	72	1.27.02	72	1.27.02
Eastern Kingbird	347	8.31.99	347	8.31.99
Gray Kingbird	2	10.21.98	2	10.21.98
Scissor-tailed Flycatcher	7	12.31.03	8	12.11.05
Fork-tailed Flycatcher	1	7.23.00	1	7.23.00
Loggerhead Shrike	18	2.3.02	18	2.3.02
White-eyed Vireo	53	10.5.03	74	10.5.08
Bell's Vireo	1	2.6.00	1	2.6.00
Yellow-throated Vireo	2	4.3.02	2	4.3.02
Blue-headed Vireo	10	1.19.05	19	11.23.08
Philadelphia Vireo	1	10.14.99	1	10.14.99
Red-eyed Vireo	17	9.21.00	17	9.21.00
Black-whiskered Vireo			1	9.10.06
Blue Jay	102	10.15.03	180	10.17.07
Florida Scrub-Jay	2	4.17.02	2	4.17.02
American Crow	6	7.4.03	38	11.9.08
Fish Crow	4,400	1.27.02	4,400	1.27.02
Purple Martin	2,850	6.20.04	2,850	6.20.04
Tree Swallow	12,000	3.13.05	71,000	3.10.06
Northern Rough-winged Swallow	28	10.11.04	28	10.11.04
Bank Swallow	145	9.2.01	265	8.20.08
Cliff Swallow	68	9.25.99	71	10.1.06
Cave Swallow	2	4.14.04	14	10.28.05
Barn Swallow	2,600	8.24.03	9,300	8.22.08
Carolina Chickadee	1	11.9.99	7	5.3.09
Tufted Titmouse	8	8.1.04	16	9.15.10
Brown-headed Nuthatch	1	12.17.03	1	12.17.03
Carolina Wren	103	4.24.03	103	4.24.03

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Bewick's Wren	1	2.25.00	1	2.25.00
House Wren	674	11.5.00	674	11.5.00
Winter Wren	1	1.19.03	1	1.19.03
Sedge Wren	108	11.26.00	108	11.26.00
Marsh Wren	174	10.27.04	211	11.9.05
Golden-crowned Kinglet	1	12.7.99	3	11.17.06
Ruby-crowned Kinglet	31	12.12.04	67	11.17.06
Blue-gray Gnatcatcher	167	10.3.04	173	12.7.07
Eastern Bluebird	6	12.21.02	6	12.21.02
Veery	12	10.2.02	12	10.2.02
Gray-cheeked Thrush	2	10.2.03	6	10.15.08
Bicknell's Thrush	1	5.27.00	1	5.27.00
Swainson's Thrush	36	9.26.01	36	9.26.01
Hermit Thrush	9	12.12.04	9	12.12.04
Wood Thrush	1	10.19.99	1	10.19.99
American Robin	10,300	2.4.04	240,000	12.29.06
Gray Catbird	660	10.12.03	713	10.17.08
Northern Mockingbird	118	7.11.04	126	10.8.06
Brown Thrasher	23	10.7.01	74	10.8.08
European Starling	1,250	7.18.04	2,040	7.13.07
Common Myna	1	7.11.05	1	7.11.05
American Pipit	570	12.8.98	820	1.2.09
Cedar Waxwing	615	4.6.99	2,240	4.8.07
Blue-winged Warbler	2	9.3.00	2	9.3.00
Tennessee Warbler	29	10.21.04	29	10.21.04
Orange-crowned Warbler	36	12.15.00	36	12.15.00
Nashville Warbler	1	1.11.99	1	1.11.99
Northern Parula	52	3.18.05.	52	3.18.05
Yellow Warbler	145	8.24.03	232	9.15.06
Chestnut-sided Warbler	6	9.21.00	6	9.21.00
Magnolia Warbler	3	10.13.04	4	10.17.09
Cape May Warbler	13	4.17.99	16	4.30.08
Black-throated Blue Warbler	5	5.1.99	15	4.30.08
Yellow-rumped Warbler	8,470	3.5.03	10,220	2.23.07
Black-throated Gray Warbler			1	9.15.10
Black-throated Green Warbler	2	12.20.98	4	10.15.10
Blackburnian Warbler	4	9.19.00	4	9.19.00
Yellow-throated Warbler	4	10.11.04	8	9.26.07

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Pine Warbler	6	10.29.99	24	12.9.11
Prairie Warbler	83	9.10.03	83	9.10.03
Palm Warbler	3,120	2.26.03	3,120	2.26.03
Bay-breasted Warbler	1	10.19.99	2	11.2.07
Blackpoll Warbler	20	4.28.04	73	5.5.06
Cerulean Warbler	2	9.21.00	2	9.21.00
Black-and-white Warbler	10	9.22.04	10	9.22.04
American Redstart	48	5.14.01	48	5.14.01
Prothonotary Warbler	2	4.14.02	2	4.14.02
Worm-eating Warbler	2	9.22.04	2	9.22.04
Swainson's Warbler	1	8.16.00	1	8.16.00
Ovenbird	47	10.11.04	92	9.27.06
Northern Waterthrush	188	9.28.04	188	9.28.04
Louisiana Waterthrush	68	8.26.04	98	8.27.10
Kentucky Warbler	1	4.14.99	1	4.14.99
Common Yellowthroat	856	9.22.04	856	9.22.04
Hooded Warbler	2	4.17.99	2	4.17.99
Wilson's Warbler	2	1.26.05	2	1.26.05
Canada Warbler	1	8.24.03	1	8.24.03
Yellow-breasted Chat	41	5.23.04	41	5.23.04
Summer Tanager	2	10.19.99	2	10.19.99
Scarlet Tanager	1	10.2.99	2	10.10.07
Western Tanager			1	12.9.07
Eastern Towhee	228	7.30.03	228	7.30.03
Bachman's Sparrow	1	1.16.05	1	1.16.05
Chipping Sparrow	4	4.14.02	19	12.17.08
Clay-colored Sparrow	46	2.3.99	46	2.3.99
Field Sparrow	12	3.14.02	32	1.30.09
Vesper Sparrow	22	12.15.03	45	1.16.09
Lark Sparrow	1	2.9.99	1	2.9.99
Savannah Sparrow	860	12.8.98	860	12.8.98
Grasshopper Sparrow	12	2.17.99	12	2.17.99
Henslow's Sparrow	1	11.20.98	1	11.20.98
LeConte's Sparrow	1	12.16.98	1	12.16.98
Nelson's Sparrow	1	11.5.00	1	11.5.00
Fox Sparrow	1	2.17.99	1	2.17.99
Song Sparrow	16	12.16.02	16	12.16.02
Lincoln's Sparrow	5	11.17.02	5	11.17.02

Species	Highest count to 8.14.05	Date of high count to 8.14.05	Highest Count to 8.14.12	Date of high count to 8.14.12
Swamp Sparrow	1,126	11.21.04	1,126	11.21.04
White-throated Sparrow	4	2.25.01	7	3.4.09
White-crowned Sparrow	51	2.3.99	51	2.3.99
Dark-eyed Junco	1	12.17.03	1	12.17.03
Lapland Longspur	1	10.16.98	1	10.16.98
Northern Cardinal	307	4.14.05	344	4.9.08
Rose-breasted Grosbeak	2	10.17.04	3	10.21.09
Blue Grosbeak	69	9.12.04	72	10.1.06
Lazuli Bunting	1	1.7.02	1	1.7.02
Indigo Bunting	336	10.15.03	840	10.26.07
Painted Bunting	12	5.26.04	12	5.26.04
Dickcissel	143	5.22.05	143	5.22.05
Bobolink	7,060	5.1.02	16,550	4.30.08
Red-winged Blackbird	303,000	7.17.05	303,000	7.17.05
Eastern Meadowlark	62	1.24.02	74	2.27.09
Yellow-headed Blackbird	5	12.31.98	5	12.31.98
Rusty Blackbird	13	12.3.98	13	12.3.98
Brewer's Blackbird	1	12.19.01	1	12.19.01
Common Grackle	117,000	7.17.05	117,000	7.17.05
Boat-tailed Grackle	167,000	7.14.05	167,000	7.14.05
Shiny Cowbird	13	7.3.05	13	7.3.05
Bronzed Cowbird	1	11.23.98	2	12.13.09
Brown-headed Cowbird	3,150	2.20.05	3,600	2.27.09
Orchard Oriole	24	7.1.05	28	6.19.09
Baltimore Oriole	7	9.29.03	7	9.29.03
Bullock's Oriole	1	1.22.03	1	1.22.03
Purple Finch			1	11.26.06
House Finch	2	11.17.04	27	7.11.12
Pine Siskin	1	4.30.03	2	12.26.08
American Goldfinch	136	11.28.04	196	2.20.08
House Sparrow	7	12.8.98	7	12.8.98
Orange Bishop	1	4.6.03	1	4.6.03
Bronze Mannikin	1	11.18.01	1	11.18.01
Zebra Finch			1	9.7.05
Pin-tailed Whydah			2	9.22.05

That is a total of 337 species to August 14, 2005 and 357 to August 14, 2012.

The following seven species were recorded by others at Zellwood prior to the start of the survey on August 15, 1998 and they had not been seen since. One of these species has now been seen in 2011, that is the Hudsonian Godwit, it was seen on June 22, 2011.

Brant	1	10.24.81
White-cheeked Pintail	1	8.18.73
Ferruginous Hawk	2	12.19.83
Southern Lapwing	1	7.23.61
Hudsonian Godwit	32	9.3.86
Brown Noddy	1	9.10.65
Golden-winged Warbler	1	8.17.74

### Summary

Total species August 15, 1998 to August 14, 2005	337
Additional species pre-survey	7
Grand Total	344
Less exotics	11
<b>Acceptable total</b>	<b>333</b>
<b>Total species August 15, 1998 to August 14, 2012</b>	<b>357</b>
Additional species pre-survey	6
Grand Total	363
Less exotics	15
<b>Acceptable total</b>	<b>348</b>

## **Appendix A**

### **Historical Bird Sightings at Zellwood**

I have decided because of space not to include these historical records. The full list can be seen in *Bird Migration: a Florida Study* and in *Bird Migration: a Second Florida Study*.

## **Appendix B**

### **Field Descriptions**

#### **Sooty Shearwater**

Hurricane Charley crossed Lake Apopka on August 13 and on August 15 I found this shearwater on the lake. I was counting the Laughing Gulls with the aid of the Kowa telescope when I spotted this shearwater. This was only a little larger than the gulls but the wings were exceptionally long. Plumage was an overall dark sooty brown. Bill was dark. A very heavy squall line came in from the west and with the strong winds this bird took off and left the lake. In flight the very long wings with a prominent white center to the underwing was clearly visible. The bird was quickly arcing down the lake.

#### **Olive-sided Flycatcher**

On April 20<sup>th</sup> I was driving south down Airport Road towards a prominent and totally isolated dead tree when I saw that there was a bird perched on the tip of the uppermost snag. I stopped and got out the telescope and came to realize that this was an Olive-sided Flycatcher. This was a large upright flycatcher with a large head and a quite short squared tail. It was facing me so the very dark gray flanks and sides of the breast offset the very white center to the breast. I did not see it leave but I could not relocate it. I have seen two previously and have seen many Wood-Pewees.

#### **Yellow-bellied Flycatcher**

I first saw this bird on October 11 in a flooded portion of the Nursery. Initially I heard it call and the call was that of an empid. When I saw the bird it was in vegetation close to the water. It was very distinctive with bright olive-green upperparts and yellow underparts. The wings were black with two buff wing bars. So this was in first-winter plumage. Head seemed quite large and rounded. There was a strong white eyering coming to a point behind the eye. Bill had an orange-yellow lower mandible. I also saw this bird on 13<sup>th</sup>, 21<sup>st</sup> and 24<sup>th</sup>. It was always in the same general area; inside the wood in cover feeding low over the water. I never saw it higher up in the trees where any Acadian would hang out.

## **Appendix C**

### **The Breeding Birds of Zellwood**

I carried out a survey of the breeding birds in each of the six years. This survey was conducted in late May and early June. The area covered being the Sand Farm together with Units One and Unit Two.

During the six surveys I followed the same routine each summer. I walked the boundary of the property together with every road and track. Every year I walked some 75 miles averaging eight miles a day. For the most part I recorded singing males but for the majority of the species I saw adults carrying food or the recently fledged young. To avoid disturbance I did not look for nests or use tapes. Where available I am including additional information from the summer of 2005.

At the end of this appendix there is a table showing the species and the number of pairs for each year.

#### **The Species**

##### **Pied-billed Grebe**

There was a 300 acre lake at the Sand Farm up to November 2000 when it was drained. This same area was allowed to flood naturally during the winter of 2001/2002 and by July 2002 a significant cattail marsh had formed with areas of open water. This is the only breeding site

for this species, there were five pairs in 1999, one pair in 2003 and seven pairs in 2004. There were five pairs in 2005.

#### Anhinga

There were five pairs on two small islands near the western end of Lust Road in 2000. Breeding was successful with the pairs raising one to two young a pair. It is possible that this species also nested regularly on the lake side of larger islands but those areas could not be seen from the shore of the lake. There were three nests in 2005 with nests to the north of the Lust Road pump house, the wood by the Lake Level Canal and the island to the south of the Hooper Farms Road extension.

#### American Bittern

Very exceptionally a pair raised one young at the Sand Farm Cattail Marsh in 2004.

#### Least Bittern

Numbers varied each year depending on the water level in Lake Apopka. With high water levels pairs nested in the various small cattail beds along the shore of the lake. Nesting also now occurs at the Sand Farm cattail marsh. Population has been edging higher with 15 pairs in 2003.

#### Great Blue Heron

This species probably bred for many years on the Duda property but with the death and collapse of so many trees pairs started nesting in the survey area in 2004. There were five pairs that year each pair raised at least one young. There was a single pair in 2005, they raised one young.

#### Snowy Egret

No pairs nested during the breeding bird survey but three pairs nested on an island near the end of Lust Road in 2005; young were raised. There were another three pairs further north.

#### Little Blue Heron

Two pairs nested on an island near the end of Lust Road in 2000. Young almost certainly raised but the vegetation grew too thick to see what was going on. In 2005 there were 14 pairs; of these twelve pairs nested on an island near the end of Laughlin Road Extension and two pairs nested on an island near the end of Lust Road. Young were raised.

### Tricolored Heron

No pairs nested during the breeding bird survey. In 2005 two pairs nested on an island near the end of the Laughlin Road extension, at least two young raised. There was also a pair on an island near the end of Lust Road.

### Cattle Egret

Nesting depended on the depth of water in Lake Apopka, when the water level in the lake was high there were a series of islands that might be used for nesting. There were 413 pairs in 1999 and 103 pairs in 2000 on a series of islands near the end of Lust Road, many young raised. In 2005 there were four pairs at this site.

### Green Heron

With the District's purchase of the property the ditches and canals gradually developed an extensive growth of vegetation. Then in 2003 the District took back control and started to clean out and clear the ditches and canals. The breeding population reflects this situation. There were only nine pairs in 1999 but the population had grown to 54 pairs in 2002. Numbers then lower with 43 pairs in 2003 and 38 pairs in 2004. Pairs will continue to nest by Lake Apopka, the Lake Level Canal and at the Sand Farm cattail marsh.

### Night-Herons

Both species were present all summer but no nest sites have been located.

### Glossy Ibis

No nesting noted during the breeding bird survey. In 2005 there were four pairs on an island near the end of the Laughlin Road extension, four young raised. There were also two pairs on an island near the end of Lust Road.

### Fulvous Whistling-Duck

In 1999 there were 25 pairs, many broods of young seen. This population probably stemmed from birds that had stayed locally after the fields of Unit Two drained in February, 1999. One pair located in 2000, none in the other three years. In 2004 there was a pair at the Sand Farm Cattail Marsh, young were seen.

### Wood Duck

This species probably nests every year in the survey area. Normally just one pair but there was two pairs in 2002. Perhaps only one to two young survived. The known nesting sites

are the wood at the southern end of the Lake Level Canal, the island to the south of Hooper Farms Road extension and the southern border.

#### Mallard

There were three pairs in 1999 with one pair in 2000. They nested in the major canals. No nesting in the later years.

#### Mottled Duck

There were 12 pairs in 1999 and 2002 with 13 pairs in 2000. They nested in the hyacinth filled canals. The District has been working at clearing the waterways so only four pairs found in 2003 with none in 2004.

#### Bald Eagle

A pair nests every year in the pine wood at the Sand Farm, often raising one young. There is another pair immediately to the south of the survey area.

#### Cooper's Hawk

Population often in the range of three to four pairs in the wooded borders. Adults hunt over the fields and there is a growing post-breeding gathering.

#### Red-shouldered Hawk

Population ranges from four to six pairs with a high count of nine pairs in 2001. The nesting sites are all in the wooded borders. There is unlikely to be much change in the numbers.

#### Red-tailed Hawk

There are slightly higher numbers of this species as six to eight pairs located annually with a high count of 11 pairs in 2000. Most of the pairs were in the more isolated stretches of woodland along the eastern border.

#### Northern Bobwhite

This species is very habitat dependent. Initially the breeding population was along the eastern border and throughout the Sand Farm fields, as the vegetation grew it moved out into the fields of Units One and Unit Two. With increased mowing and roller-chopping the population will return to its original size. Initially there were 38 to 40 pairs with 89 pairs in 2002 and 125 pairs in 2003. Only 87 pairs located in 2004. With plenty of cover many young raised.

## King Rail

With the formation of the Sand Farm cattail marsh and the continuing extension of these marshes at Duda the overall breeding population is likely to rise. At Zellwood there were two pairs in 2002 with 14 pairs in 2003 and 18 pairs in 2004, young seen each year. There were 13 pairs in 2005.

## Purple Gallinule

Both this and the next species have gained from the clearance of the thick vegetation from the canals. In the nutrient rich waters of the canals vegetation grows very fast providing nesting and feeding habitats for these two species. There were only 21 pairs in 1999 with 40 pairs in 2002, 51 pairs in 2003 and 54 pairs in 2004.

## Common Gallinule

As the ditches and canals were neglected the population grew slowly from 104 pairs in 1999 to 146 pairs in 2002. With the clearance of the vegetation there were 214 pairs in 2003 with 305 pairs in 2004.

## American Coot

This species has similar needs to the Pied-billed Grebe. It has not nested at Lake Apopka, the only nesting took place at the Sand Farm Cattail Marsh, and there were five pairs in 1999 and two pairs in 2004.

## Limpkin

It is likely that this species nests in the Sand Farm/Duda area and at the southern border, the only pairs were found in 2001 (one pair) and 2004 (two pairs).

## Killdeer

Habitat is the deciding factor for this species. Initially there was the Sod Farm with its very short grass but this ceased operation in the summer of 2002. At that time they removed all the turf creating many shallow, mud lined ponds. With the Sod Farm in use up to six pairs a year seen through to 2001 after operations ceased in 2002 there were 11 pairs but none could be found in 2003. In 2005 there was a pair by the Hooper Farms Road gate.

## Black-necked Stilt

The water levels in Lake Apopka and the Lake Level Canal are the deciding factor for this species. In normal years with average water levels there were six pairs in 1999 and seven pairs

in 2000. Then the water level dropped and the number of pairs rose, there were 18 pairs in 2001 with 30 pairs in 2002. Lake Apopka then became too full and only one pair could be found in 2003 and 2004. No pairs located in 2005.

#### Eurasian Collared-Dove

This is really a suburban dweller rather than a bird of the woods or the fields. There was a single pair on the northern border from 2001 to 2003 with three pairs in 2004.

#### White-winged Dove

This is a new arrival with three pairs in 2003. They were in an area south of Hogshead Road where thick stands of willows lined a ditch. I had seen birds in that area in the previous two summers.

#### Mourning Dove

The population is probably static in the wooded borders, averaging 24 pairs a year.

**The following describes the woodland edge breeding bird territories and the changes that occurred to these territories over the five to six years of this survey.**

Many of the species that follow show a similar pattern in that the breeding population has risen in “steps”. I believe that these species had territories along the edge of the wood whilst the fields were being cultivated. This pattern did not change in the first two years after the farming stopped. Step 1 therefore deals with that basic situation for the years 1999 and 2000. In 2001 and 2002 many species changed their territory shape from linear to one which included a portion of a field. This meant that many more pairs could fit into a given stretch of the eastern border, this I call Step 2. In 2003 and 2004 numbers jumped again, this time many species were now also nesting out in the fields. A few species did not make this move out into the fields or perhaps they delayed the move for a year. Whilst this analysis deals with the first five years I am including the figures from 2004 to give a clearer picture. This last move I call Step 3.

#### Common Ground-Dove

This is a woodland edge species that was later nesting out in the fields. This is the first of a number of species where the population has risen in steps. In 1999 there were 40 pairs with 59 pairs in 2000 (step 1). In 2001 there were 116 pairs with 98 pairs in 2002 (step 2). Finally there were 236 pairs in 2003 with 191 pairs in 2004 (step 3). That is a major change in a very short period of time.

### Yellow-billed Cuckoo

This is another species that moved from the woods out into the fields. There were seven pairs in 1999 with ten pairs in 2000 (step 1). There were 16 pairs in 2001 with 26 pairs in 2002 (step 2). There were 48 pairs in 2003 with 49 pairs in 2004 (step 3).

### Barn Owl

This species nested in derelict buildings that were scattered through the property. Normally four pairs a year located with six pairs in 2004; up to three young per pair raised.

### Eastern Screech-Owl

It will be present but as I do not use tapes I have no idea as to the size of the population.

### Great Horned Owl

The population has been growing as only two pairs located in 1999 with seven pairs in 2001, nine pairs in 2002 and 13 pairs in 2004. The increase will be due to the change in the shape of their territories, they are now hunting out over the fields so they need a smaller woodland range.

### Barred Owl

This species has remained in the woods so there is a stable population of two to four pairs.

### Common Nighthawk

This is another species that has taken advantage of the changing habitat. It still nests in the borders but it is now also nesting out in the fields, especially those that have been roller-chopped. There were just five pairs in 1999 with four pairs in 2000. Since then the population has been in the range of eight to 13 pairs with 16 pairs in 2004.

### Chuck-will's-widow

Up to five pairs a year seen from 1999 to 2002. In this species the change was delayed but step 2 occurred in 2003 and 2004 as 20 pairs located in both years. This species is not breeding out in the fields.

### Red-bellied Woodpecker

This is another "pattern" species as step 1 involved 27 pairs in 1999 and 39 pairs in 2000 with for step 2 a total of 58 pairs in 2001 and 56 pairs in 2002. With step 3 the population

climbed to 76 pairs in 2003 with 94 pairs in 2004. The count in 2004 is so much higher perhaps there is yet another element encouraging a larger population.

#### Downy Woodpecker

This is yet another pattern species but one with a variation. Step 1 involved 12 pairs in 1999 and 14 pairs in 2000, and then step 2 involved 31 pairs in 2001. This species made the move to step 3 after one year as there were from 37 to 39 pairs from 2002 to 2004.

#### Northern Flicker

This is also a pattern species with five pairs in 1999 and 2000 (step 1) with 10 to 12 pairs from 2001 to 2003 (step 2). In 2004 there were 18 pairs which indicate a move to step 3. I have seen nest holes for both this and the following species in utility poles out in the fields.

#### Pileated Woodpecker

The same pattern as for the Northern Flicker, there were three pairs in 1999 and 2000 with eight to ten pairs from 2001 to 2003. In 2004 there were 13 pairs, it seems strange but I have regularly seen a Pileated Woodpecker drumming on a utility pole at least half a mile from any woodland.

#### Great Crested Flycatcher

The summer visitors appear to have more variable breeding populations but the "pattern" appears to be at work here. There were 17 pairs in 1999 with only ten pairs in 2000 and 13 pairs in 2001. Step 2 appears to have happened in 2002 when 25 pairs located. The switch to step 3 appears to be complete in 2003 (30 pairs) and 2004 (33 pairs). I regularly saw birds out in the fields near stands of trees.

#### Eastern Kingbird

This is puzzlement in that I have not been able to prove breeding even by the sight of fledged young. There appeared to be two pairs in 2000 with three pairs in 2003 and two again in 2004.

#### Loggerhead Shrike

There was a stable population of five to six pairs along the border, most pairs were located near buildings with barbed wire fencing.

### White-eyed Vireo

This is not really a step species as it appears to have gone straight from step 1 to step 3! There were five pairs in 2000 with three pairs in 2001 (step 1) then with step 3 there were 13 pairs seen in 2002 with 14 pairs in 2003 and 16 pairs in 2004. This species is nesting out in the fields.

### Blue Jay

This is another pattern species. Step 1 involved 26 pairs in 1999 and 25 pairs in 2000. For step 2 there were 42 pairs in 2001 with 49 pairs in 2002. Then with step 3 there were 62 pairs in 2003 and 70 pairs in 2004. This species can now be found year round out in the fields.

### Fish Crow

Isolated pairs nested by water with a population of between four and 11 pairs. After breeding they and the fledged young leave the area.

### Barn Swallow

The breeding population is dependent on there being suitable nesting sites i.e. bridges. The District had to replace some of the bridges and the new bridges are not suitable nesting sites. The breeding population has therefore fallen from 44 to 52 pairs down to 34 to 36 pairs in 2003 and 2004. The count of 52 pairs was in 2001. The first swallows to arrive each year tend to be the locally breeding birds. They nest early and leave the area with the fledged young in June.

### Tufted Titmouse

This is a pattern species with step 1 involving three pairs in 1999 and 2000. Step 2 involved seven pairs in 2001 and nine pairs in 2002. Finally step 3 had 16 pairs in both 2003 and 2004. There is a problem here as I did not see this species out in the fields, so again there has to be another unknown trigger.

### Carolina Wren

This is yet another pattern species, a real one. Step 1 involved 79 pairs in 1999 with 69 pairs in 2000. Step 2 involved 153 pairs on 2001 and 162 pairs in 2002. Step 3 involved 185 pairs in 2003 and 171 pairs in 2004. This species is nesting out in the fields.

### Northern Mockingbird

There had to be a problem species and this is it. This should be a “pattern” species but it is not. There were 55 pairs in 1999 with 59 pairs in 2001, 62 pairs in 2002, 61 pairs in 2003 and 60 pairs in 2004. This species has to have gone through these steps as it is now breeding out in the fields. It would appear that the population in the border habitats is dropping and that the extra pairs out in the fields are not even compensating for that loss.

### Brown Thrasher

This is a pattern species, initially with step 1 there were seven pairs in 1999 with 12 pairs in 2000. Step 2 lasted for three years not the usual two with 20 pairs in 2001 and 2002 then 22 pairs in 2003. The reluctance to move out into the fields shown by this and a few other species is interesting. It did eventually move out, there were 38 pairs in 2004.

### European Starling

There were 16 pairs in 1999 otherwise seven to 11 pairs recorded. This species nests in buildings or old trees.

### Northern Parula

As a summer visitor numbers vary from two pairs in 1999 and 2000 to ten pairs in 2001 and 2003. All the pairs were found in the larger pieces of woodland.

### Common Yellowthroat

This is an occasional summer resident, breeding has not been proved. Singing males located but no females found. There were two in 1999 with four in 2002 and three in 2003. None seen or heard during the summers of 2000, 2001 and 2004. Most of these males were on territory in locations that I could not get close to so it is possible that they bred.

### Yellow-breasted Chat

This is a species that should not be breeding in Central Florida but it is. With the clearance of so much vegetation the population is now falling but there were 19 pairs in 2000 with seven pairs in 2001, 25 pairs in 2002, 56 pairs in 2003 and an exceptional count of 103 pairs in 2004. I say pairs but this is really a count of singing males on territory. Adults have been seen carrying food and fledged young have been noted. This is such a secretive species that I have only seen the females occasionally.

### Eastern Towhee

This is a pattern species with for step 1 ten pairs in 1999 with 48 pairs in 2000. Step 2 involved 72 pairs in 2001 with 91 pairs in 2002. Then there was a huge jump with step 3 as there were 206 pairs in 2003 with 207 pairs in 2004. The figures suggest that many pairs took less than two years to change their habits. There really were only ten pairs in 1999. It was a hard species to find through the first year. This species is now widespread out in the fields.

### Northern Cardinal

This is another pattern species with for step 1 a total of 179 pairs in 1999 and 176 pairs in 2000. For step 2 there were 320 pairs in 2001 with 380 pairs in 2002. Step 3 involved 575 pairs in 2002 and 593 pairs in 2004. This species is now widespread out in the fields.

### Blue Grosbeak

This is another pattern species with step 1 involving 41 pairs in 1999 and 59 pairs in 2000. Step 2 involved 76 pairs in 2001 and 74 pairs in 2002. Step 3 involved 87 pairs in 2003 and 81 pairs in 2004. Unlike some of the other species the numbers never took off. It is breeding out in the fields.

### Indigo Bunting

In reality this is a pattern species but the population has been growing so fast that there are no steps! Its rate of growth was so fast that even though it started off with 30 less pairs than the Blue Grosbeak in 2004 there were 76 more pairs of Indigo Buntings. There were 11 pairs in 1999 with 32 pairs in 2000, 54 pairs in 2001, 65 pairs in 2002, 96 pairs in 2003 and a staggering 157 pairs in 2004. This species is now widespread out in the fields.

### Painted Bunting

This is another pattern species but it has not progressed to step 3 (not even by 2010 when this is being written). I have not knowingly seen females, just adult or immature males on territory. For step 1 there were eight in 1999 with nine in 2000. Step 2 involved 19 in 2001, 20 in 2002, 19 in 2003 and 22 in 2004. I have not found one out in the fields. This is not a breeding species but it is included because its behavior is the same.

### Dickcissel

Whilst the Yellow-breasted Chat was not known to nest in Central Florida this species is not meant to nest in Florida. Females are hard to locate so counts are of males on territory. Nests have been found, females and fledged young also noted. There were 13 males on territory in 1999 with eight in 2000, four in 2003 and four in 2004. With this exceptional species

I am including even later records. In 2005 there were at least 143 males on territory with 11 females and later two fledged young. When not singing this species it is very hard to locate making it difficult to locate any adults or their young. Later in 2006 there were 14 males. In 2010 I am beginning to think of it as a resident, what more can I say. Zellwood always surprises and this is certainly an unexpected series of events.

#### Red-winged Blackbird

The number of pairs appears to be totally dependent on the height and type of vegetation. If it grass there are no pairs in contrast if the fields are full of woody plants with taller plants interspersed then there will be many pairs of Red-winged Blackbirds. The worst year was 1999 with 545 pairs and the best year was 2003 with 2,582 pairs. Some, if not many, of the nests may be destroyed by mowing. It is likely that in 2003 some 1,200 of the 2,582 nests were destroyed. The adults then congregate at the Sand Farm Cattail Marsh for a few days before leaving to nest again at a new location.

#### Eastern Meadowlark

This species prefers the shorter grassed fields. So with more mowing the population grew. There were up to 26 pairs a year through to 2003 with 43 pairs in 2004.

#### Common Grackle

This species nests in small colonies in the wetter woodlands. The population is small, in the range of 25 to 32 pairs in four years with higher counts of 45 pairs in 2001 and 2004. Why the two higher years? I have no idea.

#### Boat-tailed Grackle

There are so many locations in the whole North Shore area for this species to nest that the number of colonies and their size is probably not significant. The colonies are either in cattails or in willows. The lowest count was that of 111 pairs in 2002 and the highest was that of 225 pairs in 1999. This species is an early nester.

#### Brown-headed Cowbird

This is an increasing but unwelcome addition to the breeding birds of Zellwood. There were single pairs seen in 1999 and 2000 with three in 2001, four in 2002, five in 2003 and eight pairs in 2004. To date the known "parents" are Northern Mockingbirds and Red-winged Blackbirds. Could this be the reason for the decline in the numbers of Northern Mockingbirds in the border habitats? Fledged young seen each year in early June.

## Orchard Oriole

This is the last pattern species with step 1 involving single pairs in 1999 and 2000. Step 2 involved ten pairs in 2001 and 15 pairs in 2002. Step 3 involved 26 pairs in 2003 and 22 pairs in 2004. Zellwood is right at the southern limit of this species' breeding range, to have so many pairs here is really exceptional. Nests have been found (by others) and fledged young seen with their parents. Pairs are now breeding out in the fields where there are isolated mature trees.

## House Sparrow

Up to two pairs bred on the northern border in man-made structures. No pairs located in 2004 or since.

## CAUTION

Whilst this text was written in 2010 it is written as in the fall of 2004. There have been major changes to the habitat during the last few years with increased mowing and roller-chopping. Even these activities have now ceased. Most of the fields have had their surface soil buried 4 to 6 foot down. Two large tracts, phases one and two have been re-flooded.

There are now more not less breeding species. The only species lost are the Loggerhead Shrike and the House Sparrow.

What this appendix does show is just how adaptable most species are if they are given the opportunity to expand. Even species of concern like the Northern Bobwhite and the Eastern Meadowlark have done well.

**The following is a list of the species known to have bred (excepting the Painted Bunting) in all or any of the years 1999 to 2004 together with the number of pairs located in each year.**

<b>SPECIES</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Pied-billed Grebe	5				1	7
Anhinga		5				
American Bittern						1
Least Bittern	3	4	8	6	15	7
Great Blue Heron						5
Little Blue Heron		2				
Cattle Egret	413	103				
Green Heron	9	20	25	54	43	38
Fulvous Whistling-Duck	25	1				1
Wood Duck	1		1	2	1	1
Mallard	3	1				
Mottled Duck	12	13	7	12	4	
Bald Eagle	1	1	1	1	1	1
Cooper's Hawk		4	1	3	2	3
Red-shouldered Hawk	4	6	9	6	4	5
Red-tailed Hawk	6	11	6	6	8	6
Northern Bobwhite	40	38	65	89	125	87
King Rail				2	14	18
Purple Gallinule	21	23	17	40	51	54
Common Gallinule	104	129	126	146	214	305
American Coot	5					2
Limpkin			1			2
Killdeer	6	1	6	11		
Black-necked Stilt	6	7	18	30	1	1
Eurasian Collared-Dove			1	1	1	3
White-winged Dove					3	
Mourning Dove	32	14	29	23	22	26
Common Ground-Dove	40	59	116	98	236	191
Yellow-billed Cuckoo	7	10	16	26	48	49
Barn Owl	1	4		4	4	6
Great Horned Owl	2	5	7	9	8	13
Barred Owl	3	2	4	2	4	3
Common Nighthawk	5	4	13	8	12	16
Chuck-will's-widow	5	2	1	5	20	20
Red-bellied Woodpecker	27	39	58	56	76	94
Downy Woodpecker	12	14	31	37	39	38
Northern Flicker	5	5	10	12	10	18
Pileated Woodpecker	3	3	8	10	8	13
Great Crested Flycatcher	17	10	13	25	30	33
Eastern Kingbird		2			3	2
Loggerhead Shrike	6	5	5	6	6	5
White-eyed Vireo		5	3	13	14	16
Blue Jay	26	25	42	49	62	70

<b>SPECIES</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Fish Crow	6	11	6	4	6	10
Barn Swallow	25	48	52	44	34	36
Tufted Titmouse	3	3	7	9	16	16
Carolina Wren	79	69	153	162	185	171
Northern Mockingbird	55	51	59	62	61	60
Brown Thrasher	7	12	20	20	22	38
European Starling	16	11	8	11	9	7
Northern Parula	2	2	10	6	10	7
Common Yellowthroat	2			4	3	
Yellow-breasted Chat		19	7	25	56	103
Eastern Towhee	10	48	72	91	206	207
Northern Cardinal	179	176	320	380	575	593
Blue Grosbeak	41	59	76	74	87	81
Indigo Bunting	11	32	54	65	96	157
[Painted Bunting]	8	9	19	20	19	22
Dickcissel	13	8			4	4
Red-winged Blackbird	545	1,109	932	826	2,582	1,537
Eastern Meadowlark	9	22	12	15	26	43
Common Grackle	25	26	45	32	26	45
Boat-tailed Grackle	225	134	152	111	164	154
Brown-headed Cowbird	1	1	3	4	5	8
Orchard Oriole	1	1	10	15	26	22
House Sparrow	1	12	1	2	1	
Totals	2,119	2,430	2,666	2,774	5,199	4,481
Less Painted Bunting males	8	9	19	20	19	22
Total breeding population	2,110	2,421	2,647	2,754	5,180	4,459
Less the Red-winged Blackbirds	545	1,109	932	826	2,582	1,537
Trend totals	1,565	1,312	1,715	1,928	2,598	2,922
Less the Cattle Egrets	413	103				
Totals that are comparable	1,152	1,209	1,715	1,928	2,598	2,922

To a degree the totals above do not give a clear picture so I have manipulated them, something that one is not meant to do. As I have made these manipulations transparent I hope they are acceptable.

I firstly took off the Painted Buntings as they were not actually breeding, that seems reasonable. I took off the Red-winged Blackbirds as their population was totally dependent on what man had done to the fields i.e. mowed or not mowed. Their numbers did not and could not indicate any trend. Finally I took off the Cattle Egrets as their population depended on whether they bred in the survey area or further south.

What I hope I am left with is the great bulk of the breeding population from which I could see any trends in the population i.e. steps 1 to 3. If you look at just the last line you can now see how the basic breeding population has been growing year on year and that the steps are clearly visible.

## Appendix D

### Butterflies

I have not kept a daily log of these insects. All I have recorded is the first date on which each species was seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed all the species that have been seen from August 15, 1998 to December 31, 2005. I am however only detailing the records for the years 2001 to 2005.

Species	2001	2002	2003	2004	2005
Pipevine Swallowtail	5.27.01			8.4.04	6.5.05
Polydamus Swallowtail	2.18.01	3.14.02	2.23.03		
Zebra Swallowtail	6.10.01	4.24.02	3.24.03		
Black Swallowtail	2.14.01	2.3.02	2.2.03	2.2.04	1.2.05
Giant Swallowtail	2.21.01	2.20.02	3.2.03	2.4.04	2.2.05
Eastern Tiger Swallowtail	2.21.01	2.20.02	1.2.03	2.22.04	1.2.05
Spicebush Swallowtail	2.28.01	3.6.02	3.24.03	3.28.04	2.28.05
Palamedes Swallowtail	3.11.01	3.27.02	6.16.03	3.7.04	6.5.05
Checkered White	1.14.01	2.3.02	3.19.03	4.18.04	1.2.05
Cabbage White	4.8.01	3.10.02	3.5.03	5.26.04	
Great Southern White	2.28.01	2.6.02	2.15.03	1.4.04	1.2.05
Orange Sulphur	2.21.01	5.30.02	6.16.03	2.4.04	2.8.05
Southern Dogface	8.22.01	8.14.02	6.11.03	4.21.04	8.21.05
Cloudless Sulphur	2.7.01	1.16.02	2.15.03	1.4.04	1.2.05
Orange-barred Sulphur					8.21.05
Large Orange Sulphur			5.29.03		8.7.05
Barred Yellow	2.25.01	1.20.02	1.22.03	1.4.04	1.2.05
Little Yellow	5.4.01	1.24.02	2.23.03	3.3.04	1.2.05
Sleepy Orange	2.14.01	2.3.02	1.30.03	1.4.04	1.2.05
Dainty Sulphur	4.6.01	2.24.02	3.5.03	3.3.04	3.20.05
Great Purple Hairstreak		5.6.02	5.15.03		
Banded Hairstreak		5.30.02			6.12.05
White M Hairstreak	12.21.01	5.1.02			1.19.05
Gray Hairstreak	5.20.01	1.27.02	5.15.03	1.11.04	1.19.05
Red-banded Hairstreak	3.27.01				2.20.05

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Cassius Blue				7.24.04	
Ceraunus Blue	5.8.01	4.17.02			
American Snout	2.18.01	3.6.02	2.19.03	4.7.04	4.14.05
Gulf Fritillary	1.14.01	1.7.02	1.2.03	1.4.04	1.2.05
Zebra	9.23.01	1.16.02	1.5.03	1.11.04	1.2.05
Variegated Fritillary	5.27.01	5.9.02	4.27.03	5.5.04	3.30.05
Phaon Crescent	7.29.01	6.2.02	5.7.03	5.10.04	6.5.05
Pearl Crescent	2.21.01	1.24.02		3.3.04	1.6.05
Question Mark	5.6.01	3.17.02	4.21.03	4.18.04	2.28.05
American Lady	2.25.01	2.6.02	3.5.03	1.19.04	1.19.05
Painted Lady	1.24.01	1.7.02	1.11.03	3.22.04	3.30.05
Red Admiral	1.1.01	1.7.02	1.11.03	1.4.04	1.6.05
Common Buckeye	2.7.01	2.3.02	1.5.03	1.4.04	1.2.05
White Peacock	6.10.01	3.17.02	4.21.03	1.14.04	1.2.05
Red-spotted Purple					
Viceroy	2.28.01	1.24.02	1.9.03	1.4.04	1.2.05
Hackberry Emperor	4.4.01	4.10.02	6.11.03	4.28.04	4.10.05
Tawny Emperor	4.6.01	4.7.02	4.13.03	4.28.04	4.17.05
Carolina Satyr	2.28.01	7.25.02	4.24.03	3.3.04	1.2.05
Monarch	3.11.01	1.16.02	1.2.03	1.4.04	1.2.05
Queen	2.28.01	2.3.02	1.5.03	1.4.04	1.2.05
Silver-spotted Skipper	3.11.01	3.24.02	8.20.03		2.20.05
Long-tailed Skipper	3.22.01	4.7.02	4.24.03	1.14.04	1.2.05
Dorantes Skipper	8.22.01	2.3.02	5.26.03	8.29.04	1.2.05
Southern Cloudywing					
Confused Cloudywing	2.28.01				
Juvenal's Duskywing					
Horace's Duskywing	5.4.01	4.10.02	4.24.03	4.25.04	2.16.05
Zarucco Duskywing	4.22.01			7.4.04	6.26.05
Common Checkered-	2.21.01	2.17.02	2.23.03	2.11.04	1.19.05
Tropical Checkered-Skipper	2.7.01	2.3.02	1.30.03	1.4.04	1.12.05
Swarthy Skipper	7.11.01				
Clouded Skipper	2.28.01	6.16.02	4.27.03	1.25.04	1.6.05
Least Skipper					2.28.05
Southern Skipperling	5.2.01	2.3.02	4.24.03	3.14.04	5.22.05
Fiery Skipper	3.22.01	1.24.02	3.26.03	1.14.04	1.2.05
Dotted Skipper					10.28.05
Whirlabout	7.4.01	6.10.02		8.11.04	2.28.05
Southern Broken-Dash					
Northern Broken-Dash					
Sachem		5.30.02	3.24.03	7.21.04	2.13.05
Byssus Skipper					
Dun Skipper		7.3.02		5.10.04	8.3.05

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Dusted Skipper					
Eufalia Skipper		7.31.02			
Twin-spot Skipper	4.29.01	5.12.02		5.14.04	
Brazilian Skipper					

There were 73 species recorded from August 15, 1998 to December 31, 2005.

## Appendix E

### Dragonflies and Damselflies

I have not kept a daily log of these insects. All I have recorded is the first date on which each species was seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed all the species that have been seen during the survey from August 15, 1998 to December 31, 2005. Here I detail the first dates for the years 2001 to 2005.

Species	2001	2002	2003	2004	2005
Ebony Jewelwing					
Common Spreadwing				3.31.04	4.14.05
Variable Dancer	5.8.01	6.10.02	6.1.03		
Familiar Bluet		5.20.02		5.23.04	7.17.05
Purple Bluet					
Atlantic Bluet			5.18.03	5.23.04	4.10.05
Florida Bluet	2.25.01		5.29.03	5.14.04	5.22.05
Orange Bluet					
Vesper Bluet	3.25.01				
Citrine Forktail	4.16.01	2.3.02	2.23.03	4.7.04	1.2.05
Fragile Forktail				1.14.04	1.2.05
Rambur's Forktail	2.21.01	1.24.02	3.5.03	2.4.04	1.2.05
Southern Sprite		4.21.02	5.29.03	2.29.04	2.28.05
Duckweed Firetail	4.8.01	5.1.02	5.7.03		
Comet Darner			9.10.03		
Common Green Darner	1.17.01	1.3.02	1.2.03	1.4.04	1.2.05
Blue-faced Darner	5.4.01			5.16.04	4.14.05
Regal Darner	3.27.01	3.19.02	4.13.03	3.14.04	4.10.05

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Swamp Darner	3.22.01	3.24.02	3.24.03	3.7.04	3.16.05
Twilight Darner	6.10.01	1.20.02	5.4.03	6.6.04	2.6.05
Cyrano Darner	7.29.01		3.29.03	8.22.04	4.10.05
Phantom Darner	8.29.01	8.11.02		9.16.04	1.2.05
Two-striped Forceptail	4.16.01	5.15.02	5.15.03	5.16.04	6.12.05
Gray-green Clubtail	3.22.01		5.12.03	4.14.04	4.26.05
Cypress Clubtail		3.10.02			4.17.05
Dragonhunter	7.27.01			5.26.04	6.26.05
Prince Baskettail	3.22.01	3.19.02	3.24.03	3.28.04	3.27.05
Common Baskettail				2.16.04	1.26.05
Sepia Baskettail	7.29.01		5.4.03		
Florida Baskettail		1.27.02	1.11.03		3.13.05
Four-spotted Pennant	4.16.01	3.31.02	4.13.03	4.18.04	4.20.05
Amanda's Pennant					
Red-veined Pennant					6.26.05
Halloween Pennant	5.6.01	7.3.02	3.24.03	4.14.04	4.6.05
Banded Pennant	5.8.01		6.26.03	5.10.04	6.19.05
Faded Pennant		7.3.02	6.1.03	3.19.04	6.26.05
Scarlet Skimmer	7.18.01	3.24.02	4.24.03	3.31.04	3.30.05
Pin-tailed Pondhawk	4.19.01	5.6.02	3.12.03	3.28.04	2.23.05
Eastern Pondhawk	1.17.01	1.24.02	3.2.03	1.4.04	2.23.05
Little Blue Dragonlet	5.4.01	4.28.02	4.6.03	4.28.04	4.17.05
Blue Corporal					
Golden-winged Skimmer	4.8.01	4.10.02	4.27.03	5.14.04	4.3.05
Bar-winged Skimmer			4.24.03	6.13.04	4.24.05
Slaty Skimmer	4.6.01	4.14.02	4.24.03	6.2.04	4.10.05
Needham's Skimmer	5.20.01	4.17.02		5.10.04	4.24.05
Great Blue Skimmer	6.7.01	6.10.02	6.11.03	6.13.04	6.12.05
Marl Pennant	5.20.01				5.15.05
Hyacinth Glider	3.11.01	3.22.02	3.12.03	3.14.04	3.27.05
Roseate Skimmer				4.14.04	1.2.05
Blue Dasher	2.25.01	2.3.02	3.5.03	3.7.04	1.19.05
Wandering Glider	4.2.01	3.22.02	3.9.03	5.5.04	5.22.05
Spot-winged Glider	5.24.01	9.29.02	5.26.03	4.28.04	6.12.05
Eastern Amberwing	2.21.01	3.19.02	3.12.03	3.7.04	3.27.05
Carolina Saddlebags	2.11.01	2.10.02	1.2.03	2.29.04	1.6.05
Black Saddlebags	4.2.01	3.6.02	2.26.03	2.22.04	2.23.05
Red Saddlebags	5.20.01	7.17.02	4.16.03	3.14.04	3.27.05

So far during the survey a total 56 species have been identified, of these 14 were damselflies.

## Appendix F

### Amphibians and Reptiles

I have not kept a daily log of these creatures. All I have recorded is the first date on which they were seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed the species seen from August 15, 1998 to December 31, 2005. I have only detailed those seen in the years 2001 to 2005.

Species	2001	2002	2003	2004	2005
Eastern Newt					1.2.05
Southern Toad		3.17.02	1.30.03	1.4.04	1.9.05
Oak Toad					7.17.05
Greenhouse Frog		3.24.02	2.15.03	3.3.04	2.8.05
Southern Cricket Frog	8.5.01	8.11.02	5.29.03	3.19.04	7.1.05
Spring Peeper			1.2.03	1.14.04	1.9.05
Green Treefrog		3.14.02	2.23.03	1.4.04	1.6.05
Barking Treefrog	4.6.01	4.24.02	3.9.03	3.10.04	2.23.05
Pinewoods Treefrog				9.28.04	
Squirrel Treefrog	2.28.01	4.28.02	2.26.03	5.10.04	5.1.05
Cope's Gray Treefrog		3.14.02	1.2.03	1.4.04	1.16.05
Southern Chorus Frog	6.20.01		2.15.03	5.10.04	3.13.05
Ornate Chorus Frog	2.11.01		2.26.03	3.19.04	3.27.05
Little Grass Frog	2.14.01	2.3.02	2.9.03	5.16.04	3.13.05
Eastern Narrow-mouthed Frog	5.27.01	4.28.02	4.27.03	5.2.04	4.24.05
Bull Frog	4.11.01	3.24.02	3.5.03	3.7.04	3.27.05
Pig Frog	2,25.01	3.10.02	1.5.03	3.3.04	2.23.05
Bronze Frog				4.23.04	4.6.05
Southern Leopard Frog	1.17.01	1.7.02	1.2.03	1.4.04	1.2.05

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
American Alligator	1.4.01	1.3.02	1.2.03	1.4.04	1.2.05
Common Snapping Turtle	2.18.01	2.17.02	2.15.03	2.16.04	2.2.05
Stinkpot	5.8.01				
Loggerhead Musk Turtle					
Striped Mud Turtle	1.24.01	3.10.02		2.16.04	4.3.05
Box Turtle				11.7.04	6.12.05
Florida Cooter	1.17.01	2.17.02	2.19.03	1.4.04	1.2.05
Florida Redbelly Turtle	1.7.01	1.10.02	1.7.03	1.4.04	1.2.05
Chicken Turtle	1.14.01	3.22.02	3.19.03	2.16.04	1.2.05
Gopher Tortoise	7.4.01		7.4.03	1.16.04	
Florida Softshell	1.14.01	1.20.02	1.2.03	1.4.04	1.2.05
Green Anole	2.11.01	1.24.02	1.2.03	3.14.04	4.3.05
Brown Anole	2.14.01	2.3.02	1.19.03	3.19.04	1.24.05
Six-lined Racerunner	4.6.01	3.17.02		3.24.04	
Ground Skink					
Broad-headed Skink	2,25.01			3.31.04	
South-eastern Five-lined Skink		3.17.02		8.11.04	7.1.05
Mole Skink					
Eastern Glass Lizard	8.2.01		3.19.03		
Island Glass Lizard					
Florida Green Water Snake	2.7.01	3.24.02			7.20.05
Brown Water Snake			5.4.03		
Banded Water Snake	2.11.01	2.17.02	3.12.03	4.25.04	1.9.05
Swamp Snake					
Brown Snake			4.2.03	6.6.04	2.16.05
Striped Crawfish Snake					
Garter Snake	8.29.01	4.28.02	5.4.03	1.11.04	1.6.05
Ribbon Snake	8.16.01	3.24.02	4.30.03		4.26.05
Eastern Hognose Snake					8.28.05
Ring-neck Snake					4.20.05
Racer	3.25.01	3.17.02	2.12.03	2.16.04	1.6.05
Eastern Coachwhip					3.30.05
Rough Green Snake	5.6.01			11.14.04	3.24.05
Corn Snake	4.11.01	3.17.02	5.7.03	9.16.04	3.6.05
Rat Snake	4.11.01	3.17.02	3.12.03	1.11.04	3.24.05
Cottonmouth		6.2.02	9.10.03		3.13.05
Eastern Diamondback			3.9.03		

There were 19 Amphibians and 37 Reptiles seen since August 15, 1998.

## Appendix G

### Mammals

I have not kept a daily log of these mammals. All I have recorded is the first date on which they were seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed all the species that have been seen from August 15, 1998 to December 31, 2005. I have only detailed those seen in the years 2001 to 2005.

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Virginia Opossum	1.1.01	1.24.02	1.2.03	1.16.04	1.6.05
Southern Short-tailed Shrew	7.15.01		1.2.03		
Least Shrew					
Nine-banded Armadillo		5.30.02	4.30.03	5.16.04	2.28.05
Eastern Cottontail	1.1.01	1.24.02	1.2.03	1.4.04	7.3.05
Marsh Rabbit	1.1.01	1.7.02	1.2.03	1.4.04	1.2.05
Gray Squirrel	3.11.01	2.6.02	1.5.03	2.4.04	3.6.05
Southern Flying Squirrel	1.14.01	9.22.02	1.9.03	2.29.04	4.30.05
Marsh Rice Rat				10.3.04	3.2.05
Eastern Harvest Mouse		7.3.02			
Cotton Mouse					
Hispid Cotton Rat	2.7.01	1.20.02	1.2.03	3.31.04	4.26.05
Eastern Wood Rat					
Round-tailed Muskrat		9.22.02	4.27.03		
Norway Rat	8.22.01			11.14.04	
House Mouse					
Coyote	3.11.01		1.19.03	1.14.04	1.6.05
Red Fox	1.21.01	1.13.02	2.26.03	1.16.04	7.14.05
Gray Fox	3.18.01		4.27.03	4.7.04	8.7.05
Black Bear				2.22.04	
Raccoon	1.4.01	1.7.02	1.5.03	1.4.04	1.2.05

<b>Species</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Long-tailed Weasel		5.23.02			
Spotted Skunk				7.4.04	10.30.05
Striped Skunk					1.30.05
River Otter	1.1.01	1.10.02	1.2.03	1.4.04	1.2.05
Bobcat	1.1.01	1.3.02	1.11.03	1.21.04	1.19.05
Florida Panther			5.15.03		

A total of 27 species have been seen since August 15, 1998.