



The 6th Zellwood Bird Report

August 15, 2003 to August 14, 2004

By

Harry Robinson

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Bird Usage of the 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 6th report on the birds that visited the former Zellwood Drainage and Water Control District's Unit One and Two together with the Zellwin Sand Farm. All are located in Orange County, Florida. This detailed summary covers the period August 15, 2003 to August 14, 2004. The survey is ongoing; in its 15th year at the time of writing this report. At the end of this survey year a total of 609 surveys (counts) had been completed involving at least 7,627 hours of field work.

Table C give details of the days the site was visited; the hours spent doing the field work and the number of species/individuals seen. During this year a total of 1,380 hours were spent on fieldwork spread over 104 visits. There were no gaps in the coverage this year. Surveys were conducted on Wednesdays and Sundays with variations as necessary.

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.

In 2002, the District began mowing and roller-chopping the former farm fields in Units One and Two in order to manage the woody vegetation that would make it difficult to remediate and/or treat the fields. Fields that had no woody vegetation were mowed three times a year with most of the mowing occurring between September and April. The fields that had significant woody vegetation were roller-chopped two years in a row and were then added to the mowing list. Since this program was just started in 2002, by August 2003 and August 2004 Units One and Two were a mosaic of mowed, unmowed, chopped and unchopped fields. Most of the mowed fields included short grass species and herbaceous ground cover. The fields that had been unmowed for a few months included taller grass species, like Johnson grass and dog fennel. The woody fields that had not been roller-chopped included woody vegetation in the form of elderberry, saltbush, willow and ludwigia. The fields that had been recently roller-chopped had woody debris in the form of branches and stumps on the ground. In November and December 2003, most of the fields along Laughlin Road south to the McDonald Canal were mowed and very open. The fields south of the McDonald Canal along Laughlin Road had thick patches of elderberry and saltbush. The fields on the north side of Lust Road between Pole Road and the eastern border had a great deal of woody vegetation including elderberry, saltbush and willow. The fields south of Lust Road, between Airport Road and the eastern border, primarily included elderberry. The field on the south-west corner of the intersection of Lust Road and Airport Road was sandy and barren after the site was remediated. The south-eastern corner of the property to the south of Hooper Farms Road had stands of very tall willow.

Between August 2003 and August 2004 the Sand Farm Cattail Marsh and Lake Apopka accounted for most of the wet areas in the survey area. The Sand Farm Cattail Marsh became inundated in late 2003 and the spring of 2004. It included a corner of thick cattails, a large swath of open water with duckweed, another large strand of cattails to the north-west of the open water and finally a long strand of willow and ludwigia along the north-western most edge. Most of the habitat that included trees as the dominant species occurred along the northern and eastern edges of the property.

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 strict timetable.

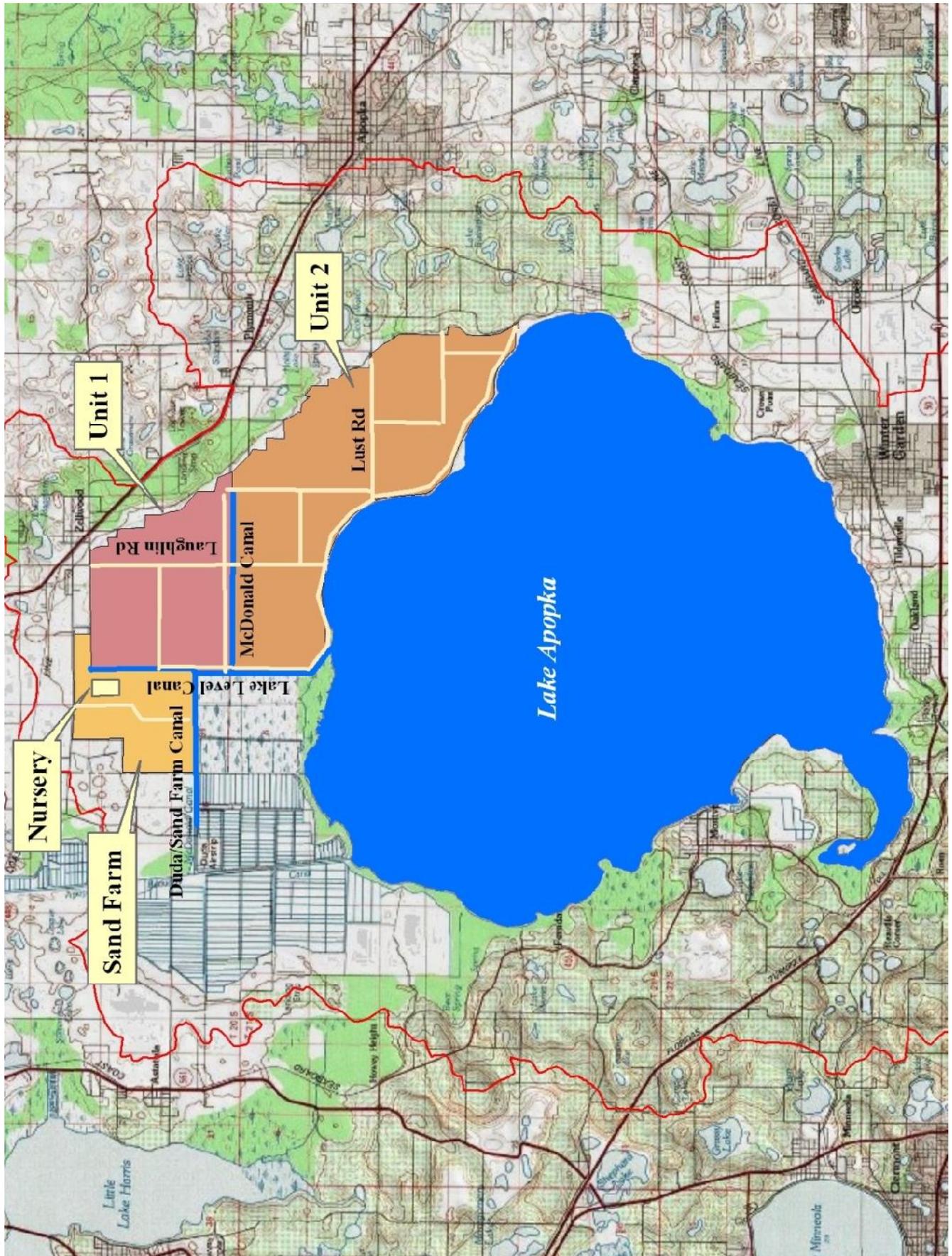
In all I survey some 10,000 acres, this total includes 2,800 acres of Unit One, 6,000 acres of Unit Two and 1,200 acres of the Sand Farm. The whole of the Lake Apopka property comprises some 20,000 acres. The District has given the whole area the name Lake Apopka North Shore Restoration Area or LANSRA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

2004 was the final year of the breeding bird survey; Appendix C gives details of the Breeding Bird Survey for the years 1999 to 2004.

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 six years but have only shown the first dates for the years 2000 to 2004.

There is also a list of all bird species seen during the six years together with the highest daily count for each species. Alongside these counts there is a second table showing the situation as at August 14, 2012. There were ten additions to the list this year. These were: Canada Warbler, Alder Flycatcher, Gray Partridge, Clapper Rail, Dark-eyed Junco, Brown-headed Nuthatch, Long-eared Owl, Thayer's Gull and Mississippi Kite. Some will be described 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 Units One and Two and the Sand Farm. This map was kindly provided by Pam Bowen of the 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. Whilst driving around the property I have always had the support of any District staff that I met, thank you.

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 so much.

Rachel Gerker has come to my aid as I needed help in preparing this book for placement on the Orange Audubon Society's web site, Rachel thank you for all your help.

Harry Robinson

Front Cover: this Western Kingbird was photographed by Eli Schaperow at Potter's Farm on January 19, 2013. Thanks Eli.

THE SURVEY ROUTE

I entered the property at Laughlin Road and made my way to the Potter's Farm Road where I turned to the north to Canal Road where I would start the day. I would then walk a long circuit that joined Potter's Farm Road and Laughlin Road. After this I would travel south to the lake and work my way south to Lust Road. At this time none of the "roads" were surfaced so travel was very bumpy and slow. I would go into the wood that stretched between Lust and Hooper Farms Road (there was a disused road that ran through this wood). I would then go to the southern border where there were two tracks that ran through a wetland area. Finally if there was time I would work my way back up north to the Workshop area.

In late 2003 this all changed with the flooding of the Sand Farm Cattail Marsh. Instead of doing that long circuit I spent time each morning at the cattail marsh. There was a track up the side of the marsh but there was no Duda Bridge. In the summer of 2004 I switched my start point to the Sand Farm Bridge and I now spent more time out on the Sand Farm. The Nursery became available at the very end of this survey year and that became a focal point of the survey.

This year was truly a year of transition.

AN ANNOTATED CHECKLIST OF THE BIRDS OF

ZELLWOOD

AUGUST 15, 2003 TO AUGUST 14, 2004

This checklist covers the 6th year of the survey. I hope in the future to make printed reports for years one to five. The survey covered Units One and Two and the Sand Farm, in all some 10,000 acres were surveyed twice a week. During the year I carried out 104 surveys and spent 1,380 hours on the fieldwork.

A brief description is given of each species indicating its Zellwood status for this particular year. The description 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 from August 15, 2003 to August 14, 2004 but fall passage and any post-breeding gatherings do not recognize such dates. I am therefore providing records from earlier in 2003 where this helps to provide a better picture. The same situation could arise in August, 2004 in which case I will describe records proper to the following report. **These entries are all in italics to show that they do not belong to this survey year.**

Common Loon (*Gavia immer*)

This was a vagrant. For the late fall passage there was one on November 12.

Pied-billed Grebe (*Podilymbus podiceps*)

A total of seven pairs bred at the Sand Farm Cattail Marsh otherwise present in small numbers through the year. There was a brood of six that dropped to three and other broods of four, three, two and three of one. Early fall records: *there was one on June 26 with three on June 29 and July 9, then two seen on July 13 with one on July 19. There were two from July 27 to August 20 with six on August 24, then one seen on August 27.* That was the early fall passage. For the main fall passage there were singles from September 29 to October 12 with two to October 19, three to October 29, four on November 2, five on November 9 and eight on November 12, then seven seen on November 16 with four on November 20, three to November 28 and two on December 1. That very shallow influx lasted two months and covered the whole of the main fall passage. For the winter passage there were four on December 3 with six on December 9, then five seen on December 15 with three on December 17 and one on December 20. There were six on December 21 with ten on December 28, then six seen on December 31 with two on January 4. That completed the winter passage. For the early spring passage there were five on January 11 with nine to January 19, 11 to January 25, 13 on January 28 and 17 on February 2, then 15 seen on February 4 with 14 on February 11, 12 on February 16 and ten on February 18. There were 12 on February 22 with 15 on February 27, then 13 seen on March 3 with ten on March 7 and seven on March 10. That closed the early spring passage. There was no main spring passage as we move straight to the summer passage (the first young were seen on March 19). There were nine on March 14 with 14 on March 19, 16 on March 22 and 20 on March 24, then 11 seen on March 28. There were 12 on March 31 with 17 on April 4, 19 on April 14 and 28 on April 18, then 18 seen on April 23 with 15 on April 25, 13 on April 28, 12 to May 14 and nine on May 16. There were 13 on May 20 with seven on May 23 and four on May 26. There were 19 on May 30 with five on June 2, four on June 6, three on June 9 and singles to June 16. There were two on June 20 with three on June 28 and five on July 2, then two seen on July 4 with singles to July 24. That was the summer passage so for the early fall passage there were two on July 29 with singles to August 11.

Horned Grebe (*Podiceps auritus*)

This was a vagrant. For the winter passage there was one on December 17.

Eared Grebe (*Podiceps nigricollis*)

This was a vagrant. For the late fall passage there was one on October 19.

American White Pelican (*Pelecanus erythrorhynchos*)

For this year all the sightings came from the winter and spring passages. For the winter passage there were 60 on December 3. At the end of the month there were 40 on December 28 with 49 on December 31, then three seen on January 4. That was the extent of the winter passage. For the early spring passage there were 28 on January 16 with 32 on January 19, then one seen on January 21. There were 24 on February 4 with nine on February 8, six on February 11, two on February 22 and singles to February 29. That closed the early spring passage. For the main spring passage there were 23 on March 3 with 16 on March 7 and two on March 10. There were six on March 14 with 33 on March 19 and 40 on March 22, then five seen on March 24. There were 24 on March 28 with ten on March 31 and four on April 4. There were also seven on April 7. Finally for the main spring passage there were eight on May 2 with nine on May 10; there were no later records.

Brown Pelican (*Pelecanus occidentalis*)

This was a rare visitor. For the late fall passage there was one on November 23. For the more normal late spring passage there were single adults and immatures on April 4 with two adults on April 23.

Double-crested Cormorant (*Phalacrocorax auritus*)

Seen in low numbers for most of the year but there was an unprecedented spring passage. Early fall records: *there were four on June 23 with six on June 26, seven to July 2 and 12 on July 4, then nine seen on July 6. There were ten on July 9 and July 13 with 12 on July 19, then ten seen on July 21 with five on July 23. There were eight on July 25 with nine on July 27, then eight seen on August 5 with four to August 13.* For this year there were nine on August 20 with seven on August 27 and two on September 1. There were six on September 3 with ten on September 7, then five seen to September 14. There were six on September 16 with three on September 19. There were five on September 21 with seven on September 24, then three seen on September 29. That was the early fall passage. For the main fall passage there were five on October 2 with eight on October 5, then six seen on October 12 with four on October 15. Now the passage really got underway. There were 40 on October 19 with 69 on October 26, then 47 seen to November 9 with 32 on November 12, 26 on November 16 and 21 on November 20.

There were 266 on November 23 with 42 on November 28. That closed the main fall passage. For the winter passage there were 61 on December 1 with 68 on December 3, then 46 seen on December 7. There were 57 on December 9 with 69 on December 15 and 87 on December 17, then 65 seen on December 20 with 62 on December 21. There were 78 on December 26 with 154 on December 28 and 231 on January 4, then 174 seen on January 11 with 123 on January 14 and 36 on January 16. That completed the winter passage. For the early spring passage there were 120 on January 19 with 226 on January 21, then 58 seen on January 25. There were 94 on January 28 with 111 on February 2, then 98 seen on February 8 with 56 on February 11. There were 122 on February 16 with 171 on February 18 and 7,800 on February 22, then 98 seen on February 27. The flock of 7,800 is still (2013) the highest count for Zellwood. This flock was approximately a mile long by a quarter mile wide, I have seen nothing like it. To put it into perspective the previous high count was only that of 828 on March 25, 2001. That count was beaten four times this year. That was also the end of the early spring passage. For the main (excluding that one count) spring passage there were 156 on February 29 with 1,404 on March 3, then 112 seen on March 7. There were 202 on March 10 with 270 on March 14, 385 on March 19, 660 on March 24 and 1,048 on March 28, then 715 seen on March 31. There were 962 on April 4 with 376 on April 7, 188 on April 18, 130 on April 21, 128 on April 25, 72 on May 2, 69 on May 5, 65 on May 10, 39 on May 16, 25 on May 20, 19 on May 23 and 13 on May 26. That decline lasted nearly two months. That was also the end of the main spring passage. For the summer passage there were 38 on May 30 and June 6 with 12 on June 9. There were 24 on June 13 with 26 on June 16 and 28 on June 23, then 26 seen on June 28. There were 27 on July 2 with 28 on July 4, then 16 seen 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.*

Each year I recorded any visible migration i.e. flocks flying to the south late in the day in the fall and early in the day to the north in the spring. The totals mentioned below are included in the totals given above. For the fall passage flying to the south there were 33 on October 19 with 57 on October 26, ten on November 2, four on November 5, ten on November 9 and two on November 23. Flying to the north in the spring there were 15 on March 22 with ten on March 24, 308 on March 28, 165 on March 31, 422 on April 4, 146 on April 7, ten on April 14, 20 on April 18, four on April 21, 13 on April 23, 47 on April 25, 16 on April 28, three on May 5, 13 on May 10, five on May 16 and 12 on May 20.

Anhinga (*Anhinga anhinga*)

Present all year in low numbers; there was the suggestion of a post-breeding gathering. Early fall records: *there were 14 on June 16 with 18 on June 18, 22 on June 23, 31 to June 29 and 32 on July 2, then 23 seen on July 6 with 13 on July 9. There were 18 on July 13 with 24 on July*

19, then 19 seen on July 21 with 11 on July 23. There were 12 on July 25 with 16 on July 27 and 21 on July 30, then 17 seen on August 5 with nine on August 8. There were 19 on August 10 with 13 to August 20, seven on August 27 and six on September 1. There were 16 on September 3 and September 7 with 17 on September 14 and 19 on September 19, then ten seen on September 21. There were 18 on September 24 with 34 on September 29, then 28 seen on October 2. On October 2 very exceptionally a total of 86 flew to the south. That was the early fall passage. For the main fall passage there were 30 on October 5 with 37 on October 12, then 16 seen to October 19 with 13 on October 22. There were 29 on October 26 with 21 on October 29 and 13 on November 2. There were 15 on November 5 with 28 on November 9, then 32 seen on November 16 and November 20 with 31 on November 23, 19 on November 28 and 15 on December 1. That closed the main fall passage. For the winter passage there were 30 on December 3 with 19 on December 7. There were 22 on December 9 with 25 on December 15, 28 on December 20, 33 on December 21, 48 on December 28 and 54 on December 31, then 38 seen on January 4 with 37 on January 14 and 29 on January 16. That completed the winter passage. For the early spring passage there were 32 on January 19 with 35 on January 21, 40 on January 25 and 44 on February 2, then 35 seen on February 4 with 25 on February 8. There were 37 on February 11 with 33 on February 16, 30 on February 22 and 15 on February 27. That concluded the early spring passage. For the late spring passage there were 42 on February 29 with 20 on March 3, 16 on March 7 and 12 on March 10. There were 18 on March 14 with 22 on March 19, then 14 seen on March 24 with ten on March 28. There were 15 on March 31 and April 4 with 29 on April 7, then nine seen on April 14. On April 4 a total of 50 also flew to the north. That was the end of the late spring passage so for the summer passage there were 15 on April 18 with 26 on April 21 and April 23, then 20 seen on April 25 with 19 on May 2, 17 on May 10 and 11 on May 14. There were 19 on May 16 with 16 to May 23 and 15 on May 26. There were 52 on May 30 with 50 on June 6 and 27 on June 9. That appeared to be the end of the summer passage and the start of a 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 21 on October 6. That was the post-breeding gathering; it took up part of the summer passage and all of the early fall passage.

American Bittern (*Botaurus lentiginosus*)

Initially a fall passage migrant, a winter visitor and an early spring passage migrant in near normal numbers; then there was a major passage in the late spring culminating in a pair

breeding at the Sand Farm Cattail Marsh. Early fall records: *there was one at the Sand Farm Cattail Marsh on June 11, June 23, June 26 and July 13. Is it possible that there was a pair there?* For this year there were singles on September 1 and September 3 with three on September 7, then singles seen to September 14. There were four on September 16 with three on September 19 and two on September 21. There were three on September 24 with six on September 29, seven on October 2 and eight on October 5, then two seen on October 9. There were three on October 12 with four on October 15, then nine seen on October 19 and October 26 with eight on October 29 and four on November 2. There were 11 on November 5 with eight on November 9, five on November 16 and four on November 20. There were 18 on November 23 with seven to December 1 and five on December 3. Very exceptionally two were “singing” on November 28. That was the end of what appeared to be a single fall passage. For the winter passage there were six on December 7 with 11 on December 9, then ten seen to December 17 with eight on December 21. There were nine on December 26 with 13 on December 28 and 23 on December 31, then 11 seen to January 11. That completed the winter passage. For the early spring passage there were 13 on January 14 and January 19 with 14 on January 21, then eight seen on January 25. There were ten on January 28 and February 2 with 12 on February 4 and 22 on February 11, then 13 seen on February 16 with 11 on February 18. That was the early end of the early spring passage. Now the major event started the main spring passage. There were 14 on February 22 and February 27 with 16 on February 29, 32 on March 3, 39 on March 7, 45 on March 14, 52 on March 19 and 60 on March 24, then 25 seen on March 31 with 17 on April 4. The count of 60 was the highest count for Zellwood but the highest count is now (2013) that of 105 on December 30, 2009. There were 30 on April 7 with ten on April 18, eight on April 21 and six on April 23. There were nine on April 25 with seven on April 28 and singles to May 5. There were four on May 10 with one on May 16. That closed the main spring passage. For the summer passage there were up to two a day seen from May 20 to August 1. Very exceptionally there was a pair at the Sand Farm Cattail Marsh and a juvenile was seen with them from June 20. On that date it was having a job flying, perhaps this was its first long flight. On most dates after that it was seen with a single adult but all three were seen on June 28, July 7, July 18 and August 1. *The adult and immature were still together on September 14.* This is the first breeding record for Zellwood.

As this species is seldom heard to sing in Florida I kept a record of the numbers “singing”. There were two on February 2 with one on February 16, two on February 18, four on February 22, five on February 27, six on February 29, six on March 3, seven on March 7, seven on March 10, eight on March 19, seven on March 22, five on March 28, five on March 31 and six on April 4. On March 14 there was a partial albino; it had white wing tips and white patches in the secondaries.

Least Bittern (*Ixobrychus exilis*)

A summer visitor; there was a significant post-breeding gathering. During the Breeding Bird Survey a total of seven pairs located. Early fall records: *there were five from July 9 to July 19 with three on July 21 and two on July 23. There were three on July 25 with two to July 30 and one on August 5. There were two on August 10* with singles to September 7. That probably denoted the departure of the summer visitors. So for the late fall passage there were singles on October 9, October 15, October 19, October 22, October 29, November 5 and November 16. That was the late fall passage. There are not normally any winter records or even any November records so for the winter passage there were two on December 3 with one on December 15. There were two on December 17 with singles on December 21, December 26, December 28, December 31, January 4 and January 11. That completed the winter passage. As so often happens the birds that just should not be here leave at the end of a passage. There were no early spring sightings. For the main spring passage there were singles from March 3 to March 31 with later one on April 14. That was the extent of the main spring passage. For the summer passage there were two on April 28 and May 2 with one on May 5. There were two on May 10 with five on May 16, then two seen to May 23 with one on May 26. There were three on May 30 with four on June 6, then one seen on June 9. There were two on June 13 with eight on June 16, then seven seen to June 23. That ended the summer passage. For the post-breeding gathering 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 closed the post-breeding gathering.

Great Blue Heron (*Ardea herodias*)

Present all year in quite low numbers; during the Breeding Bird Survey a total of five pairs located. The first pair had two young on April 14 but one died on April 18; it was not removed from the nest. The second pair had two young on April 25, the third pair had two young on May 10, the fourth pair had one young on May 15 and the fifth pair had one young on June 16; so much for this being a winter nester. Early fall records: *there were 11 on June 8 with 14 on June 11, 16 to June 23 and 27 on June 29, then 20 seen on July 2 with ten on July 4. There were 14 on July 6 with 16 on July 9, then 13 seen on July 13 with eight on July 19 and five on July 21. There were seven on July 23 with 15 on July 25, then nine seen on July 27. There were ten on July 30 with 17 on August 5, then 13 seen on August 8 with 12 on August 10 and seven on August 13.* There were 13 on August 20 with 11 on August 24 and eight on August 27. There were 14 on September 1 with 11 to September 7. There were 19 on September 10 with 15 on September 14, 13 on September 19 and ten on September 21. That was the early fall passage. For the main fall passage there were 17 on September 24 with 21 on October 2, then 20 seen on October 5 with 18 on October 12, 16 on October 19 and 13 on October 22. There were 23 on

October 26 with 22 on October 29, 19 on November 2 and 13 on November 5. There were 16 on November 9 with 21 on November 12 and 31 on November 20, then 25 seen on November 23 with 15 on November 28. That closed the main fall passage. For the winter passage there were 25 on December 1 with 30 on December 3, then 16 seen on December 7. There were 22 on December 9 with 24 on December 15, then 18 seen on December 17 with 16 on December 20. There were 23 on December 21 with 25 on December 28, then 23 seen on January 4 with 22 on January 11. That completed the winter passage so for the early spring passage there were 29 on January 14 with 25 to January 21, 21 on January 25, 18 on January 28 and 15 on February 2. There were 26 on February 4 with 29 on February 11, then 28 seen on February 16 with 25 to February 22 and 20 on February 27. That concluded the early spring passage. For the late spring passage there were 22 on February 29 with 30 on March 3, then 21 seen on March 7. There were 25 on March 10 with 28 on March 14, then 27 seen on March 19 with 22 on March 22 and 21 on March 24. There were 27 on March 28 with 12 on March 31. That was the end of the late spring passage. For the summer passage there were 19 on April 4 with 22 on April 7, then 12 seen on April 14. There were 15 on April 18 with 22 on April 21, then 25 seen on April 25 and May 2 with 21 on May 5, 20 on May 14 and 19 on May 16. There were 20 on May 20 with 12 on May 23. There were 16 on May 26 with 19 on May 30, 21 on June 2 and 34 on June 6, then 23 seen on June 13 with 19 on June 16 and 12 on June 20. That was the end of the summer passage. For the early fall passage there were 15 on June 23 with 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.

Great White Heron (*Ardea occidentalis*)

This was a vagrant. For the summer passage there was a juvenile at the Sand Farm on May 30 and June 2. There was also one on the southern border on July 2; its age was not noted.

Great Egret (*Ardea alba*)

Present all year in low numbers; perhaps the numbers in the summer were the highest of the year. Early fall records: *there were 14 on June 16 with 19 on June 18 and 61 on June 23, then 23 seen on June 26. There were 48 on June 29 with 64 on July 2, then 45 seen on July 4 with 41 on June 9, 38 on July 19, 37 on July 23, 20 to July 27, ten on July 30 and five on August 5. That was the end of the summer passage. For the early fall passage there were 29 on August 8 with 37 on August 10, then nine seen on August 20 with six on August 24. There were ten on August 27 with 33 on September 1, then 23 seen on September 3 with seven on September 7, six on September 14, four to September 21 and three on September 24. That was the extent of the*

early fall passage. For the main fall passage there were eight on September 29 with four on October 2 and three on October 5. There were ten on October 9 with 13 on October 12, then ten seen to October 19 with six on October 22 and four to October 29. There were six on November 2 with four to November 9. There were six on November 12 with eight on November 20, then five seen on November 23 with three to December 1. That closed the main fall passage. For the winter passage there were 14 on December 3 with 13 on December 7, 11 on December 9, nine on December 15, seven on December 17 and four on December 20. There were eight on December 21 with nine on December 26 and 12 on December 28, then seven seen on December 31 with five on January 4. That completed the winter passage. For the early spring passage there were six on January 11 with eight to January 19 and 20 on January 21, then 15 seen on January 25 with ten on January 28 and seven on February 2. There were 11 on February 4 with five on February 8. There were seven on February 11 and February 16 with ten on February 18 and 25 on February 27, then 23 seen on March 3 with seven on March 7 and two on March 10. That concluded the early spring passage. For the main spring passage there were seven on March 14 with four on March 19 and one on March 22. There were five on March 24 with three on March 28 and two on March 31. There were five on April 4 with 32 on April 7 and 61 on April 18, then two seen on April 21. There were three on April 23 with 129 on April 25, then singles seen to May 2. That ended the main spring passage. For the summer passage there were six on May 5 with nine on May 10 and 83 on May 14, then 54 seen on May 16 with 17 on May 20, 11 on May 23 and six on May 26. There were 53 on May 30 with 69 on June 6, then 25 seen on June 9 with 18 on June 13, 15 on June 16 and 12 on June 20. That finished the summer passage. For the early fall passage there were 16 on June 23 with 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.

Snowy Egret (*Egretta thula*)

Seen in low numbers all year with the exception of a single very short lived influx; a signature of this species. Early fall records: *there were 51 on July 6 with 46 on July 9 and 33 on July 13. There were 72 on July 19 with 51 on July 21, 45 on July 23, 38 on July 25, 19 on July 27 and six on July 30. There were 18 on August 5 with 55 on August 8, then 48 seen on August 10 with 17 on August 13 and five on August 20. There were 32 on August 24 with 50 on September 1, then 23 seen on September 3 with seven on September 7. There were eight on September 10 with ten on September 14, then four seen on September 16 with three on September 19. There were five on September 21 with six on September 24 and 16 on September 29, then three seen on October 2. That was the early fall passage. For the late fall passage there were six on October 5 with seven on October 9, then four seen on October 12 with three on October 15. There were four on October 19 with five on October 22, then three seen on October 26 with two on October 29. There were 13 on November 2 with singles to November 23. That closed*

the late fall passage. For the winter passage there were two on November 28 with four on December 1 and seven on December 3, then six seen on December 7 with three on December 9. There were five on December 15 with 17 on December 17 and 27 on December 21, then ten seen on December 26. There were 15 on December 28 with 16 on December 31 and 25 on January 4, then 16 seen on January 11 with seven on January 14. That completed the winter passage. For the early spring passage there were 24 on January 16 with 26 on January 19, 27 on January 21 and 43 on January 28, then 34 seen on February 2 with 23 on February 4 and 22 on February 8. There were 34 on February 11 with 22 on February 16. There were 27 on February 18 with 29 on February 22 and 31 on February 29, then 27 seen on March 3 with ten on March 7. That concluded the early spring passage. For the late spring passage there were 12 on March 10 with 11 on March 14, eight on March 19 and six to March 24. There were 11 on March 28 with seven on March 31 and three on April 4. There were four on April 7 with 14 on April 14, then five seen on April 18 with four on April 23 and singles to April 28. That ended the late spring passage. For the summer passage there were seven on May 2 with 18 on May 10 and 57 on May 14, then 41 seen on May 20 with 14 on May 23. There were 20 on May 26 with 44 on May 30 and 240 on June 6, then 40 seen on June 9 with 35 on June 13 and eight on June 16. That one day large influx is a feature of this species. There were nine on June 20 with 30 on June 23, then five seen on June 28. That finished the summer passage. For the early fall passage there were 14 on July 2 with 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.*

Little Blue Heron (*Egretta caerulea*)

Numbers were far more consistent through the year than those for the last species; there was however a short-lived passage in mid-May. Early fall records: *there were 79 on July 19 with 58 on July 21, 42 on July 25, 29 on July 27, 27 to August 8, 26 on August 10 and 18 on August 13.* For this year there were 29 on August 20 with 35 on August 27 and 63 on September 1, then 57 seen on September 7 with 34 on September 10, 28 on September 14 and 20 on September 16. There were 39 on September 19 with 22 on September 21 and 20 on September 24. That was the early fall passage. For the late fall passage there were 34 on September 29 with 24 to October 5. There were 40 on October 9 with 23 to October 19 and 17 on October 22. There were 23 on October 26 with 31 on October 29, then 22 seen on November 2 with 12 on November 5. There were 25 on November 9 and November 12 with 41 on November 16, then 28 seen on November 20. The late fall passage seems to be ending early this year as for the winter passage there were 35 on November 23 with 38 on November 28 and 49 on December 3, then 35 seen to December 15 with 32 on December 17 and 30 on December 20. There were 31 on December 21 with 40 on December 26 and 56 on December 28, then 40 seen on

December 31 with 26 on January 4. That completed the winter passage. For the early spring passage there were 29 on January 11 with 50 on January 14 and 65 on January 19, then 64 seen on January 21 with 58 on January 25, 36 on January 28, 35 on February 4 and 31 on February 8. There were 34 on February 11 with 47 on February 16 and 52 on February 18, then 45 seen on February 22 with 35 on February 27. That concluded the early spring passage. For the late spring passage there were 49 on February 29 with 60 on March 3, then 55 seen on March 10 with 37 on March 14, 22 on March 19 and 21 on March 22. There were 26 on March 24 with 20 on March 28 and 18 on March 31. There were 20 on April 4 with 25 on April 7, then 20 seen on April 14 with 19 on April 18, 12 on April 21 and six on April 23. That was the late spring passage. For the summer passage there were 24 on April 25 with 13 on May 2 and ten on May 5. There were 30 on May 10 with 134 on May 14, then 109 seen on May 16 with 65 on May 20, 48 on May 23, 38 on May 30 and 28 on June 2. There were 41 on June 6 with 47 on June 13, then 45 seen on June 16. There were 48 on June 20 with 55 on June 23, then 45 seen on June 28 with 42 to July 4 and 37 on July 7. That ended the summer passage. For the post-breeding gathering 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.*

Tricolored Heron (*Egretta tricolor*)

The rarest of these herons; the only time there were higher numbers present was during the post-breeding gathering. Early fall records: *for the post-breeding gathering there were 11 on June 16 with 14 on June 18, 15 on June 23, 35 on June 29, 44 on July 4 and 64 on July 6, then 31 seen on July 9 with 27 on July 13. There were 93 on July 19 with 83 on July 21, 48 on July 23, 28 on July 25, 26 on July 30 and 23 on August 5. There were 33 on August 8 with 14 on August 10, 13 on August 13 and 11 on August 20. There were 19 on August 24 with 29 on August 27 and 46 on September 3, then 31 seen on September 7 with 19 on September 10, 14 on September 14, three on September 16 and two to September 24. That was the end of the post-breeding gathering; again the early fall passage was enveloped by the preceding event. For the main fall passage there were 12 on September 29 with four to October 5. There were 11 on October 9 and October 12 with 14 on October 15 and 15 on October 19, then five seen on October 22 with four on October 26. There were six on October 29 with five on November 2 and two on November 5. There were five on November 9 with six on November 12 and ten on November 20, then eight seen on November 28 with three on December 1. That closed the main fall passage. For the winter passage there were nine on December 3 with four on December 7. There were five on December 9 with six to December 21 and 12 on December 26, then ten seen on December 28 with six on December 31, five on January 4 and four on January 11. That completed the winter passage. For the early spring passage there were six on January 14 with 16 on January 19, then 12 seen on January 21 with three on January 25. There were five on January 28 with seven on February 2 and February 4, then five seen on February 8 with three*

on February 11. There were four on February 16 with seven on February 18, then nine seen on February 27 and February 29 with eight on March 3 and two on March 7. That concluded the early spring passage. For the late spring passage there were ten on March 10 with 11 on March 14, then four seen on March 19 with three on March 22. There were four from March 24 to April 4 with eight on April 7, then seven seen on April 18 with two on April 21. There were four on April 23 with 13 on April 25, then five seen to May 5. That was the end of the late spring passage so for the summer passage there were nine on May 10 with 12 on May 14, then five seen on May 16 with four on May 20. There were six on May 23 with seven on May 30 and 16 on June 6, then 11 seen on June 9 with eight on June 13. That finished the summer passage. For the post-breeding gathering there were nine on June 16 with 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 with 17 to August 11 *and 15 on August 15.*

Reddish Egret (*Egretta rufescens*)

This was a vagrant. For the late spring passage an immature flew to the east at the Lust Road pump house on May 10.

Cattle Egret (*Bubulcus ibis*)

Seen in good numbers throughout the year; there was the suggestion of a post-breeding gathering. The first fledged young was seen out in the fields on May 16. Early fall records: *for the post-breeding gathering there were 636 on June 11 with 800 on June 16, 910 on June 23 and 1,345 on June 26, then 1,125 seen on June 29 with 890 on July 4, 750 on July 6 and 605 on July 9. There were 1,410 on July 13 with 1,700 on July 19, then 830 seen on July 21 with 430 on July 23 and 295 on July 25. There were 610 on July 27 with 655 on August 5 and 1,020 on August 8, then 340 seen on August 10. There were 545 on August 13 with 1,045 on August 20 and 1,330 on August 24, then 850 seen to September 1 with 280 on September 3. That was the end of the post-breeding gathering. For the fall passage there were 325 on September 7 with 550 on September 10, then 235 seen on September 14 with 190 on September 16. There were 360 on September 19 with 525 on September 21, then 158 seen on September 24. There were 305 on September 29 with 580 on October 2 and 950 on October 5, then 285 seen on October 9. There were 490 on October 12 and October 15 with 655 on October 22 and 1,860 on October 26, then 1,045 seen on October 29 with 240 on November 2 and 51 on November 3. There were 410 on November 9 with 275 on November 12. There were 290 on November 16 with 885 on November 20, then 535 seen on November 23 with 285 on November 28. That closed the fall passage. For the winter passage there were 315 on December 1 with 355 on December 3 and 810 on December 7, then 410 seen on December 9. There were 450 on December 15 with 750*

on December 17, 1,065 on December 21 and 1,840 on December 28, then 12 seen on December 31. That completed the winter passage. For the early spring passage there were 90 on January 4 with 715 on January 11 and 1,250 on January 14, then 1,050 seen on January 16 with 810 on January 19. There were 1,080 on January 21 and January 28 with 1,100 on February 2, then 980 seen on February 4 with 500 on February 8. There were 1,150 on February 11 with 1,160 on February 16 and 1,255 on February 22, then 525 seen on February 29 with 80 on March 3. That concluded the early spring passage. For the late spring passage there were 305 on March 7 with 250 on March 10 and 165 to March 19. There were 205 on March 22 with 345 on March 24, then 275 seen on March 28 with 150 on March 31. There were 170 on April 4 with 1,400 on April 7, then 740 seen on April 18 with 440 on April 23 and 305 on April 25. That ended the late spring passage. For the summer passage there were 545 on April 28 with 665 on May 5, then 615 seen on May 14 with 475 on May 16, 420 on May 20 and 250 on May 23. There were 275 on May 26 with 485 on May 30, then 205 seen on June 2. That was the end of the summer passage and the start of 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 950 seen on August 9. There were 1,005 on August 11 with 1,530 on August 16, then 705 seen on August 19. 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. That finished the post-breeding gathering.

Green Heron (*Butorides virescens*)

A summer visitor with a significant post-breeding gathering; numbers were low from September to February. During the Breeding Bird Survey a total of 38 pairs located; the first fledged young (two) were seen on May 5. Early fall records: *for the post-breeding gathering there were 37 on May 29 and June 1 with 67 on June 8, then 45 seen on June 16 with 29 on June 18. There were 84 on June 23 with 109 on June 29, then 73 seen on July 4 with 50 on July 6, 44 on July 9 and 42 on July 13. There were 59 on July 19 with 66 on July 21 and 71 on July 23, then 32 seen on July 25 with 27 to July 30, 17 on August 5, 14 on August 10 and 11 on August 13.* That was the end of the post-breeding gathering and the start of the fall passage. For this year there were 15 on August 20 with 16 on August 24, then 14 seen to September 1. There were 16 on September 3 with 19 on September 7, then six seen on September 10 with five on September 19 and two on September 21. There were six from September 24 to October 2 with nine on October 5, then seven seen on October 12 with five to October 19. There were six on October 22 and October 26 with five to November 2 and three on November 5. There were five on November 9 with six on November 12 and seven on November 16 and November 23, then four seen on November 28. That closed the fall passage. For the winter passage there were

seven on December 1 with nine on December 7, then four seen on December 9 with two on December 15. There were three on December 17 with five on December 20 and six on December 21, then two seen to December 28. There were seven on December 31 with five on January 4 and two on January 11. That completed the winter passage. For the early spring passage there were six on January 14 with four on January 16 and three on January 19. There were seven on January 21 with four on January 28 and three to February 4. There were eight on February 8 with six to February 18, five on February 27 and three on February 29. That concluded the early spring passage. Numbers were now higher with the start of the summer passage (this species nested so early that there was no late spring passage). There were 13 on March 3 with 15 on March 7 and 20 on March 14, then 13 seen on March 19 with eight on March 22 and seven on March 24. There were 24 on March 28 with seven on March 31. There were 12 on April 4 with 26 on April 7, then 15 seen on April 14. There were 20 on April 18 and April 21 with 25 on April 23, then 23 seen on April 25 with 22 on April 28. There were 36 on May 2 with 21 on May 10 and 14 on May 14. That ended the summer passage. For the post-breeding gathering there were 17 on May 16 with 20 on May 20, 26 on May 23 and 66 on May 30, then 51 seen on June 2 with 35 on June 6. There were 78 on June 9 with 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. During this gathering there was a roost by the Sand Farm Bridge. There were 56 on June 16 and June 20 with 63 on June 23 and 72 on July 2.

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

Seen in low numbers through the year; numbers were lowest in September and February. Early fall records: *there were two on June 29 with three on July 2, seven on July 4 and eight on July 9, then one seen on July 13. There were three on July 19 with four on July 21 and seven on July 23, then singles seen to July 30. There were two on August 5 with three on August 8, then singles seen to September 1. There were three on September 21 with two on September 24. That was the early fall passage. For the main fall passage there was one on October 2 with two on October 5, then singles seen to October 19. There were seven on October 22 with singles to October 29. There were two on November 2 with three on November 5, then two seen on November 12 with singles to November 20. There were five on November 23 with two on November 28 and one on December 1. That closed the main fall passage. For the winter passage there were four on December 7 with seven on December 9, then singles seen to December 17. There were two from December 20 to December 26 with singles to December 31. There were four on January 4 with two on January 14 and one on January 16. That completed the winter passage. For the early spring passage there was one on January 19 with two on January 25. There was a single record for February there being two on*

February 11. That concluded the early spring passage. For the main spring passage there were singles from March 3 to March 14 with two on March 19 and March 22, then seven seen on March 31 with singles to April 18. There were two on April 21 and April 23 with 14 on April 25, then singles seen to May 20. That was the end of the main spring passage. For the summer passage there were two on May 23 with three on May 30, four on June 6 and five on June 9, then four seen on June 13 with singles to July 4. That finished the summer passage. For the early fall passage there were four from July 7 to July 14 with seven on July 21, then six seen to August 1 with three on August 9.

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

A summer visitor but breeding has yet to be proved; there is little to suggest a separate passage. Early fall records: *there was one on June 26 with two on July 2, then one seen on July 4. There were two from July 19 to August 13 with one on August 20.* There were singles on September 3 and September 7. Later there were two on October 2 that was the only record that suggested passage. That completed the early fall passage. For the spring passage there were singles on March 31, and April 7. Later there were singles from April 18 to April 23 with six on April 25, then three seen on May 10. That was the end of the spring passage so for the summer passage there were two on May 23 with one on May 26. There were 12 on May 30 (by the Lake Level Canal) with 21 likewise on June 6, then seven seen on June 9 with six on June 13. The count of 21 was the highest count for Zellwood but the highest count is now (2013) that of 28 on April 24, 2011. There were seven on June 16 and June 20 with four on June 28, two on July 2 and singles to July 7. That finished the summer passage. For the early fall passage 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 singles to August 15. There were two on August 16 with one on August 26. Finally for the early fall passage there were six on September 9.*

White Ibis (*Eudocimus albus*)

They were seen in low numbers this year; although there was a major passage in April and a quite strong summer passage. Early fall records: *there were 56 on July 13 with 190 on July 19, then 95 seen on July 21 with 42 on July 25 and 17 to July 30. There were 21 on August 5 with 80 on August 8, 117 on August 10 and 545 on August 20, then 67 seen on August 24 with 36 on August 27.* There were 150 on September 1 with 115 on September 7, 74 on September 10, 17 on September 14, 16 on September 19, nine on September 21 and one on September 24. That was the early fall passage. For the late fall passage there were 62 on September 29 with 28 on October 5, eight on October 9 and two on October 12. There were 15 on October 15 with four on October 19 and one on October 22. There were 45 on October 26 with nine on October 29.

There were 11 on November 2 with 56 on November 5 and 75 on November 9, then 28 seen on November 12 with ten on November 16. There were 72 on November 20 with 20 on November 28 and 13 on December 1. That closed the late fall passage. For the winter passage there were 63 on December 3 with 23 on December 7, 17 on December 9, seven on December 15 and two to December 20. There were seven on December 21 with 20 on December 26 and 23 on December 28, then 21 seen on January 4 with 13 on January 14. That completed the winter passage. For the early spring passage there were 25 on January 16 with 34 on January 21, then seven seen on January 25 with four on January 28. There were 31 on February 2 with 15 on February 4 and three on February 8. There were 17 on February 11 with 19 on February 16, then four seen on February 18. There were 12 on February 22 with 175 on February 27, then six seen on February 29. That concluded the early spring passage. For the main spring passage there were 68 on March 3 with 72 on March 7, 97 on March 10, 120 on March 14 and 231 on March 19, then ten seen on March 22. There were 68 on March 24 with 451 on March 28, 700 on March 31 and 4,310 on April 7, then 1,510 seen on April 18 with 40 on April 21. The 4,310 were seen flying south to Duda at dusk. The count of 4,310 was the highest count for Zellwood but the highest count is now (2013) that of 11,210 on June 17, 2011. That was the end of the main spring passage. For the summer passage there were 170 on April 23 with 1,800 on April 25, then eight seen on April 28. There were 113 on May 2 with 236 on May 5, 240 on May 10 and 1,480 on May 14, then 965 seen on May 16 with 320 on May 20, 137 on May 23, 104 on May 26 and 71 on May 30. There were 113 on June 2 with 431 on June 6, 460 on June 9 and 540 on June 16, then 320 seen on June 23 with 141 on July 2, 132 on July 7 and 100 on July 11. That was the summer passage. For the early fall passage 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, then 24 seen on August 11.

Glossy Ibis (*Plegadis falcinellus*)

Unlike the last species there were no major flocks this year. Early fall records: *there were 62 on July 4 with 162 on July 6, then 58 seen on July 9 with 41 on July 13. There were 1,380 on July 19 with 243 on July 21, 109 on July 25, 39 on July 27, 27 on July 30 and seven on August 5. There were 51 on August 8 with 122 on August 10 and 450 on August 20, then 62 seen on August 24. There were 70 on August 27 with 192 on September 1, then 190 seen on September 3 with 130 on September 10, 110 on September 14, 34 on September 16 and six on September 19. That was the end of the early fall passage. For the late fall passage there were 20 on September 21 with 27 on September 24, 69 on September 29, 70 on October 5 and 175 on October 9, then 124 seen on October 15 with 94 on October 19, 79 on October 22, 52 on October 29 and ten on November 2. There were 19 on November 5 with 48 on November 9 and 69 on November 12, then 17 seen on November 16 with 11 on November 20 and ten on November 23. That closed the late fall passage. For the winter passage there were 43 on*

November 28 with 12 on December 1, nine on December 3 and two to December 9. There were 16 on December 15 with ten on December 20 and eight on December 21. There were ten on December 26 with 21 on December 28, then three seen on December 31 with one on January 4. That completed the winter passage. For the early spring passage there were three on January 11 with five on January 14, 11 on January 16, 20 on January 19, 37 on January 21 and 307 on January 25, then ten seen on February 2 with eight on February 4. There were 27 on February 8 with 12 on February 11. There were 14 on February 16 with 32 on February 22 and 390 on February 27, then 17 seen to March 3. That was the end of the early spring passage. Note how different this event was from the winter passage. For the main spring passage there were 29 on March 7 with eight on March 14 and six to March 22. There were 38 on March 24 with six on March 28. There were nine on March 31 and April 4 with 360 on April 7 and 585 on April 18, then seven seen on April 21. There were 13 on April 23 with 500 on April 25, then four seen on April 28. That was the end of the main spring passage. For the summer passage there were 15 on May 2 with 21 on May 5 and 142 on May 14, then 26 seen on May 16 with 11 on May 20, six on May 23 and two to May 30. There were four on June 2 with ten on June 6, 17 on June 9, 46 on June 13 and 55 on June 16, then 15 seen on June 20 with 13 on June 23 and nine on June 28. That ended the summer passage. For the early fall passage there were 16 on July 2 with 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.*

Roseate Spoonbill (*Platalea ajaja*)

This was a vagrant. For the early fall passage there was immature at the ibis roost at the end of Lust Road on September 29.

Wood Stork (*Mycteria americana*)

An irregular visitor this year; numbers were very low. Early fall records: *there were singles from June 29 to July 13 with four on July 19, then three seen on July 21 with later one on August 13.* For this year there were two on August 20 with one on September 1. There were also three on September 3. Those were the early fall passage sightings. For the late fall passage there were two on October 9 and October 15 with one on October 22. There were two on November 9 with three on November 20, then one seen on November 28. That closed the late fall passage. For the winter passage there were two on December 7 with later one on December 31 that was it. There were no early spring records. For the main spring passage there three on February 27 with singles on March 3 and March 10. For the summer passage there was

one on May 5. For the early fall passage there were three on July 4 with two on July 14. There were also three on July 29 with one on August 4.

Black Vulture (*Coragyps atratus*)

Present all year in small numbers, there was still no evidence of it breeding in the survey area. Early fall records: *there were eight on July 4 with nine on July 6, 13 on July 13, 14 on July 21 and 16 on July 25, then five seen on July 30 with three on August 5. There were four on August 8 with six on August 10, then three seen on August 13 with two on August 20. There were 23 on August 24 with nine on September 1, six to September 10, five to September 24, four on September 29 and one on October 2. That was the early fall passage. For the late fall passage there were five on October 9 with nine on October 15 and 21 on October 19, then three seen to October 29. There were 16 on November 2 with three on November 5 and one to November 12. There were four on November 16 with 13 on November 20, then six seen to November 28 with four on December 1. That closed the late fall passage. For the winter passage there were five on December 3 with 13 on December 9, then 11 seen on December 15 with singles to December 26. There were three on December 28 with 12 on December 31, then five seen to January 11 with three on January 14 and two on January 16. That completed the winter passage. For the early spring passage there were four on January 19 with seven to January 25 and 11 on January 28, then three seen on February 2 with two on February 4. There were three on February 8 with 30 on February 11, then 13 seen on February 16 with two on February 18. There were five on February 22 with six on February 27, then two seen on February 29 with one on March 3. That concluded the early spring passage. For the late spring passage there was one on March 7 with three on March 10 and seven on March 14, then two seen on March 19. There were six on March 22 with 18 on March 24, then 13 seen on March 31 with four on April 4 and two to April 18. There were four on April 21 with nine on April 25, then two seen on April 28. That was the late spring passage. For the summer passage there were eight on May 2 with 27 on May 5, then six seen on May 10 with three on May 14 and singles to May 20. There were three on May 23 with eight on May 30, then six seen on June 6 with three on June 9. There were five on June 13 with 16 on June 16, 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. That closed the summer passage. For the early fall passage 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.*

Turkey Vulture (*Cathartes aura*)

Numbers very low this year why I am not sure; the only period with higher numbers was right at the end of the survey year. Early fall records: *there were 23 on July 2 with 31 on July 4 and 81 on July 9, then 47 seen on July 13 with 38 on July 19 and 11 on July 21. There were 15 on July 23 with 25 on July 25, then 20 seen on July 27 with 16 on July 30. There were 25 on August 5 with 12 on August 8. There were 24 on August 10 with 51 on August 13, then 21 seen on August 24 with 15 on August 27, 12 on September 3, six on September 7 and five on September 10. There were seven on September 14 with four on September 16 and three on September 19. There were nine on September 21 with five on September 24 and three on September 29. That closed the early fall passage. For the main fall passage there were seven on October 2 with 13 on October 9 and 41 on October 15, then 16 seen on October 19 with seven on October 22. There were 27 on October 26 with 40 on October 29 and November 2, then 33 seen on November 5 with 29 on November 9, 22 on November 16 and 17 on November 20. There were 40 on November 23 with 86 on November 28, then 28 seen on December 1. That was the end of the main fall passage. For the winter passage there were 29 on December 3 with 33 on December 7, then 11 seen on December 9. There were 24 on December 15 with 43 on December 17, then 16 seen on December 21. There were 23 on December 26 with 39 on December 28 and 48 on December 31, then 20 seen on January 11 with ten on January 14. That completed the winter passage. For the early spring passage there were 51 on January 16 with 55 on January 21 and 80 on January 28, then 28 seen on February 2 with 25 on February 4. There were 70 on February 8 with 16 on February 11 and 15 on February 16. There were 68 on February 18 with 23 on February 22 and 16 on February 27. That concluded the early spring passage. For the late spring passage there were 43 on February 29 with 22 on March 7, 19 on March 10, 14 on March 14, 12 on March 22, 11 to March 28 and four on March 31. There were seven on April 4 with 11 on April 7, then five seen on April 14 with three on April 18 and two on April 21. That was the end of the late spring passage and the start of the summer passage there were four on April 23 with six on April 28 and 21 on May 5, then seven seen to May 16 with five on May 20, four on May 23 and two on May 26. There were six on May 30 with one on June 2. There were two on June 6 with six on June 9 and ten on June 16, then nine seen on June 23 with five on June 28. That closed the summer passage. For the early fall passage there were ten on July 2 with nine on July 4 and 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. That was the early end of the early fall passage.**

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

This is becoming a year round resident; this year it was absent from October 6 to March 6. Early fall records: *(the only records for 2002/2003) there was one on May 29 with five on June 1, then three seen on June 8 with two on June 11 and June 23. There was one on June 26 with three on June 29 and July 4, then two seen on July 6 with one on July 9. There were six on July 19 with four on July 21, three on July 23 and one on July 25. There were four on July 27 with two on July 30 and singles on August 5 and August 8. There were three on August 10 with one on August 13.* There had been no sightings earlier in that survey year. For this year there were two on August 20 with singles on August 24 and September 1. There were four on September 3 with three on September 7. Later there were two on September 19, September 21 and September 24 with singles to October 5. That was the early fall passage. There was no late fall passage, no winter passage and no early spring passage. For the main spring passage there were 11 on March 7 with two on March 14. There were 57 on April 7 with two on April 18 and April 21. The count of 57 was the highest count for Zellwood but the highest count is now (2013) that of 1,660 on February 5, 2010. There were 21 on April 23 with 16 on April 25 and two to May 2. That was the end of the main spring passage. For the summer passage there were eight on May 10 with two to May 23. There were three on May 26 with 25 on June 6, then ten seen on June 9 with two on June 16. There were 13 on June 20 with two on June 23 and one on June 28. That closed the summer passage. For the early fall passage there were two on July 4 and July 7 with four on July 14, then two seen to August 1.

Fulvous Whistling-Duck (*Dendrocygna bicolor*)

Seen throughout the year; there was a major fall passage this year. On April 23 I found a pair at the Sand Farm Cattail Marsh with eight new born young, I did not see them again. Early fall records: *there were four on June 18 with five on June 23, ten on June 29, 39 on July 2 and 71 on July 6, then 61 seen on July 9 with 29 on July 19, 22 on July 21, 15 on July 25, seven on July 27 and two on July 30. There were 15 on August 5 with six on August 8 and two on August 10. There were also 14 on August 13.* For this year there were seven on August 20 with 15 on August 24, then two seen to September 3. There were 45 on September 7 with one on September 10. That was the early closure of the early fall passage. For the main fall passage there were two on September 19 and September 21 with nine to September 29, 16 on October 2, 31 on October 5, 71 on October 9, 193 on October 12, 625 on October 15, 695 on October 19 and 840 on October 22, then 31 seen on October 26. The count of 840 is still (2013) the highest count for Zellwood. The previous high was only that of 366 on August 10, 1999; there were three higher counts this year. There were 52 on October 29 with 83 on November 2, then 22 seen on November 9 with 12 on November 12. There were 16 on November 16 with 183 on November 20, then 77 seen on November 23 with 11 on November 28. That closed the main

fall passage. For the winter passage there were 35 on December 1 with 61 on December 3 and 65 on December 9, then six seen on December 15 with three on December 17. There were 18 on December 21 with four to December 28. There were eight on December 31 with 34 on January 4, then three seen on January 11. That completed the winter passage. For the early spring passage there was one on January 19 with two to February 11, seven on February 16 and 11 on February 22, then two seen on February 27. That concluded the early spring passage so for the main spring passage there were seven on February 29 with 31 on March 3, then 18 seen on March 7 with 13 to March 22, nine on March 28 and four on March 31. There were five on April 4 with 41 on April 7, then four seen on April 14. There were eight on April 18 with 12 on April 21, then 26 seen on April 23 and April 25 with four on April 28 and two on May 2. That was the end of the main spring passage. For the summer passage there were three on May 5 with six on May 10, then five seen on May 16 with four on May 20, two to May 26 and one on May 30. There were three on June 2 with nine on June 6 and 20 on June 9, then two seen to June 20. There were also seven on July 4. That ended the summer passage. There were no further sightings until two seen on August 4; that was a record for the early fall passage.

Snow Goose (*Chen caerulescens*)

This was a vagrant. For the winter passage an adult white morph was at the Sand Farm on December 7. A flock of ten flew to the south on December 31; two were identified as being blue morphs.

Wood Duck (*Aix sponsa*)

Whilst this species was seen in every month it was only on average seen on every second visit. A pair bred on the southern border, there were three small chicks on June 13. Early fall records: *there were seven on July 19 with one on July 23. There were four on August 5 with two on August 10.* For this year there were three on August 24 with two on September 10. There were three on September 29 with one on October 2. That was the early fall passage. For the late fall passage there were two on October 15 with later two on November 12. For the winter passage there were four on December 1 with one on December 7. There were two on December 9, December 17 and December 26, then four seen on December 28 with singles on December 31 and January 4. That completed the winter passage. For the early spring passage there were 12 on January 14 with four to January 21. There were seven on January 25 and February 4 with five on February 8, four on February 11 and one on February 16. There were also three on February 18. That concluded the early spring passage. For the late spring passage there were four on March 3 with singles to March 14. There were three on March 19 with one on March 22. There were two on March 28 with one on March 31. There were also four on April

7. That was the end of the late spring passage. Later for the summer passage there were nine on May 2 with two on May 5 and one on May 10. There was one on May 30 with four on June 6, then three seen on June 13. That ended the summer passage so for the early fall passage there were singles on June 23, June 28 and July 4 with six on July 11, then five seen on July 18 with one on July 21. There were also three on August 1 and August 11.

Gadwall (*Anas strepera*)

With the lack of habitat this was a rare fall passage migrant and winter visitor. For the fall passage there were two on October 22. For the winter passage there were singles on December 26 and December 28 with two on December 31 that was it.

American Wigeon (*Anas americana*)

This was a vagrant. For the late fall passage there was one on November 9. For the winter passage there was one on December 31.

American Black Duck (*Anas rubripes*)

This was a vagrant. Exceptionally there were two at the Sand Farm from November 28 to February 11 i.e. for all of the winter passage and most of the early spring passage.

Mallard (*Anas platyrhynchos*)

Seen in very low numbers through to late June; there were no later records. Early fall records: *there were two on July 4 and July 6 with three on July 19, then two seen on July 21 with singles to August 10.* For this year there was one on August 27 with three to September 3 and four on September 7, then two seen on September 10 with singles to October 5. That was the early fall passage. For the late fall passage there was one on October 9 with three on October 12, then singles seen to October 19. There were four on October 22 with later one on November 16. That was the late fall passage. For the winter passage there were singles on December 21 and December 26 with two on December 28 and three on December 31, then two seen on January 4. For the early spring passage there was one on January 16 with three on January 19, then one seen on January 21. There were two from January 25 to February 8 with singles to February 29. That concluded the early spring passage. For the main spring passage there were singles from March 3 to March 19 with two from March 22 to April 7, then one seen

on April 14. There were two on April 18 and April 23 with singles to April 28. That closed the main spring passage. For the summer passage there were two on May 5 with singles on eight dates to June 23. There were no later records.

Mottled Duck (*Anas fulvigula*)

Present through the year; no more than 19 a day seen. There was no evidence of breeding this year. Early fall records: *there were 13 on July 2 with 20 on July 4, then 14 seen on July 6 with seven on July 9 and five on July 13. There were 56 on July 19 with 14 on July 21, 12 on July 23 and two to July 30. There were three on August 5 with 19 on August 10, then one seen on August 20. There were two on August 24 and August 27 with eight on September 1, 13 on September 3, 18 on September 7 and 19 on September 10, then 17 seen on September 14 with six on September 19, three on September 21 and one on September 24. That was the early fall passage. For the late fall passage there were two on September 29 with three on October 2 and ten from October 5 to October 15, then seven seen on October 19 with three on October 22 and two on October 29. There were two on November 12 with four on November 16, then two seen on November 20. There were four on November 23 with six on December 1, then four seen on December 3. That ended the late fall passage. For the winter passage there were five on December 7 with seven on December 15, ten on December 21 and 15 on December 28, then nine seen on December 31 with seven on January 4, two on January 11 and one on January 14. That completed the winter passage. For the early spring passage there were 12 on January 16 with five on January 19. There were 11 on January 21 with 12 on January 25, then eight seen to February 4 with six on February 8. There were nine on February 11 with 11 on February 16, then seven seen on February 18 with six on February 22. There were 11 on February 27 with nine on February 29, eight on March 7 and seven on March 10. That closed the early spring passage. For the late spring passage there were ten on March 14 with 11 on March 22, then nine seen on March 24 with seven on March 28 and five on March 31. There were six on April 4 with eight on April 7, then seven seen to April 18 with four to April 23. There were seven on April 25 with six on April 28 and one on May 2. That concluded the late spring passage. For the summer passage there were two on May 5 and May 10 with five on May 14, then three seen on May 16 with two on May 20 and one on May 26. There were five on May 30 with singles to June 9. There were four on June 16 with seven on June 28, then three seen to July 7 with singles to July 18.*

Blue-winged Teal (*Anas discors*)

A passage migrant and winter visitor; there were no large flocks this year. Early fall records: *there was a male at the Sand Farm Cattail Marsh on July 4. There were also singles (not*

aged/sexed) on July 21, July 23 and July 25 with two on July 27. Later there was one on August 10 with four on August 13, five on August 20 and 27 on August 24, then 14 seen on September 1 with three on September 3. There were 30 on September 7 with 31 on September 10, then 22 seen on September 16 with three on September 19 and two on September 21. There were seven on September 24 with 19 on September 29, 43 on October 2 and 108 on October 9, then 29 seen on October 15 with 22 on October 22 and two on October 26. There were 24 on October 29 with 16 on November 2 and five on November 5. There were 26 on November 9 with two on November 12. There were 15 on November 16 with 30 on November 20, then 24 seen on November 28 with 16 on December 1. That was the fall passage. For the winter passage there were 39 on December 3 with 30 on December 9, 24 on December 15 and 13 on December 17. There were 48 on December 21 with 38 on December 26. There were 45 on December 28 with 51 on December 31 and 151 on January 4, then 62 seen on January 11 with 55 on January 14 and 34 on January 16. That completed the winter passage. For the early spring passage there were 74 on January 19 with 70 on January 25, 48 on January 28 and 39 on February 2. There were 44 on February 4 with 49 on February 8 and 85 on February 11, then 51 seen on February 16 with 33 on February 18, 19 on February 27, four on February 29 and two on March 3. That closed the early spring passage. For the late spring passage there were seven on March 7 with 19 on March 10, then eight seen on March 22 with four on March 24 and two on March 28. There were four on March 31 with eight on April 7, then six seen on April 18 with two to April 28. Finally for the late spring passage there were four on May 10 with an adult male in breeding plumage at the Sand Farm Cattail Marsh on May 14. There were no summer sightings. For the early fall passage there were two males in breeding plumage at the Sand Farm Cattail Marsh on August 4.

Northern Shoveler (*Anas clypeata*)

For this year it was a very uncommon passage migrant. For the late fall passage there were five on October 2 with six on October 19 and October 22 that was it. For the main spring passage there was one on March 22.

Northern Pintail (*Anas acuta*)

This was a very uncommon fall passage migrant with two winter sightings. Until the fields are flooded there are only going to be traces of what could be. For the late fall passage there was one on October 15 with two on October 19 and October 22. For the winter passage there were two on November 28 and December 21.

Green-winged Teal (*Anas crecca*)

Along with the Blue-winged Teal these were the only ducks that showed up this year. For the early fall passage there was an early individual on August 24. There were also two on September 10. That was the early fall passage. For the main fall passage there were two from October 2 to October 15. There were 19 on October 19 with six on October 22 and two on October 26. There were 15 on October 29 with two on November 2 and one on November 5. There were four on November 9 with 42 on November 12, then ten seen on November 20 with three on November 23 and two to December 1. That closed the main fall passage. For the winter passage there were 32 on December 3 with eight on December 7 and two on December 9. There were nine on December 15 with three on December 17. There were four on December 21 with five on December 26 and 18 on December 28, then 12 seen on December 31 with eight on January 4. That completed the winter passage. For the early spring passage there were 20 on January 11 with 25 on January 14, then 21 seen on January 19 with 20 on January 25, 12 on January 28 and two on February 2. There were 14 on February 4 with 38 on February 11, then 24 seen on February 18 with three on February 22. There were no later records.

Redhead (*Aythya americana*)

This was a vagrant. For the late fall passage there were two on November 9.

Ring-necked Duck (*Aythya collaris*)

With the lack of suitable habitat this was an uncommon passage migrant and winter visitor. For the late fall passage there were 108 on November 9 with 55 on November 12 and one on November 20. For the winter passage there were three on December 7 with later one on December 28. Finally for the main spring passage there were 30 on March 3 with later two on April 7.

Lesser Scaup (*Aythya affinis*)

This species used Lake Apopka so there was no real excuse for the low numbers; it was an uncommon passage migrant and winter visitor. For the late fall passage there were three on November 9 that was it. For the winter passage there were 12 on December 7 with later one on December 17. There were also 12 on December 20 and January 4. That completed the winter passage. For the early spring passage there were 32 on February 2; there were no other sightings.

Hooded Merganser (*Lophodytes cucullatus*)

A passage migrant and winter visitor; numbers were low this year. For the fall passage there were three on November 16 with one on November 20. For the winter passage there were four on December 3 with five on December 7 and 11 on December 9, then five seen on December 15 with four to December 26. There were five on December 28 with six on January 4, then four seen on January 14 with three on January 16. That completed the winter passage. For the early spring passage there were five on January 19 with two on January 21. There were four on January 25 with nine on January 28, then seven seen on February 2 with six on February 8 and three to February 29. That was the end of the early spring passage but it was also the end of all sightings.

Red-breasted Merganser (*Mergus serrator*)

This was a vagrant. For the early spring passage there were two on January 11.

Ruddy Duck (*Oxyura jamaicensis*)

A passage migrant and winter visitor to Lake Apopka; this year there was a very heavy spring passage. For the fall passage there were six on November 9 with 220 on November 12 and 380 on November 16, then one seen on November 23. That was the extent of the fall passage. For the winter passage there were 20 on December 1 with 140 on December 7 and 470 on December 9, then 50 seen on December 15 with three on December 17. There were 830 on December 21 with 2,720 on December 28, 5,600 on December 31 and 10,300 on January 4, then 2,400 seen on January 14 with two on January 16. The count of 10,300 was at that date the highest count for Zellwood. That completed the winter passage. For the early spring passage there were 100 on January 21 with 11,000 on February 2 and 12,000 on February 4, then 3,900 seen on February 11 with 230 on February 22. The count of 12,000 was the highest count for Zellwood but the highest count is now (2013) that of 34,000 on January 4, 2006. That closed the early spring passage so for the late spring passage there were 2,800 on March 3 with 4,230 on March 7, then 850 seen on March 28. Exceptionally there was one on May 2 with an adult male in breeding plumage on June 23. The latter might be an early fall record.

Osprey (*Pandion haliaetus*)

There was a change in progress here; last year the highest numbers were in April whilst in this year (and future years to at least 2013) the peak counts were in the early fall i.e. there was from this year a growing post-breeding gathering. Early fall records: *there were 20 on July*

6 with nine on July 13, eight on July 19 and seven on July 21. There were 11 on July 23 with 18 on July 25, then seven seen on July 27 with six on July 30. There were nine on August 5 with ten on August 10, then seven seen on August 20 with three on August 27 and two on September 1. There were three on September 3 with seven on September 7, then eight seen on September 10 and September 14 with five to September 21. There were six on September 24 with seven on October 2, then two seen on October 5. That was the early fall passage. For the main fall passage there were five on October 9 with six to October 15 and 12 on October 19, then eight seen on October 22 with four on October 26. There were 11 on October 29 with seven on November 2 and six on November 5. There were eight on November 9 with ten on November 12 and 12 on November 20, then seven seen on November 23 with three on November 28. That closed the main fall passage. For the winter passage there were seven on December 1 and December 3 with 11 on December 7 and 12 on December 9, then nine seen on December 15 with seven on December 17 and six on December 20. There were eight on December 21 with seven to December 28. There were 11 on December 31 with six on January 4 and five on January 11. That completed the winter passage. For the early spring passage there were ten on January 14 with four on January 16. There were nine on January 19 and January 21 with 13 on January 25, 19 on January 28 and 25 on February 4, then 17 seen on February 11 with 14 on February 16 and 13 on February 18. That was the early spring passage. For the main spring passage there were 18 on February 22 and February 27 with 22 on February 29 and 27 on March 3, then 13 seen on March 10 with 11 on March 14. There were 21 on March 19 with 13 to March 28 and eight on March 31. There were 15 on April 4 with 21 on April 7, then eight seen on April 14. There were 16 on April 18 with 17 on April 21 and April 23, then 15 seen on April 25. That concluded the main spring passage. For the summer passage there were 17 on April 28 with 19 on May 2 and 20 on May 5, then 15 seen on May 10 with 13 on May 14. There were 17 on May 16 with 23 on May 20, then eight seen to May 26. There were 15 on May 30 with 16 on June 2, then 15 seen on June 9 with 13 on June 13. There were 19 on June 16 with eight on June 20. There were 14 on June 23 with 20 on June 28, then 14 seen on July 2. That ended the summer passage. Now the new post-breeding gathering got underway. 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. That was the end of the first post-breeding gathering. The count of 59 was the highest count for Zellwood but the highest count is now (2013) that of 213 on July 14, 2013.

Swallow-tailed Kite (*Elanoides forficatus*)

An occasional visitor in the spring and the summer; in the early fall by contrast there was a major post-breeding gathering. Early fall records: *there were 21 on June 26 with 106 on July 2, 148 on July 6, 211 on July 9, 303 on July 19, 413 on July 21 and 556 on July 25, then 415 seen on July 27 with 243 on July 30, 202 on August 5, 41 on August 8 and 30 on August 10. The count of 556 was the highest count for Zellwood but the highest count is now (2013) that of 1,642 on August 3, 2012. There were 90 on August 13 with 78 on August 20, four on September 1, three on September 3 and one on September 7. That was the end of the post-breeding gathering. There were no further sightings until the spring. Exceptionally one flew to the north over the Sand Farm on February 27; this happened to be the coldest day in 13 months! Later there were singles on April 21 and April 25 with two on April 28, May 2 and May 10, then one seen on May 14. That was the end of the spring passage. For the summer passage including the failed breeders there was one on May 26 with 14 on June 2 and June 6, then three seen on June 9. There were 11 on June 13 with 54 on June 16, then 28 seen on June 23 with ten on June 28. That ended the summer passage. For the post-breeding gathering there were 310 on July 2 with 417 on July 4 and 438 on July 11, then 388 seen on July 14 with 18 on July 18 (adverse weather conditions caused this species to remain further north for the day). 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. After Hurricane Frances there was low humidity, none seen on September 12. That was the end of the post-breeding gathering.*

Mississippi Kite (*Ictinia mississippiensis*)

This was a vagrant. During the late spring passage an adult flew to the north on May 5. This was the first record for Zellwood.

Bald Eagle (*Haliaeetus leucocephalus*)

Present all year with the highest numbers from October to February, just one stayed for the summer. There was a pair at the Sand Farm and there was probably another pair just over the southern border. Early fall records: *there were two on July 4 with singles to July 13. There were also two on July 19. There was an adult present from July 30 to August 13. For this year there were singles on August 24, September 1 and September 3 with two on September 10 and September 14, then one seen on September 16. There were three on September 19 and September 24 with two on September 29 and one on October 2. That was the early fall passage.*

For the main fall passage there were five on October 5 with two on October 9. There were four on October 12 with nine on October 15, then six seen on October 19 with four on October 22. There were six on October 26 with 13 on October 29, then nine seen on November 2 with five to November 9. There were seven on November 12 with ten on November 20, then six seen on November 23. That closed the main fall passage. For the winter passage there were ten on November 28 with 16 on December 1 and 18 on December 3, then 12 seen on December 7 with 11 on December 9 and seven on December 15. There were 13 on December 17 with seven to December 26, six on December 28 and five to January 4. That completed the winter passage. For the early spring passage there were 11 on January 11 with 15 on January 16, then 11 seen on January 21 with seven to February 2 and six on February 4. There were ten on February 8 with seven on February 11 and four on February 16. There were nine on February 18 with ten on February 22, then seven seen on February 27. That concluded the early spring passage. For the late spring passage there were eight on February 29 with 12 on March 3, then six seen on March 7 with five on March 10 and four on March 14. There were eight on March 19 and March 24 with five on March 28 and four on March 31. There were six on April 4 with five on April 7 and three on April 14. There were eight on April 18 with four to April 25, three on May 5 and one on May 10. There were six on May 14 with two to May 20. There were three on May 23 with two on May 26 and one on May 30. That was the end of the late spring passage; at this point most left the area. There was a single adult present from June 6 to August 9 with two on July 14, July 18, July 21 and July 29.

Northern Harrier (*Circus cyaneus*)

A passage migrant and winter visitor; numbers were much lower this year. Early fall record: *an adult female was at the Sand Farm on August 10*. For this year there was an adult male on August 24, none were aged/sexed after that date. There were two on September 1 and September 3 with singles on September 10 and September 14. There were two on September 16 with three on September 19, then two seen on September 21. That was the early fall passage. For the main fall passage there were four on September 29 with seven on October 2, then six seen to October 9 with three on October 12. There were nine on October 15 with 11 on October 19, 13 on October 26, 17 on October 29 and 27 on November 2, then 24 seen to November 12. There were 42 on November 16 with 53 on November 20, then 44 seen on November 23. That closed the main fall passage. For the winter passage there were 84 on November 28 with 104 on December 3, then 79 seen on December 7 with 74 on December 9, 53 on December 17, 51 on December 21 and 37 on December 26. There were 44 on December 28 with 57 on December 31, then 45 seen on January 11 with 20 on January 14. That completed the winter passage. For the early spring passage there were 45 on January 16 with 15 on January 19. There were 26 on January 21 with 29 on January 25, then 27 seen on January 28 with 12 on February 2. There were 42 on February 4 with 39 on February 8, 30 on February 11,

25 on February 16, 24 on February 18 and 18 on February 22. There were 20 on February 27 with 22 on February 29, then 19 seen on March 7 with 15 on March 10 and ten on March 14. That concluded the early spring passage. For the late spring passage there were 16 on March 19 and March 22 with 13 on March 24 and 12 on March 28. There were 13 on March 31 with 18 on April 7, then 11 seen on April 18 with seven on April 21 and five to April 25. There were six on April 28 and May 2 with four on May 5 and singles on May 10 and May 16. That ended the late spring passage. For the early fall passage there was an adult male on August 9.

Sharp-shinned Hawk (*Accipiter striatus*)

An uncommon passage migrant and winter visitor; there were some very early fall records this year. Early fall records: *there was an immature male at the Sand Farm on July 27. Later there were singles on August 5 and August 13; these were not aged/sexed.* For this year there were singles on September 3, September 7 and September 10. That was the early end of the early fall passage. For the main fall passage there were singles on September 24, October 5 and October 19. There were three on October 22 and October 29 with one on November 2. There were two on November 5 and November 9 with three on November 12, then five seen on November 16 and November 23 with singles to December 1. That closed the main fall passage. For the winter passage there were four on December 3 and December 7 with five on December 9, then singles seen to December 17. There were two on December 21 and December 26 with three on December 28 and six on December 31, then four seen to January 14 with one on January 16. That completed the winter passage. For the early spring passage there were four on January 19 with one on January 21. There were two on January 25 and January 28 with three on February 2 and February 4, then two seen to February 27 with one on February 29. That concluded the early spring passage. For the late spring passage there were two on March 3 and March 7 with one on March 10. There were two from March 19 to March 24 with singles to March 31. There were two on April 7 with singles on April 14 and April 21; there were no later records.

Cooper's Hawk (*Accipiter cooperii*)

This was a resident with a significant post-breeding gathering. During the Breeding Bird Survey in 2004 three pairs located but there may have been more. Early fall records: *for the post-breeding gathering there was one on June 29 with two on July 3, then one seen on July 9. There were two on July 13 with three on July 19, and five on July 23, then three seen on July 25 with two on July 27. There were eight on July 30 with six on August 5. There were seven on August 8 with 12 on August 10, then eight seen on August 13 with five on August 24 and two on August 27. There were five on September 1 with eight on September 7, then four seen on*

September 10 with one on September 14. That marked the end of the post-breeding gathering. For the fall passage, well the lack of it there were singles from September 16 to October 12 with two on October 15, then singles seen to October 22. There were two from November 2 to November 9 with singles to November 16. There were two on November 20 with one on November 23. That closed the fall passage. For the winter passage there were two from November 28 to December 17 with three on December 26 and December 31, then two seen to January 11 with one on January 14. That completed the winter passage. For the early spring passage there were three from January 16 to January 21 with two on January 25 and singles to February 8. There were two on February 16 and February 22 with four on February 29, then one seen on March 3. That concluded the early spring passage. For the late spring passage there were three on March 7 with two to March 14. There were three on March 19 and March 24 with two on March 28 and singles to April 14. There were two on April 18 with singles to April 23. That closed the late spring passage. For the summer passage there were two on May 2 and May 14 with singles to July 2. That ended the summer passage. Now we come to the only event of the year the post-breeding gathering. There were three on July 4 with 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 (they were all immatures) and 23 on August 1 (there was one adult), then 18 seen on August 4 with 15 on August 9, nine on August 11 *and one on August 15*. The count of 23 was the highest count for Zellwood but the highest count is now (2013) that of 45 on August 25, 2006. *There were 25 on August 16 with 15 on August 19, eight on August 26 and five on August 29. The count of 25 was another intermediate high count for Zellwood. There were 15 on September 1 with six on September 12 and one on September 16. That was the end of the post-breeding gathering.*

Red-shouldered Hawk (*Buteo lineatus*)

A resident breeding in the wooded borders; outside of the breeding season they used communal roosts and flew out at first light to stake out a territory in the fields. During the Breeding Bird Survey in 2004 a total of five pairs located. Early fall records: *there were four on June 18 with five to June 29, six on July 2 and eight on July 4, then one seen on July 6. There were two on July 9 with three on July 13 and five on July 19, then four seen on July 21 with three on July 23. There were seven on July 25 with nine on July 27, 15 on August 5 and 18 on August 10, then 15 seen on August 20 with 13 on August 24 and eight on August 27. There were 12 on September 1 with 13 on September 3 and 18 on September 7, then 12 seen on September 10 with 11 on September 14 and seven on September 16. There were 14 on September 19 with 12 on September 24 and ten on September 29. That was the early fall passage. For the main fall passage there were 20 on October 2 with 19 on October 5 and 12 on October 9. There were 22 on October 12 with ten on October 15. There were 13 on October 19 with 19 on October 22 and 20 on October 29, then eight seen on November 5 with seven on November 9. There were*

17 on November 12 with 21 on November 16, then 18 seen on November 23 with 15 on November 28 and 12 on December 1. That closed the main fall passage. For the winter passage there were 13 on December 3 with 17 on December 7 and 18 on December 9, then 14 seen on December 15 with 13 to December 28, 12 to January 11 and ten on January 14. That completed the winter passage. For the early spring passage there were 13 on January 16 with 17 on January 21, then 15 seen on January 25 with eight on February 2, seven on February 4 and two on February 8. Counts were now lower through to July. There were five on February 11 with ten on February 16 and February 18, then eight seen on February 22 with two to February 29. That was the end of the early spring passage. For the late spring passage there were four on March 3 with singles to March 10. There were five on March 14 with four to March 28, three on March 31 and two on April 4. That closed the late spring passage. For the summer passage there were five on April 7 and April 18 with four to April 25, three on April 28 and one on May 2. There were two on May 5 with four on May 10, then three seen to May 16 with two on May 20 and one on May 23. There were five on May 26 with singles to June 6. That ended the summer passage. For the post-breeding gathering there were three on June 9 with four on June 16, five to June 23, six to July 2, 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. The count of 76 was the highest count for Zellwood but the highest count is now (2013) that of 133 on September 29, 2006. 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 and 19 on September 22. That concluded the post-breeding gathering. During this event the majority were immatures.

Broad-winged Hawk (*Buteo platypterus*)

This was a vagrant. Again there was a juvenile that wandered south well before the start of the fall migration. Early fall record: *there was a juvenile by Lake Apopka to the north of the Lust Road pump house on August 5*. For this year in the late fall there was an adult at the Sand Farm on October 15.

Short-tailed Hawk (*Buteo brachyurus*)

This was a vagrant. Early fall record: *there was an adult dark morph on July 30 between Lust and Hooper Farms Road; it was being harried by an adult Red-shouldered Hawk*. For this year there was an adult dark morph by Hooper Farms Road on August 20. In the following year there was an adult dark morph by Pole Road on July 7.

Swainson's Hawk (*Buteo swainsoni*)

This was a vagrant. For the late fall passage there was a juvenile light morph flying to the south-east over Hooper Farms Road on November 23. For the early spring passage there was an adult light morph at the Sand Farm on January 4.

Red-tailed Hawk (*Buteo jamaicensis*)

A resident in the larger pieces of woodland; during the Breeding Bird Survey in 2004 a total of six pairs located. Numbers were low this year with only slightly higher numbers from November to February. Early fall records: *there were six on June 23 and June 26 with seven to July 2, eight to July 9 and nine on July 19, then seven seen to July 30. There were ten on August 5 with 11 on August 8 and 18 on August 10, then 12 seen on August 13 with ten on August 20. There were 12 on August 24 with ten to September 1 and four on September 3. There were 12 on September 7 with four on September 10. There were six on September 14 with eight on September 16 and 14 on September 19, then six seen on September 21 with five on September 24. That was the early fall passage. For the main fall passage there were nine on September 29 with 16 on October 2, then eight seen on October 5 with six on October 9. There were nine on October 12 with seven on October 15. There were eight on October 19 with ten on October 22, then six seen on October 26. There were nine on October 29 with ten on November 2, then nine seen on November 5 with eight on November 9. There were nine on November 12 with 15 to November 20 and 23 on November 23, then 18 seen to December 3. That closed the main fall passage. For the winter passage there were 23 on December 7 with 26 on December 9, then 25 seen on December 15 with 14 on December 17. There were 16 on December 21 with 18 on December 26 and 25 on December 28, then 14 seen to January 4. That completed the winter passage. For the early spring passage there were 17 on January 11 with 23 on January 16, then eight seen on January 19. There were 22 on January 21 with 23 on January 25 and February 2, then 14 seen on February 4. There were 15 on February 8 with 18 on February 11, then 11 seen on February 16. There were 15 on February 18 with 19 on February 22, then 15 seen on February 29 with ten on March 3. That concluded the early spring passage. For the late spring passage there were 14 on March 7 with 11 on March 14, nine on March 22, seven on March 24 and six on March 28. That appeared to mark the final departure of the spring migrants. There were nine on March 31 with seven on April 4, five on April 7 and four on April 14. There were six on April 18 with seven on April 23, then six seen on April 25 with five on April 28 and three on May 2. That ended the late spring passage. For the summer passage there were six on May 5 with three to May 14 and two on May 16. There were six on May 20 with four to May 30 and three on June 6. There were six on June 9 and June 16 with five on June 20 and three on June 23. There were seven on June 28 with six to July 7 and three on July 11. That closed the summer passage so for the early fall passage there were six from July 14 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.

American Kestrel (*Falco sparverius*)

A passage migrant and winter visitor; there was no evidence of breeding this year. Early fall record: *there was one at the Sand Farm on August 13*. For this year there were singles from August 24 to September 16 with three on September 19, 11 on September 21 and 12 on September 29, then nine seen on October 2 with six on October 5. That was the early fall passage. For the main fall passage there were 12 on October 9 with 18 on October 15, 24 on October 19, 34 on October 26, 36 on October 29 and 38 on November 5, then 34 seen on November 9 with 27 on November 12. There were 29 on November 16 with 33 on November 20, then 31 seen to November 28. That closed the main fall passage. For the winter passage there were 38 on December 1 with 33 on December 3 and 32 on December 7. The counts of 38 are still (2013) the highest counts for Zellwood. There were 34 on December 9 with 30 on December 15 and 21 on December 17. There were 36 on December 21 with 29 on December 28, 25 on December 31, 20 on January 4 and 15 on January 11. That completed the winter passage. For the early spring passage there were 21 on January 14 with 14 on January 16 and 13 on January 19. There were 18 on January 21 with 17 on January 25 and 14 on January 28. There were 15 on February 2 with 17 on February 4, then 12 seen to February 11. There were 19 on February 16 with 18 on February 18, 16 on February 27 and 14 on February 29. That concluded the early spring passage. For the main spring passage there were 16 on March 3 with 17 on March 7, 19 on March 10, 22 on March 19, 26 to March 24, 32 on March 31 and 34 on April 4, then five seen on April 7 with two on April 14. There was a late individual flying to the north at the Hooper Farms Road gate on May 2. Prior to this year the highest count had been that of 28 on October 26, 1999; this year there were 18 higher counts! For the early fall passage there was an adult male that flew to the south at the Workshops on the morning of July 7 with perhaps the same adult male by Lust Road later that day.

Merlin (*Falco columbarius*)

An uncommon passage migrant and winter visitor; the fall passage was the strongest event. For the fall passage there was one on September 10 with two on September 21, then one seen on September 24. There were four on September 29 with one on October 2. The count of four was the highest count for Zellwood but the highest count is now (2013) that of eight on September 30, 2007. Note the closeness in the dates. There were two on October 5 with three on October 9, then two seen on October 12 with one on October 15. There were two on October 19 with singles on six dates to November 20. That was the fall passage. For the

winter passage there were singles on five dates from December 1 to December 17 with two on December 21, then singles seen on five dates to January 16. That completed the winter passage. For the early spring passage there were singles on three dates from January 28 to February 8 with two on February 16, then one seen on February 29. That concluded the early spring passage. For the late spring passage there were singles on March 19, March 28, March 31, April 7, April 21, April 23 and April 25 with two on April 28, then one seen on May 5. On April 25 one caught a male Bobolink.

Peregrine Falcon (*Falco peregrinus*)

A very uncommon passage migrant; there were no winter records this year. For the late fall passage there were singles on September 24, October 9, October 15, October 19 and October 22. For the early spring passage there were singles on January 25 and February 4. There were no later sightings.

Gray Partridge (*Perdix perdix*)

This was an exotic, an introduced game bird beyond that this appears to be the first record for the State of Florida. There were two at the Sand Farm on September 14. There is a description in Appendix B.

Northern Bobwhite (*Colinus virginianus*)

A resident with the greatest numbers at the Sand Farm; disturbingly the numbers appear to be decreasing each year. Last year there were 125 pairs and this year there were 87. Early fall records: *there were 26 on June 16 with 27 on June 18, 40 on June 26, 60 on July 2 and 69 on July 4 (note the count of 69), then 51 seen on July 6 with 46 on July 9, 45 on July 13, 37 on July 19, 24 on July 21 and 22 on July 23. There were 40 on July 25 with 25 on July 27 and 21 on July 30. There were 31 on August 5 with 15 on August 10, eight on August 13, four on August 20, two on August 24 and one on August 27. There were seven on September 1 with three on September 3 and two on September 7. There were six on September 10 with five to September 19, four on September 21 and two on September 24. That was the early fall "passage"; in reality this recorded the decline in singing. For the late fall "passage" there were eight on September 29 with three to October 5, two on October 9 and one on October 12. There were two on October 15 with three on October 19, then two seen on October 22 with one on October 26. There were three on October 29 with nine on November 9, then three seen on November 16. That closed the late fall "passage". For the winter "passage" there was one on December 1 with*

five on December 3, then two seen to December 9 with singles to December 26. There were two on December 28 and January 4 with singles to January 16. That completed the winter passage. For the early spring passage there were singles from January 19 to February 27, not even a covey located during that passage. For the main spring passage there were three on March 7 and March 10 with 13 on March 14, then three seen on March 19 with two on March 22. There were nine on March 24 with ten on March 31, then seven seen on April 4 with five on April 7. That concluded the main spring passage. For the summer passage there were 12 on April 14 with 22 on April 18, 25 on April 21, then 42 seen on April 25 and May 2 with 35 on May 5 and 32 on May 10. There were 42 on May 14 with 45 on May 16, then 35 seen on May 20 with 28 on May 23 and 20 on May 26. There were 29 on May 30 and June 2 with 25 on June 6 and 15 on June 9. There were 17 on June 13 with 20 on June 16, 26 on June 20 and 40 on June 23, then 26 seen on June 28 with nine on July 2. 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, then 21 seen on July 21 with seven on July 24 and five on July 29. The high count this year is 11 lower than last year's count of 69 on July 4, 2003. There were seven on August 1 with 20 on August 4, then 13 seen on August 9 with four on August 11.

Yellow Rail (*Coturnicops noveboracensis*)

This was a vagrant. For the early spring passage there was one by the Sand Farm Cattail Marsh on February 11.

Clapper Rail (*Rallus longirostris*)

This was also a vagrant. There was one calling in the Sand Farm Cattail Marsh on November 28, December 9 and December 17. This is the first record for Zellwood.

King Rail (*Rallus elegans*)

During this year the pattern was changing; there was a marked fall and winter passage with much lower numbers from the early spring through the summer. There was also a post-breeding gathering. During the Breeding Bird Survey a total of 18 pairs located; there was a brood of four young on July 11. Early fall records: *for the post-breeding gathering there were four on June 16 with seven on June 23 and July 2, then five seen on July 13 with two to July 21. There were six on July 23 with four to July 27. There were six on July 30 and August 5 with eight from August 8 to August 13, 11 to August 27, 15 on September 1, 17 on September 3, 18 to September 16 and 26 on September 19, then 22 seen on September 24 with 13 on September*

29. That closed the post-breeding gathering which took up the whole of the early fall passage. For the main fall passage there were 18 on October 2 with 23 on October 5 and 27 on October 9, then 25 seen to October 15. There were 32 on October 19 with 36 on October 22 and 45 on October 29, then 31 seen on November 2. There were 32 on November 5 with 48 on November 9, 54 on November 12, 58 on November 16, 63 on November 20 and 69 on November 28, then 53 seen to December 3. That was the end of the main fall passage. For the winter passage there were 25 on December 7 with 34 on December 9, then 19 seen on December 17 with seven on December 21 and five on December 26. There were 17 on December 28 with 16 on January 4 and three on January 11. That completed the winter passage. For the early spring passage there were 21 on January 14 and January 16 with 15 on January 19, ten to February 2 and singles to February 8. There were seven on February 11 with 12 on February 16 and 13 on February 22, then 11 seen on February 27 with eight on February 29 and seven on March 3. That concluded the early spring passage. For the late spring passage there were 14 on March 7 with 13 on March 10, ten on March 19, nine on March 22 and four to March 31. There were nine on April 4 and April 7 with ten to April 21, then 11 seen on April 23 and April 25 with ten on April 28, eight on May 2 and two on May 5. That concluded the late spring passage. For the summer passage there were three on May 10 with eight on May 16, then three seen to May 23. There were five on May 26 and May 30 with one on June 2. There were two on June 6 with five on June 9, then singles seen to June 16. That ended the summer passage. For the post-breeding gathering there were four on June 20 with five on June 23, six on July 2, 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.* This influx lasted two months. The count of 107 was the highest count for Zellwood but that count was quickly overtaken by the new high count of 134. Both these high counts have now been replaced as the highest count is now (2013) that of 523 on August 23, 2006. Note the closeness in the dates. *There were 56 on September 12 with 15 on September 16 and 14 on September 19. That finished the post-breeding gathering.*

Virginia Rail (*Rallus limicola*)

This was a passage migrant and winter visitor; the great majority of the sightings came from the Sand Farm Cattail Marsh. For the late fall passage there were singles at the Sand Farm on September 29, October 9, October 12 and October 19. During this period there was one by Pole Road on October 9 with one by the McDonald Canal on October 22. There was one at the Sand Farm Cattail Marsh on October 29 with two there on November 5, then one seen there on November 16. During this period there was one by Pole Road on November 5 with one by Lake Apopka to the south of the Hooper Farms Road extension on November 12. Finally for the fall passage there was one by Lust Road on November 20. For the winter passage there were two at

the Sand Farm Cattail Marsh on November 23 and November 28 with singles there on December 1, December 3 and December 7. During this period there was one by Lust Road on December 1 and December 3. There were two at the Sand Farm Cattail Marsh on December 9 with singles there to December 21. There were two at the Sand Farm Cattail Marsh on December 26 with three on December 28 and January 4, then one seen on January 11. During this period there was one by Lust Road on December 28. That completed the winter passage. For the early spring passage there were two at the Sand Farm Cattail Marsh on January 14 and January 16 with three on January 19, then singles seen there to January 28. During this period there was one by the Lake Level Canal on January 16 and January 21 with two by Lust Road on January 19. Finally for the early spring passage there were two at the Sand Farm Cattail Marsh on February 2. For the late spring passage there were two at the Sand Farm Cattail Marsh with one by Lust Road on March 3.

Sora (Porzana carolina)

A common fall passage migrant and winter visitor; there were lower numbers during the spring passages. For the fall passage there were two on September 3 with singles from September 16 to September 21. There were four on September 24 with eight on September 29, 18 on October 2 and 32 on October 5, then 24 seen on October 12 with 11 on October 15. There were 45 on October 19 with 110 on October 22, then 59 seen on October 26 with 42 on October 29 and 18 on November 2. There were 49 on November 5 with 41 on November 9. There were 46 on November 12 with 81 on November 16, 90 on November 20 and 132 on November 23, then 91 seen on November 28 with 80 on December 1 and 54 on December 3. That was the fall passage. For the winter passage there were 78 on December 7 with 156 on December 9, then 45 seen on December 15. The count of 156 was the highest count for Zellwood but the highest count is now (2013) that of 415 on November 28, 2008. There were 51 on December 17 with 120 on December 21 and 124 on December 28, then 85 seen on January 4 with 76 on January 11. That completed the winter passage. For the early spring passage there were 91 on January 14 with 67 on January 19, 60 on January 25, 47 on January 28, 27 on February 2, 12 on February 8 and ten on February 11. There were 13 on February 16 with 23 on February 18, then 18 seen on February 27 with ten on February 29 and eight on March 3. That closed the early spring passage. For the late spring passage there were 19 on March 7 with 22 on March 10, then 13 seen on March 19 with nine on March 22 and six on March 24. There were 15 on March 28 with 17 on April 4 and 20 on April 7, then eight seen on April 14 with five on April 18. There were six on April 21 with eight on April 23, then five seen on April 25 with four on April 28, two on May 2 and one on May 5.

Purple Gallinule (*Porphyrio martinica*)

Whilst this species is present all year this is really a summer visitor; there were 54 pairs this year the highest count for the Breeding Bird Survey. The first young (four) were seen on June 6 and the latest new brood (three) was seen on July 24. Early fall records: *there were 28 on July 6 with 16 on July 9. There were 18 on July 13 with 20 on July 19, then 19 seen on July 23 with 17 on July 27, 14 on July 30, 12 on August 5, 11 on August 10, nine on August 13, eight on August 24, five on August 27 and four on September 1.* That long decline probably indicated the departure of the summer visitors. There were ten on September 3 with 17 on September 7, then five seen on September 10. There were six on September 14 with eight on September 16, then five seen on September 19 with four to September 24 and two on September 29. There were six on October 2 with two on October 5. There were four on October 9 with six on October 12. That appeared to be the end of the early fall passage and the end of all passage until the spring. There were three on November 5 with singles to November 28. That closed the late fall passage. For the winter passage there were two on December 1 and December 3 with singles to December 31. There were two on January 4 and January 11 with one on January 14. That completed the winter passage. For the early spring passage there were three on January 16 with singles to January 21. There were three from January 25 to February 8 with two to February 16. There were three on February 18 and February 22 with four on February 27, then three seen to March 7. That was the early spring passage. For the main spring passage there were four on March 10 with seven on March 14, then four seen on March 19 with three on March 22. There were six from March 24 to March 31 with 14 on April 4, 17 to April 14, 29 on April 19, 42 on April 21, 54 on April 23 and 97 on April 25, then 40 seen on April 28 with 33 on May 2. The count of 97 is still (2013) the highest count for Zellwood. There were 37 on May 5 with 51 on May 10, then 30 seen to May 16 with 22 on May 23 and 18 on May 26. That ended the main spring passage. For the summer passage there were 36 on May 30 with 24 on June 6 and 19 on June 9. There were 26 on June 13 with 29 on June 16, 43 to June 28 and 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. That was the end of the summer passage.*

Common Gallinule (*Gallinula galeata*)

A common resident and winter visitor, there were lower numbers from April to June. For the Breeding Bird Survey there were 305 pairs which was by far the highest count for the survey. The last new brood (of two) was seen on October 2 and the first new brood (three) in the spring was seen on February 16. Early fall records: *there were 135 on July 6 with 155 on July 3, then 130 seen on July 19 with 110 on July 21. There were 185 on July 23 with 115 on July 25.*

There were 160 on July 27 with 185 on July 30, then 170 seen on August 5 with 135 to August 10. There were 140 on August 13 with 160 on August 20, 250 on August 27, 280 on September 3 and 335 on September 7, then 240 seen on September 14 with 90 on September 16. There were 100 on September 19 with 105 on September 21, 150 to September 29, 162 on October 2, 165 on October 5 and 180 on October 12, then 125 seen on October 15 with 110 on October 19 and 90 on October 22. There were 118 on October 26 with 135 on October 29, then 98 seen on November 2 with 85 on November 5. There were 105 on November 9 with 140 on November 12, 180 on November 20 and 290 on November 23, then 220 seen on November 28. That closed the fall passage. For the winter passage there were 225 on December 1 with 345 on December 3 and 400 on December 9, then 290 seen on December 15. There were 365 on December 17 with 565 on December 21, then 510 seen on December 28 with 465 on December 31, 455 on January 4, 370 on January 11, 360 on January 14 and 335 on January 16. That completed the winter passage. For the early spring passage there were 380 on January 19 with 500 on January 21, then 310 seen on January 25. There were 345 on January 28 with 405 on February 2 and 460 on February 4, then 290 seen on February 8 with 245 on February 11. There were 293 on February 16 with 170 on February 18 and 165 on February 22. That concluded the early spring passage. For the late spring passage there were 250 on February 27 with 200 on March 3, 170 on March 10, 135 on March 19, 125 on March 24, 95 on March 31, 80 on April 7 and 55 on April 14. That long decline indicated the end of the late spring passage. For the summer passage there were 80 on April 7 with 125 on April 18, then 80 seen on April 21 with 70 on April 23. There were 100 on April 25 with 65 on April 28. There were 85 on May 2 with 110 on May 5, then 50 seen on May 10. There were 105 on May 14 with 140 on May 16, then 115 seen on May 20 with 105 on May 23, 90 on May 30, 65 on June 2, 55 on June 6 and 50 on June 9. 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. That was the summer passage. For the early fall passage 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.

American Coot (*Fulica americana*)

Because of the limited areas of open water numbers were very low, there were however two pairs at the Sand Farm Cattail Marsh and they had broods of three and two. Early fall records: *there were singles on June 26, June 29, July 2, July 4, July 6 and July 9.* There were no further sightings until one seen on August 20, August 24 and August 27. Those were the only early fall records. For the main fall passage there was one on October 19 with four on October 22, then two seen on October 26. There were three on October 29 with 14 on November 2, then 12 seen on November 9 with eight on November 12 and seven on November 16. There were nine on November 20 with 13 on November 23, then 11 seen on November 28. That was

the main fall passage. For the winter passage there were 13 on December 1 with 17 on December 3 and 25 on December 7, then 23 seen on December 9 with 11 on December 15 and eight on December 17. There were 18 on December 21 with 16 on December 28 and five on December 31. There were eight on January 4 with 28 on January 11, then 19 seen to January 16. That completed the winter passage. For the early spring passage there were 13 on January 19 with 21 on January 21, then 11 seen on January 25 with ten on January 28. There were 16 on February 2 with 23 on February 4, then nine seen on February 8. There were 14 on February 11 with 31 on February 16 and 33 on February 18, then 31 seen to February 29 with 17 on March 3 and 11 on March 7. That concluded the early spring passage. For the late spring passage there were 16 on March 10 and March 14 with 26 on March 19, then 20 seen on March 22 with 17 on March 24 and 13 to March 31. There were 19 on April 4 with 11 on April 14, five on April 21 and four on April 23. That was the end of the late spring passage but it is likely that locally the summer passage had started earlier. There were six on April 25 with singles to May 10. There were three on June 2 and June 16 with five to June 23 and seven on June 28, then five seen to July 24. There were no later records.

Limpkin (*Aramus guarauna*)

Basically present in the non-breeding season; I did not note the location of many of the sightings so I can only provide a simple summary. For the fall passage there was one on September 10. There were no winter records. For the early spring passage there was one on January 14 that was it. For the non-breeding season there was one on April 21 with later two on May 16, then singles seen on May 23 and May 26. There was one on June 2 with two on June 6 and June 13, then three seen on June 20 and June 23 with two to July 2. 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. As this species nests from January to April the seasons really do not apply.

Sandhill Crane (*Grus canadensis*)

A passage migrant there were flocks flying to the south in the fall and north in the spring. For the fall passage flying to the south there were 37 on November 16 with 41 on November 20, five on December 1, 57 on December 7 and 11 on December 31. For this species the visible fall passage continued through the winter passage. In the area there were for the winter passage two on December 3 with five on December 15, then three seen on December 20. There were 65 in the area on December 28 with six on January 4 and one on January 16. That completed the winter passage. For the early spring passage in the area there were three on February 8 that was it. Flying to the north there were 126 on February 16 with 91 on February 22, five on February 29, five on March 24, and 16 on March 28. For the main spring

passage in the area there was one on April 18 and April 21 with three on May 5. The count of 126 was the highest count for Zellwood but the highest count is now (2013) that of 375 on January 16, 2009 (they were feeding in a field by the Sand Farm).

Black-bellied Plover (*Pluvialis squatarola*)

An uncommon passage migrant and winter visitor, the greatest numbers were seen during the main spring passage. For the early fall passage there were three on August 24. There were no records for the late fall passage. For the winter passage there were singles on December 26 and December 28 with two on January 4. That completed the winter passage. For the early spring passage there were singles on January 14, January 21 and January 25. Finally for the main spring passage there were 16 on March 28 with 13 on March 31.

American Golden-Plover (*Pluvialis dominica*)

This was a vagrant. For the late spring passage there were three in winter plumage at the Sand Farm on March 28 with one there on March 31.

Semipalmated Plover (*Charadrius semipalmatus*)

For this year it had vagrant status. For the early fall passage there was one on September 1. There were no other sightings.

Killdeer (*Charadrius vociferus*)

A passage migrant and winter visitor, there was a major passage in the winter and the early spring. This species was present all summer but it was not known to have bred this year. Early fall records: *there were two on July 6* with singles to August 20. There were 29 on August 24 with 33 on August 27, then three seen to September 3. There were 14 on September 7 with 35 on September 14, 50 on September 16 and 55 on September 21, then 37 seen on September 24 with 12 on September 29 and two on October 2. That was the early fall passage. For the main fall passage there were five on October 5 with 15 on October 9 and 18 on October 12, then 12 seen on October 15 with 11 on October 22, nine on October 26 and four on October 29. There were nine on November 2 with 54 on November 5, 168 to November 16, 215 on November 20 and 384 on November 28, then 20 seen on December 1. That closed the main fall passage. For the winter passage there were 87 on December 3 with 238 on December 7, 390 on

December 9, 520 on December 17 and 555 on December 21, then 550 seen on December 26 with 410 on December 28. There were 555 on December 31 with 1,040 on January 4, then 525 seen on January 14 with 175 on January 16. That completed the winter passage. For the early spring passage there were 470 on January 19 with 655 on January 25, then 400 seen on February 2 with 255 on February 4, 128 on February 8, 30 on February 11, 18 on February 16 and 16 on February 18. There were 138 on February 22 with five on February 27. That was the end of the event that started back in early November it was also the end of the early spring passage. Numbers now very low to the end of the survey year for the late spring passage there were 11 on February 29 with 13 on March 3 and 23 on March 7, then two seen on March 10. There were four on March 14 with nine on March 19, then eight seen on March 22 with three on March 28 and one on March 31. There were three on April 4 with five on April 18, then three seen on April 21 with one on April 23. That concluded the late spring passage so for the summer passage there were three from April 28 to May 20 with four on May 30, then two seen to June 13 with singles to July 4. That was the end of the summer passage. For the early fall passage there were two on July 18 and July 21.

Black-necked Stilt (*Himantopus mexicanus*)

An uncommon summer visitor, a single pair bred by Lake Apopka raising two young; these were first seen on June 20. Early fall records: *there were four on June 11 with six on June 16, 14 on June 23, 20 on June 26 and 25 on July 4, then 16 seen on July 6 with eight on July 9. There were 28 on July 19 with 29 on July 21, then four seen on July 30.* There were no further sightings until three flew to the north-west at the Sand Farm on December 31! That winter record was the only sighting until the summer visitors arrived. For the main spring passage there were two on March 19 with four on March 24, then two seen to March 31. There were four on April 7 with two on April 14. There were four on April 18 with five on April 21 and 14 on April 23, then six seen on April 25 with two to May 14. That closed the main spring passage. For the summer passage there were five on May 16, May 20 and May 23 with four to May 30. There were ten on June 2 with 14 on June 9, then two seen on June 13 with one on June 16. There were four on June 20 with seven on June 23 and eight on June 28, then five seen on July 4 with two to July 14 and one on July 18. There were no later records.

Greater Yellowlegs (*Tringa melanoleuca*)

An uncommon passage migrant and winter visitor, there were only low numbers seen this year. Early fall records: *there were singles on July 6 and July 19 with two on July 25.* For this year there were singles on August 20, August 24, September 7 and September 14. Those were the only records for the early fall passage. For the main fall passage there were three on

October 19 with six on October 22, then one seen on October 26. There were three on October 29 with five on November 12, then two seen on November 20 with one on November 23. That closed the main fall passage. For the winter passage there were three on December 1 with one on December 9. There were three on December 15 with singles on December 17, December 21 and December 26. That completed the winter passage. For the early spring passage there were singles on January 28 and February 2 with six on February 11. For the main spring passage there was one on March 3 with three on March 7. There was one on March 24 with 12 on March 31, then one seen on April 7. There were two on April 18 with later singles on May 2 and June 9. The latter I treat as part of the main spring passage. For the early fall passage there were singles on August 9 and August 11.

Lesser Yellowlegs (*Tringa flavipes*)

An uncommon passage migrant; there were no winter records. Early fall records: *there was one on July 9 with two on July 19, then one seen on July 23*. For this year there were seven on August 24 with one on September 3. There were three on September 7 with singles on September 14 and September 21. That was the early fall passage. For the late fall passage there were two on October 2 with three to October 12 and four on October 15, then singles seen on October 19 and October 22. There were no later fall records and no records for the winter passage. For the early spring passage there were two on February 8 and February 16. For the main spring passage there were singles on March 3 and March 7 with four on March 31, then singles seen on April 18 and April 23. There was one on May 2 with two on May 5. That closed the main spring passage. For the early fall passage there were two on July 14 with one on August 4. There were also two on August 9.

Solitary Sandpiper (*Tringa solitaria*)

This was a very uncommon passage migrant. Early fall records: *there were singles on July 19, July 21, July 23 and July 30*. For this year there were singles on September 1, September 3, September 7, September 10 and September 25. That was the early fall passage. There was just one record for the late fall passage; there was one on October 5. There was also only a single record for the early spring passage; there was one on February 4. The main spring passage was a little better. There was one on April 14 with three on April 21, then two seen on April 23 and May 5 with one on May 10. For the early fall passage there were singles on July 18, July 24 and August 1.

Willet (*Tringa semipalmata*)

This was a vagrant for the early fall passage there was one at the Sand Farm on August 1. This is a coastal species.

Spotted Sandpiper (*Actitis macularius*)

A very rare passage migrant; early fall records: *there were singles on August 5 and August 8*. For this year there were singles on August 27 and September 10. That was the extent of the early fall passage. For the spring passage there was one on April 14.

Upland Sandpiper (*Bartramia longicauda*)

This was a vagrant. Early fall records: *there was one on August 8 and August 13*. For this year there was for the early fall passage one at the Sand Farm on September 16.

Marbled Godwit (*Limosa fedoa*)

This was a vagrant. For the spring passage one flew to the north at the Sand Farm on April 21.

Ruddy Turnstone (*Arenaria interpres*)

This was a vagrant. For the late fall passage one flew to the north over Lake Apopka on November 9.

Sanderling (*Calidris alba*)

This was another vagrant. For the early fall passage there was one at the Sand Farm on September 3. For the main spring passage there were two flying north over Lake Apopka near the Lust Road pump house on May 20, they were in winter plumage so were probably first-summer birds.

Semipalmated Sandpiper (*Calidris pusilla*)

A very uncommon passage migrant; the lack of a suitable habitat is well illustrated by the low numbers of shorebirds seen this year. Early fall records: *there were three on July 19 with five on July 25, then three seen on July 27.* For this year there were two on August 24 with two later on September 10. That was the early fall passage. For the spring passage there were two on May 20. For the early fall passage there was one on July 24.

Western Sandpiper (*Calidris mauri*)

There were even fewer sightings of this species. Early fall records: *there was one on July 9 with two on July 19, then three seen on July 23 and July 25 with one on July 27. There was a puddle by Airport Road and these birds were on there.* For this year there were two on September 3 with singles on September 14 and September 16. That was the early fall passage. For the spring passage there was one on May 5. Finally for the early fall passage there was one on July 24.

Least Sandpiper (*Calidris minutilla*)

Even this species which will use a greater variety of habitats was a minor passage migrant; there were no winter records. Early fall records: *there were two on July 9 with five on July 13 and 20 on July 19, then four seen on July 25 with two on August 5 and one on August 10. That was the puddle by Airport Road.* For this year there were six on August 24 with two on August 27. There were four on September 3 with 14 on September 7 and 16 on September 10, then one seen on September 14. There were six on September 16 with 30 on September 21, then one seen on September 24. That was the early fall passage. For the main fall passage there were six on October 9 with 42 on October 19, then 18 seen on October 22. Later there were five on November 16. That closed the main fall passage. There was no winter passage. For the early spring passage there were four on January 19 that was it. For the main spring passage there were singles on March 3 and March 28 with 17 on March 31. Later there were 22 on April 14. Finally for the main spring passage there were two on May 5. For the early fall passage there were five on July 18 and two on July 24.

White-rumped Sandpiper (*Calidris fuscicollis*)

This was a vagrant. For the spring passage a party of six flew north up the side of Lake Apopka to the north of the Lust Road pump house on May 16.

Baird's Sandpiper (*Calidris bairdii*)

This was a vagrant. For the early fall passage there was a juvenile at the Sand Farm on September 10 and September 14.

Pectoral Sandpiper (*Calidris melanotos*)

For this year this was an uncommon fall passage migrant. Early fall records: *there were three on July 19 with one on July 21. There were also two on July 23.* For this year there were singles on August 24, September 1 and September 3. There were ten on September 7 with six on September 10 and two on September 21. That was the early fall passage. For the main fall passage there were 14 on September 29 and October 2 with three on October 5.

Stilt Sandpiper (*Calidris himantopus*)

This was another uncommon passage migrant. Early fall record: *there were six on July 23.* For this year there were singles on August 20 and September 3. That was the early fall passage. For the main fall passage there were eight on October 9. For the spring passage there were two on March 31. For the early fall passage there were seven on August 11.

Buff-breasted Sandpiper (*Tryngites subruficollis*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 3 with two there later on October 5. In the following year for the early fall passage there was one at the Sand Farm on August 11.

Short-billed Dowitcher (*Limnodromus griseus*)

This was a vagrant this year. For the early fall passage there was one on August 24; there were no other sightings.

Long-billed Dowitcher (*Limnodromus scolopaceus*)

A rare fall and winter passage migrant; this was another casualty of the lack of any shallow flooded fields. For the late fall passage there were seven on October 19 with 20 on

October 22, then one seen on October 29. For the winter passage there were two on December 3. There were no later records.

Wilson's Snipe (*Gallinago delicata*)

A quite common passage migrant, there was a major invasion in the late winter. For the fall passage there was one on September 3 with four on September 7 and seven on September 10, then one seen on September 14. There were two on September 16 and September 19 with four on September 24 and six on September 29, then three seen on October 2. That was the early fall passage. For the main fall passage there were five on October 5 with 39 on October 9, then three seen on October 12. There were six on October 15 with 20 on October 19, then 17 seen on October 26 with two on October 29. There were 11 on November 2 with 14 on November 5, 22 on November 12, 30 to November 20, 39 on November 23 and 65 on November 28, then 43 seen on December 1 with 18 on December 3. That closed the main fall passage. For the winter passage there were 26 on December 7 with 33 on December 9, 64 on December 15 and 129 on December 17, then 12 seen on December 21. There were 125 on December 26 with 270 on December 28, 962 on December 31 and 1,090 on January 4, then 121 seen on January 11 with 36 on January 14 and 14 on January 16. The count of 1,090 is still (2013) the highest count for Zellwood; the previous high count was that of 898 on December 28, 1998. That also completed the winter passage. For the early spring passage there were 42 on January 19 with 56 on January 21, 69 on January 28, 136 on February 2 and 205 on February 4, then 54 seen on February 11 with 45 on February 16, 14 on February 18 and 11 on February 22. There were 25 on February 27 with 13 on February 29 and seven on March 3. That concluded the early spring passage. For the late spring passage there were nine on March 7 with four to March 14. There were 26 on March 19 with 21 on March 22, seven on March 24, two on March 28 and one on March 31. There were 19 on April 4 with seven on April 7 and two on April 14.

American Woodcock (*Scolopax minor*)

A very uncommon passage migrant and winter visitor; all sightings were from the Sand Farm Bridge. For the fall passage there was one on September 29 that was it. For the winter passage there were singles on December 17 and December 21 with two on January 4. That completed the winter passage. For the early spring passage there were singles on January 11, January 14 and on January 19 with three on January 21, then two seen on January 25 with one on February 2.

Laughing Gull (*Larus atricilla*)

A spring passage migrant; there were only the occasional sightings for the other seasons. For the early fall passage there were three on August 24 that was it. For the late fall passage there was an adult on November 9. For the winter passage there were two on November 28. For the early spring passage there was one on February 2 with another on February 16. Now we come to the main event the main spring passage. This movement involved for the most part adults in breeding plumage. Unless I state to the contrary all were such adults. There were two (not aged) on March 14. Flying to the east there was one adult on April 4 with seven on April 18. There was one in first-summer plumage at the lake on April 21. Flying to the east there was one adult on April 23 with 12 on April 25. That was the end of the main spring passage. For the summer passage there were in the area three on May 2 with 15 on May 5. On May 10 there were eight adults with three in first-summer plumage. There were six adults at the lake on May 16 with five flying to the east on May 20. There were two adults on May 23 with five on May 26. On May 30 there were 15 adults with four in first-summer plumage. There was one on June 6 this was not aged. That concluded the summer passage. For the early fall passage there were four on July 11, these were not aged. Finally there was one in first-summer plumage on July 24.

Little Gull (*Larus minutus*)

This was a vagrant. For the early spring passage there was one in first-winter plumage with at least 300 Bonaparte's Gulls hawking over the fields just to the south of the Lust Road pump house on February 2.

Bonaparte's Gull (*Larus philadelphia*)

A passage migrant and winter visitor; again the greatest numbers were seen during the early spring passage. For the late fall passage there were four on November 23 with one on November 28. For the winter passage there was one on December 1 with 11 on December 3, then ten seen on December 9 with three on December 15. There were 35 on December 21 with 53 on December 28 and 75 on December 31, then 40 seen on January 4. That completed the winter passage. For the early spring passage there were 152 on January 11 with 136 on January 14, 86 on January 16, eight on January 19 and four on January 21. There were 51 on January 25 with 310 on February 2, then 24 seen on February 11 with 13 on February 18, ten on February 29 and one on March 3. That closed the early spring passage. For the late spring passage there were 12 on March 10 with 14 on March 19, then three seen on March 24 with one on March

28. There were five on March 31 and April 4 with one on April 7. Finally for the late spring passage there were two on April 14.

Ring-billed Gull (*Larus delawarensis*)

There was a very limited fall passage followed by major winter and early spring passages; interestingly there was a significant passage to the north-west from January 11 to April 4. Early fall record: *there was an adult on July 13*. For this year there were singles on September 7 and September 24; that was the early fall passage. For the main fall passage there were two on October 29 with eight on November 2, 28 on November 9 and 74 on November 12, then 70 seen on November 16 with 50 on November 23. That closed the main fall passage. For the winter passage there were 69 on November 28 with 6,200 on December 1, then 130 seen on December 7 with 34 on December 9. There were 130 on December 15 with 140 on December 17, 160 on December 20, 572 on December 21, 8,100 on December 26, 11,500 on December 31 and 12,250 on January 4, then 730 seen on January 11 with 582 on January 14. The count of 12,250 was the highest count for Zellwood but the highest count is now (2013) that of 18,000 on February 8, 2005. That also completed the winter passage. For the early spring passage there were 1,150 on January 16 with 985 on January 19. There were 1,110 on January 21 with 2,840 on January 25 and 8,450 on February 2, then 660 seen on February 4 with 540 on February 8. Interestingly February 2 was also the day of the Little Gull and the 310 Bonaparte's Gulls; perhaps they were travelling together. There were 2,020 on February 11 with 1,620 on February 18, 1,200 on February 22, 340 on February 27 and 134 on February 29. That concluded the early spring passage. For the late spring passage there were 4,400 on March 3 with 220 to March 19 and 18 on March 22. There were 265 on March 24 with 550 on March 28 and 705 on March 31, then 92 seen on April 4 with 42 on April 7, 33 on April 14, 26 on April 18, seven on April 21 and five on April 23. There were ten on April 25 and April 28 with four on May 2 and two on May 5.

I mentioned earlier that there was an unexpected visible passage to the north-west; the following were the daily counts. These figures were included in the totals given earlier. There were 63 on January 11 with 467 on January 14, 262 on January 16, 60 on January 19, 135 on January 21, four on February 2, 52 on February 8, 263 on February 11, five on February 16, 169 on February 18, 41 on February 22, five on February 27, 64 on February 29 and later 52 on April 4. These will not be complete counts as I had to be at the Sand Farm in the early morning to catch these flights.

Herring Gull (*Larus argentatus*)

A winter visitor and passage migrant; for some reason I did not record the age for most of these birds. For the fall passage there were singles in first-winter plumage on October 19 and November 12 with three on November 23. The birds were not aged after those records. Those were the only fall records. For the winter passage there were singles on November 28 and December 3 with three on December 7, then one seen on December 15. There were three on December 17 with two on December 21 and singles to January 4. That completed the winter passage. For the early spring passage there were two on January 11 with one on January 14. There were also two on January 16 with one on January 21. There were five on January 25 with singles to February 2. From this point on all birds were aged. There was an adult on February 18 with one in first-winter plumage on February 22. That concluded the early spring passage. For the late spring passage in first-winter plumage there were two on March 10 and March 14 with singles on March 24 and March 31.

Lesser Black-backed Gull (*Larus fuscus*)

This was a vagrant. For the winter passage there was one in first-winter plumage on November 23 and December 3. There was an adult of the British race *L.f.graellsii* on December 7. Finally there was one in first-winter plumage on December 17 and December 21.

Thayer's Gull (*Larus thayeri*)

This was a vagrant. For the late spring passage there was one in first-winter plumage on March 31; it was with some 160 Ring-billed Gulls that were feeding in association with a large flock of Double-crested Cormorants. This is the first record for Zellwood. There is a description in Appendix B.

Gull-billed Tern (*Geochelidon nilotica*)

This was a rare late spring passage migrant, only adults seen. There was one near the southern border on May 2, May 5 and May 10. There was one at the Sand Farm on May 14 with two there on May 16 and May 20.

Caspian Tern (*Hydroprogne caspia*)

A passage migrant and winter visitor; the greatest numbers were seen during the winter and early spring passages. Early fall record: there was one on August 27 with two on September 7. Later there were two on September 24. That was the early fall passage. For the late fall passage there were singles on September 29, October 2, October 15, October 26, October 29, November 9, November 16 and November 20. There were two on November 23 with 12 on November 28, then five seen on December 3 with one on December 7. That closed the late fall passage. For the winter passage there were 14 on December 9 with four on December 15 and one on December 21. There were four on December 26 with one on December 28. There were two on December 31 with 25 on January 4, then one seen on January 11. That completed the winter passage. For the early spring passage there were three on January 14 and January 16 with seven on January 21 and 15 on January 25, then eight seen on February 2 with six to February 16. That ended the early spring passage. For the late spring passage there were two on February 27 with five on March 3, six on March 7 and nine on March 14, then two seen to March 24. There were four on March 31 with seven on April 4, then five seen on April 7 with three to April 21 and singles to April 25. That closed the late spring passage. For the summer passage there was an adult in breeding plumage on June 2.

Sandwich Tern (*Thalasseus sandvicensis*)

This was a vagrant. There was an adult on November 28; this could be either a fall or a winter record. For the late spring passage there was one in first-summer plumage on April 18.

Common Tern (*Sterna hirundo*)

An uncommon passage migrant; there really did appear to be a minor spring passage this year. For the early fall passage there was an adult on September 7. For the main spring passage there was an adult in breeding plumage on April 21 with six adults in breeding plumage that flew to the east on May 10. Finally two more adults in breeding plumage flew to the east on May 20.

Forster's Tern (*Sterna forsteri*)

A passage migrant and winter visitor; there were three major influxes this year. For the early fall passage there was one on September 16. For the main fall passage there were ten on September 29 with 11 on November 2, then nine seen on November 16 with five on November 23. That was the main fall passage. For the winter passage there were nine on November 28

with 11 on December 1, 49 on December 3 and 129 on December 9, then six seen to December 17. There were 45 on December 20 with 58 on December 21 and 72 on December 28, then six seen on December 31 with five on January 4. That completed the winter passage. For the early spring passage there were eight on January 11 with 12 on January 16 and 28 on January 21, then 19 seen on January 25 with 15 on February 2 and 12 on February 4. There were 71 on February 8 with 74 on February 11, then 66 seen on February 16 with 23 on February 18 and two on February 22. There were 27 on February 27 (this included an adult in breeding plumage) with 71 on February 29, then 15 seen on March 3 with 13 on March 7. That concluded the early spring passage. For the main spring passage there were 63 on March 10 with 20 on March 14 and two on March 19. There were three on March 22 with 36 on March 24 and 514 on March 31, then 18 seen on April 4 with seven on April 7 and one on April 14. On March 31 there was a very strong westerly wind. The count of 514 was the highest count for Zellwood; but the highest count is now (2013) that of 611 on January 16, 2008. There were 30 on April 18 with 125 on April 21, then 12 seen on April 25 with seven on April 28. There were 16 on May 2 with ten on May 10 and eight on May 20. There were no later sightings.

Least Tern (*Sternula antillarum*)

There were just three records for the spring passage; there were singles on March 31, April 18 and April 28.

Black Tern (*Chlidonias niger*)

This was a vagrant this year. For the early fall passage there were 20 on September 7. For the summer passage there was one in first-summer plumage on June 9.

Rock Pigeon (*Columba livia*)

Seemingly a spring passage migrant; there were no records for the rest of the year. Early fall records: *there were two on July 30*. That does not count; it was in the previous year. For the late spring passage there was one on March 14 with singles on April 18 and April 25. There were also three on May 2 with one on May 10.

Eurasian Collared-Dove (*Streptopelia decaocto*)

A resident but there did appear to be a series of influxes. During the Breeding Bird Survey a total of three pairs located on the northern border. Early fall records: *there were two on July 2 with singles to July 9. There were two on July 13 and July 21 with singles to July 27. There were two on July 30, August 8 and August 13.* For this year there were two on August 20 with three on August 24 and five on August 27, then one seen on September 1. There were three on September 3 with four on September 7 and seven on September 14, then one seen on September 16. There were two on September 19 and September 21 with six on September 24, then four seen on September 29 with singles to October 5. That was the early fall passage. For the late fall passage there were two on October 9 with three on October 15, then two seen to November 2 with singles to November 9. There were two on November 12 with three on November 16, then two seen to November 28 with one on December 1. That closed the late fall passage. For the winter passage there were two on December 3 with three on December 7 and December 15, then two seen to December 21. There were three on December 26 with one on December 28. There were two on December 31 with three on January 4, then one seen on January 11. That completed the winter passage. For the early spring passage there were three on January 14 with two to January 19 and singles to January 25. There were two on January 28 with eight on February 2, then three seen on February 4 with two to February 11 and singles to February 22. There were two on February 27 and February 29 with one on March 3. That concluded the early spring passage. For the main spring passage there were four on March 7 with two to March 19 and one on March 22. There were three on March 24 with singles to April 4. There were two on April 7 and April 14 with singles to April 25. There were four on April 28 with three on May 2 and singles to May 10. That was the end of the main spring passage. For the summer passage there were two on May 14 with three on May 16, then two seen on May 23 with one on May 26. There were two on May 30 with three on June 2, then singles seen to June 13. There were two on June 16 with singles to June 23. That ended the summer passage. For the early fall passage 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.

White-winged Dove (*Zenaida asiatica*)

A late summer and early fall passage migrant; there were a few records for the spring passage. This is really an enigma; I just do not understand its status. Early fall records: *there were two on June 29 with five on July 4, then two seen on July 9. There were three on July 19 with two to August 8 and one on August 13.* For this year there was one on August 24 with two on September 10. That was the extent of the early fall passage. There were no further sightings until the spring. For the late spring passage there were two on March 7 with later one on April

18 and two on April 23. For the summer passage there was one on May 20. For the early fall passage (or so I suppose) there was one on June 16 with three on June 20, six on June 28 and seven on July 7, then one seen on July 18. There were also two on July 24 with later one on August 11.

Mourning Dove (*Zenaida macroura*)

A resident in very small numbers in the wooded borders, there was no significant post-breeding gathering this year. During the Breeding Bird Survey a total of 26 pairs located. Early fall records: *for the post-breeding gathering there were 115 on June 16 with 160 on June 23 and 200 on June 29, then 189 seen on July 2 with 77 on July 4. There were 290 on July 6 with 73 on July 9. There were 270 on July 13 with 725 on July 19, then 195 seen on July 21 with 170 on July 23. There were 300 on July 25 with 340 on July 27, then 255 seen on July 30 with 135 on August 5 and 85 on August 8. There were 147 on August 10 with 155 on August 13, then seven seen on August 20. That was the end of the post-breeding gathering. For the early fall passage there were 49 on August 24 with 106 on August 27, then 50 seen on September 1 with 22 on September 3. There were 65 on September 7 with 83 on September 10, then 38 seen on September 14. There were 63 on September 16 with 100 on September 19, 135 on September 24 and 167 on September 29, then 125 seen on October 2 with 20 on October 5. That was the early fall passage. For the late fall passage there were 30 on October 9 with 45 on October 12, then 15 seen on October 15 with 11 on October 19 and nine on October 22. There were 30 on October 26 with 32 on November 2 and 58 on November 5, then 23 seen on November 9 with 15 on November 12. There were 21 on November 16 with 65 on November 20, then 17 seen on November 23 with three on November 28. That closed the late fall passage. For the winter passage there were 22 on December 1 with 37 on December 3, then 36 seen on December 9 with 24 on December 15 and eight on December 17. There were 15 on December 21 with 19 on December 26, 70 on December 28 and 165 on December 31, then 50 seen on January 11 with six on January 14. That completed the winter passage. For the early spring passage there were 16 on January 16 with 170 on January 19, then 38 seen on January 21. There were 40 on January 25 with 84 on January 28, then 21 seen on February 2 with four on February 4. There were eight on February 8 and February 11 with 12 on February 16 and 15 on February 18, then eight seen on February 22. That concluded the early spring passage. For the summer passage (this species nests very early) there were nine on February 27 with 14 on February 29 and 46 from March 3 to March 19, then 21 seen to March 24. There were 70 on March 28 with 110 on April 4, then 84 seen on April 7 with 20 on April 18 and 15 on April 21. There were 29 on April 23 with 17 on April 25 and 15 on April 28. There were 22 on May 2 and May 10 with 19 on May 14. That was the end of summer passage. For the post-breeding gathering there were 20 on May 16 with 175 on May 20, then 106 seen on May 23 with 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.*

Common Ground-Dove (*Columbina passerina*)

A common resident, although it is hard to find in the colder months, it is possible that part of the population moves out of the area for part of the year. During the Breeding Bird Survey a total of 191 pairs located that is down from the 236 pairs of 2003. Early fall records: *there were 55 on July 6 with 54 on July 9, 48 on July 13, 36 on July 19, 32 on July 21 and 26 on July 23. There were 51 on July 25 with 44 on July 27, 36 on July 30, 30 on August 5 and 16 on August 8. There were 33 on August 10 with 21 on August 13, 16 on August 20 and 15 on August 24. There were 24 on August 27 with 18 on September 1 and 14 on September 3. There were 19 on September 7 with 21 on September 10, 23 on September 14 and 25 on September 19, then 17 seen on September 21 with 16 on September 24. That was the end of the early fall passage. For the late fall passage there were 21 on September 29 with 27 on October 5, then 12 seen on October 9 with nine on October 12. There were 14 on October 15 with five on October 19 and three on October 22. There were 11 on October 26 with eight to November 5 and two to November 12. There were four on November 16 with three to November 23 and two on November 28. That closed the late fall passage. For the winter passage there were four on December 1 with six on December 3 and eight on December 7, then six seen on December 15 with one on December 17. There were three on December 21 with eight to December 28, 12 to January 11 and 17 on January 14, then eight seen on January 16. That completed the winter passage. For the early spring passage there were 16 on January 19 with 18 on January 21, then 17 seen on January 28 with 15 on February 2. There were 29 on February 4 with 40 on February 8, then 31 seen on February 11 with 30 on February 16, 23 on February 18, 20 on February 27 and 11 on February 29. That concluded the early spring passage. For the main spring passage there were 23 on March 3 with 22 to March 19 and six on March 22. There were 19 on March 24 with 23 on March 28, then 14 seen on April 4 with 12 on April 7. There were 19 on April 14 with 36 on April 21, then 32 seen on April 25 with 16 on April 28. That was the end of the main spring passage. For the summer passage there were 75 on May 2 with 51 on May 10, 44 on May 14 and 34 on May 16. There were 48 on May 20 with 82 on May 23, then 80 seen on May 30 with 50 on June 2 and 40 on June 6. There were 61 on June 9 with 39 on June 13 and 28 on June 16. There were 41 on June 20 with 20 on June 23. That was the end of the summer passage. For the early fall passage 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.**

Yellow-billed Cuckoo (*Coccyzus americanus*)

A common summer resident, there were 49 pairs located during the Breeding Bird Survey. Early fall records: *there were five from June 23 to June 29 with four to July 9, three on July 13 and singles to July 23. There were five on July 25 with two on July 27 and singles to August 5. There were two on August 10 with later one on August 24.* That was the minimal early fall passage. For the late fall passage there was one at the Sand Farm on October 9 that was it. For the spring passage there was one on April 18 with six on April 21 and seven on April 23, then four seen on April 25. There were five on April 28 with 11 on May 2, then eight seen on May 5 with six on May 10. There were seven on May 14 with nine on May 16, then five seen on May 20. That ended the spring passage. For the summer passage there were eight on May 23 with 12 on May 26, then 16 seen 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. That was the end of the summer passage. For the early fall passage 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.*

Smooth-billed Ani (*Crotophaga ani*)

This was a vagrant. Early fall record: *there was one by Lake Apopka on June 26, 2003; it was making its way south towards the Lust Road pump house.* This was the first record for Zellwood.

Groove-billed Ani (*Crotophaga sulcirostris*)

This was also a vagrant. For the late fall passage at the Sand Farm there were singles on November 2 and November 5 with three on November 12, then one seen on November 16. The count of three was the highest count for Zellwood but the highest count is now (2013) that of six on February 6, 2005.

Barn Owl (*Tyto alba*)

A resident, during the Breeding Bird Survey six pairs located; a brood of two young were seen on July 2. Early fall records: *for the post-breeding gathering there was one on June 26 with two on July 6 and three on July 13, then singles seen to July 21. There were three on July 23 and July 25 with four on July 30, five on August 5, seven to August 20, nine on August 24 and 14 on September 1, then 12 seen on September 3 with six on September 7, four on September 10, two to September 21 and singles to September 29.* The previous high count for Zellwood was that of ten on February 7, 2001 so read on. That closed the post-breeding gathering; it was also

the end of any early fall passage. For the late fall passage there were five on October 2 with singles to October 9. There were 16 on October 12 with ten on October 19, three on October 26 and one on October 29. The count of 16 was the highest count for Zellwood but the highest count is now (2013) that of 25 on December 22, 2006. I can only think that this was an actual influx. There were three from November 2 to November 20 with singles to November 28. That closed the late fall passage. For the winter passage there were two on December 1 and December 7 with three on December 9 and eight on December 17, then three seen on December 21 with one on December 26. There were two on December 28 with five on December 31, then four seen on January 4 with one on January 11. That completed the winter passage. For the early spring passage there were two from January 14 to January 21 with six on January 25 and seven on February 2, then six seen on February 4 with two on February 8 and singles to February 18. There were two on February 22 with singles to March 3. That concluded the early spring passage. For the late spring passage there were four on March 7 with singles to April 7. There were three on April 18 with singles to April 25. There were eight on May 2 with singles to May 23. That ended the late spring passage. For the summer passage there were three on May 26 with four on May 30, six to June 13 and eight on June 16, then six seen on June 20 with four on June 23. There were eight on June 28 with six on July 2, five on July 4 and one on July 11. That closed the summer passage. For the early fall passage 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.

Eastern Screech-Owl (*Otus asio*)

As I do not use recordings this appeared to be a major rarity but it was probably quite common along the northern and eastern borders. I only came across two during the 12 months. For the early fall passage there was one on September 14. For the early spring passage there was one on January 25.

Great Horned Owl (*Bubo virginianus*)

Recorded on approximately two out of every three visits; it could be found in the wooded borders although it did hunt out over the fields. During the Breeding Bird Survey a total of 13 pairs located. Prior to this year the highest count was that of nine pairs in 2002. Up to two a day noted through to December 9 with up to three a day from December 15 to February 29. Singles then the norm with an occasional count of two; there were higher counts of five on January 14, four on January 25 and five on February 2. Very exceptionally there was a gray individual by the Hooper Farms Road gate on October 9; it appeared to be of the western race *B.v. pallescens*.

Barred Owl (*Strix varia*)

Recorded on approximately one out of every three visits; they could be found in the wooded borders. Just three pairs located during the Breeding Bird Survey. No more than two a day seen; there was no pattern to the sightings other than there were no records for June and July.

Long-eared Owl (*Asio otus*)

This was a vagrant. There was one in trees on the western side of the Sod Farm on January 11; it was being mobbed by Gray Catbirds. This could be a winter or early spring sighting. This is the first record for Zellwood. There is a description in Appendix B.

Short-eared Owl (*Asio flammeus*)

An uncommon passage migrant and winter visitor this year; there was a single late fall record of one on November 23 it was by Laughlin Road. For the winter passage there was one on November 28 with two on December 1 and December 3, then one seen on December 9. There was one on December 17 with two on December 26 and December 28, then singles seen on December 31 and January 4. That completed the winter passage. For the early spring passage there were singles on January 14 and January 16 with later one on February 29. Whilst the locations were not given it is likely that all the sightings were between the Sand Farm Bridge and Laughlin Road.

Common Nighthawk (*Chordeiles minor*)

A summer visitor; there were 16 pairs found during the Breeding Bird Survey, this was the best year to date. Early fall records: *there were singles on June 26 and June 29 with three on July 2 and July 4, then one seen on July 6. There were two on July 9 with five on July 13, then two seen on July 21 with singles to August 13.* For this year there were singles on August 24, September 3 and September 29. That closed the early fall passage. For the late fall passage there was one on October 12. For the spring passage there was one on April 18 with three on April 21, nine on April 23 and ten on April 25, then seven seen on April 28 with three on May 2. There were four on May 5 with seven on May 10, then five seen on May 14 with four on May 16. That was the end of the spring passage. For the summer passage there were seven on May 20 with 11 on May 23, then singles seen to May 30. There were four on June 2 with seven on June 9, then singles seen to June 23. There were three on July 4. Later there was one on July 18 with three on July 24, then singles seen to August 4. That closed the summer passage.

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

A summer visitor, there were a total of 20 pairs found during the Breeding Bird Survey; both 2003 and 2004 had high populations. Early fall records: *there was one on June 26 with two on July 4, then singles seen on July 6 and July 9.* There were no further sightings until the spring passage. For the spring passage there was one on March 22 with nine on March 28 and ten on March 31, then six seen on April 4 with four on April 7. There were eight on April 18 with six on April 23. There were ten on April 25 with 11 on April 28, then three seen on May 2. That closed the spring passage. For the summer passage there were five on May 5 with 11 on May 10, then ten seen on May 14 with three on May 16. There were 13 on May 20 with 16 on May 23, then singles seen on May 26 and May 30. Finally there were three on June 2 with one on June 6.

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

A scarce passage migrant and winter visitor; it is highly likely that this species was under-recorded. For the early fall passage there were singles on September 10, September 14, September 16 and September 24. For the late fall passage there was one on November 9. For the winter passage there were two on December 7 with one on January 4. All the above records were from the Sand Farm. For the early spring passage there was one by the McDonald Canal on January 19 and January 25. There was also one by the Lake Level Canal on February 2; that was the early spring passage. For the late spring passage there was one by Laughlin Road on March 14 with two on the northern border on March 28.

Chimney Swift (*Chaetura pelagica*)

A fall passage migrant with lower numbers in the spring; they did not breed in the survey area but will have done so in the township of Zellwood. Early fall records: *there were 27 on July 6 with 16 on July 13 and two on July 19. There were four on July 21 with 30 on July 23, then four seen on July 25. There were five on July 27 with 16 on July 30 and 865 on August 8, then 165 seen on August 10. The birds of the 8th and the 10th were noted as flying to the south. There were 270 in the area on August 13 with 34 on August 20 and five on August 24. There were 143 on August 27 with 260 flying to the south on September 1, then 20 seen on September 3. There were 260 on September 7 with 1,840 on September 10, then 220 seen on September 14 with nine on September 16. The count of 1,840 was the highest count for Zellwood but the highest count is now (2013) that of 8,100 on September 24, 2008. There were 22 on September 19 with 36 on September 21 and 38 on September 24, then 12 seen on September 29. That was the early fall passage. For the late fall passage there were 26 on October 2 with 33 on October 5, then 30 seen on October 12 with 12 on October 22 and two on*

October 26. That closed the late fall passage. There were no further sightings until the spring passage. For the spring passage there were 360 on April 4 with 44 on April 14, 26 on April 18, 16 on April 23 and nine on April 25. There were 12 on April 28 with 15 on May 2, 22 on May 10 and 46 on May 14, then 20 seen on May 16 with seven on May 20. There were 12 on May 23 with 20 on May 26, then 17 seen on May 30 with one on June 2. That was the end of the spring passage. For the summer passage there were two on June 6 with three on June 9, four on June 16 and six on June 20, then five seen on June 23 with four on June 28 and three to July 4. There were six on July 7 with 16 to July 14 and 37 on July 18, then 30 seen on July 21 with three on July 24. That ended the summer passage so for the early fall passage 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.*

Ruby-throated Hummingbird (*Archilochus colubris*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on October 2. For the summer passage there was one at the Sand Farm on June 23; this just might be an early fall record.

Belted Kingfisher (*Megaceryle alcyon*)

A passage migrant and winter visitor; numbers were a little higher from November to December. For the early fall passage there was one on August 20. Later there were three on September 7 with five on September 10, then singles seen to September 16. There were two on September 19 with one on September 21. That was the early fall passage. For the main fall passage there were two on September 29 with nine on October 2, then four seen to October 9. There were seven on October 12 with three on October 15. There were five on October 19 with eight on October 22, then six seen on October 26. There were seven on October 29 with nine on November 2, then eight seen to November 9. There were nine on November 12 with eight to November 23 and seven on November 28. That closed the main fall passage. For the winter passage there were nine on December 1 with 11 on December 3, then eight seen to December 9 with six on December 15, five on December 20, three to December 26 and one on December 28. That long decline indicated an event was coming to an end. There were five on December 31 and January 4 with four to January 14. That completed the winter passage. For the early spring passage there were seven on January 16 with four to January 21. There were six on January 25 with three on January 28. There were five on February 2 with six on February 4, then two seen on February 8. There were four on February 11 with seven on February 16, then five seen on February 18. There were six on February 22 with five on February 27. That was the end of the early spring passage. For the late spring passage there were seven on February 29 with

five to March 7, four to March 19, three to March 28, two on April 4 and one on April 7. There were two on April 14 with singles on April 23, April 25 and April 28. That concluded the late spring passage. There were no summer sightings this year. For the early fall passage there was one on July 4 with two on July 21 and three on August 4, then singles seen on August 9 and August 11.

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

This was a rare passage migrant. For the early fall passage there was an adult by the Lake Level Canal on August 20 with three immatures at the Sand Farm on September 10. This is still (2013) the highest count for Zellwood. Exceptionally for the late spring passage an adult flew to the south at the Sand Farm on April 14.

Red-bellied Woodpecker (*Melanerpes carolinus*)

A resident in the wooded borders but it could be seen anywhere. During the Breeding Bird Survey a total of 94 pairs located. Again there was the suggestion of passage in the fall. Early fall records: *there were 14 from June 18 to June 26 with 19 on June 29 and 24 on July 2, then 19 seen on July 4 with 17 on July 6, 16 on July 9, 14 on July 13 and 12 on July 19. There were 14 on July 21 with 17 on July 23, then 15 seen on July 25 with 13 on July 27. There were 17 on July 30 with 15 on August 5 and eight on August 8. There were 23 on August 10 with ten to August 20. There were 25 on August 24 with 22 on August 27, 20 on September 3 and ten on September 7. Now we come to what may be an actual passage. There were 17 on September 10 and September 14 with 20 on September 16 and 39 on September 19, then 13 seen on September 21. There were 22 on September 24 with 35 on September 29, then 34 seen on October 5 with 32 on October 12, 25 on October 15 and 12 on October 19. That was the end of the event. There were 20 on October 22 with 22 on October 26, then 12 seen on October 29 with ten on November 2. There were 12 on November 5 with 16 from November 9 to November 16, then ten seen to November 28 with eight on December 1 and five on December 3. That closed what appeared to be a single fall passage. For the winter passage there were ten on December 7 and December 9 with six to December 17. There were nine on December 21 with 13 on December 28 and 14 on January 4, then ten seen on January 11. That completed the winter passage. For the early spring passage there were 15 on January 14 and January 16 with 18 on January 21, then nine seen on January 25 with six on January 28. There were 18 on February 2 with 11 on February 4 and six on February 8. There were 12 on February 11 and February 16 with 17 on February 22, then 11 seen on February 27. That concluded the early spring passage. For the main spring passage there were 12 on February 29 with 21 on March 3, then 13 seen on March 7 with three on March 10. There were 12 on March 14 with 19 on*

March 19, then nine seen on March 22 with seven on March 24. There were 22 on March 28 with ten on March 31 and eight on April 4. There were 15 on April 7 with 17 on April 18, 23 on April 21, 28 on April 23, 33 on April 25 and 35 on May 2, then 27 seen on May 10 with 13 on May 16. That was the end of the main spring passage. For the summer passage there were 24 on May 20 with 36 on May 26, then 27 seen on May 30 with 12 on June 2. There were 16 on June 6 with 20 on June 9 and June 13, then 16 seen on June 16 with 13 to June 23. There were 22 on June 28 and July 2 with 19 on July 4 and 14 to July 11. There were 18 on July 14 with 16 on July 21 and nine to July 29. That was the end of the summer passage. For the early fall passage there were 13 on August 1 with 17 on August 4, *then 14 seen to August 16.*

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

This was a rare passage migrant and winter visitor; the access to the Nursery came too late for this species this year. For the fall passage there were three on October 22 with singles on November 5, November 9 and November 20. That was the fall passage. For the winter passage there were singles on December 1, December 15, December 28, December 31 and January 4. For the early spring passage there were singles on January 11 and January 14 with two on January 16, then singles seen on January 21 and January 25. That closed the early spring passage. For the late spring passage there was one by the Hooper Farms Road gate on March 3 with one at the Sand Farm on March 10.

Downy Woodpecker (*Picoides pubescens*)

A resident in the wooded borders; there was the suggestion of passage in the fall. During the Breeding Bird Survey a total of 38 pairs located. Early fall records: *there were three on June 26 with four on June 29 and July 2, then two seen on July 6 with one on July 9. There were three from July 13 to July 23 with four on July 25, then two seen to August 8. There were six on August 10 with one on August 13.* For this year there were five on August 20 with eight on August 24, then six seen on August 27 with five on September 1. What may have been an actual passage started here. There were six on September 3 and September 10 with ten on September 14, then nine seen on September 19 with six on September 21 and five on September 24. There were 22 on September 29 with 14 on October 5, ten on October 9, six on October 15, four to October 22, three on October 26 and two on October 29. The passage appeared to end on October 15. There were three on November 2 and November 5 with four on November 9 and six on November 16, then three seen on November 23 with two to December 1 and one on December 3. That closed what appeared to be a single fall passage. For the winter passage there were three on December 7 with two on December 15 and one on December 17. There were two on December 21 and December 26 with four on December 28,

then three seen on December 31 with two on January 4 and one on January 11. That completed the winter passage. For the early spring passage there were four on January 14 and January 16 with five on January 19 and January 21, then two seen to January 28. There were six on February 2 with four on February 4 and two on February 8. There were five on February 11 with four on February 16, two on February 18 and one on February 22. There were four on February 27 with one on February 29. That concluded the early spring passage. For the late spring passage there were four on March 3 and March 7 with singles to March 14. There were two on March 19 and March 22 with singles to April 14. That was the end of the late spring passage. For the summer passage there were three on April 18 with one on April 21. There were two on April 23 with four from April 25 to May 2, then three seen to May 16 with one on May 20. There were three on May 14 and May 16 with one on May 20. There were three on May 23 with nine on May 26, then six seen on May 30 with three on June 2. There were six on June 6 with seven on June 9 and June 16, then five seen to June 23. There were nine on June 28 with five on July 2 and two to July 7. That ended the summer passage. For the early fall passage 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 ten on August 18 and 11 on August 23, then ten seen on August 27 with five on August 30.*

Red-cockaded Woodpecker (Picoides borealis)

This was a vagrant. An adult landed in the scrub cover by the Sand Farm Bridge at 8.00 am on June 23, 2003. It then took off and flew out over the fields to the east. This is the only record for Zellwood. As I treat sightings after June 21 as relating to the fall passage I am detailing this record here. There is a description in the 5th Zellwood Bird Report.

Northern Flicker (Colaptes auratus)

A resident in the wooded borders; during the Breeding Bird Survey a total of 18 pairs located. Two recently fledged young were seen on July 11. There was the possibility of a minor passage in the fall. For the fall passage there were two on August 20 and August 24 with three on August 27, then singles seen to September 7. There were two on September 14 and September 16 with singles to September 21. There were three on September 24 with one on September 29. That was the early fall passage but it was the main fall passage that might just include a fall passage. For this passage there were four on October 5 with three on October 9 and two on October 12. There were four on October 15 with two to November 5. That was the end of any passage. There were three on November 9 with two on November 16 then singles seen to December 3. That closed the main fall passage. For the winter passage there were two on December 7 with singles to December 26. There were two on December 28 with singles to

January 11. That completed the winter “passage”, there was clearly no passage. For the early spring “passage” there were singles on January 14 and January 16 with three on January 19, then two seen on January 25 with one on January 28. There were four on February 2 with two on February 4 and one on February 8. There were six on February 11 with singles to February 27. That concluded the early spring passage. For the late spring passage there were four on February 29 with two on March 3 and one on March 7. There were two on March 10, March 19 and March 22 with singles to March 28. There were two on March 31 with singles to April 23. That was the end of the late spring passage. For the summer passage there were two on April 25 with three to May 2 and four from May 5 to May 20, then three seen on May 23 with singles to June 16. That was the summer passage. For the early fall passage there were two from June 20 to July 2 with three on July 7 and five on July 11, then singles seen to July 18. There were also two from July 21 to August 11.

Pileated Woodpecker (*Dryocopus pileatus*)

Another resident of the wooded borders; during the Breeding Bird Survey a total of 13 pairs located. Whilst I cannot identify any passage there did appear to be a series of influxes. For the early fall passage there were two on August 20 with three on August 24, then two seen on August 27 with one on September 7 and September 10. There were four on September 19 with two on September 24 and one on September 29. That was the early fall passage. For the main fall passage there were five on October 2 with three on October 5, two on October 9 and one on October 12. There were three on October 15 with two to November 9 and one on November 12. There were three on November 16 with two on November 23 and singles to December 1. That closed the main fall passage. For the winter passage there were three on December 7 and December 15 with singles to December 26. There were two on December 28 with four on December 31, then two seen on January 4 with one on January 11. That completed the winter passage. For the early spring passage there were two on January 14 with three from January 16 to February 2, then two seen to February 11 with singles to February 18. That was such a drawn out event that it says that this was not really an influx. There were four on February 22 with two on February 27 and one on February 29. That concluded the early spring passage. For the main spring passage there were two on March 3 with three on March 7, then singles seen to March 14. There were four on March 19 with two on March 22. There were three on March 24 with four on March 28, then two seen on March 31 with singles to April 18. There were three on April 21 with two on April 25 and singles to May 2. That was the end of the main spring passage so for the summer passage there were five on May 5 with three on May 10, two on May 16 and singles to May 23. There were three on May 26 with two to June 13 and singles to July 2. That finished the summer passage. For the early fall passage there were there were two on July 4 and July 7 with singles to July 18. There were two on July 21 and July 24 with

three on July 29, then singles seen to August 4. Finally there were two on August 9 and August 11.

Eastern Wood-Pewee (*Contopus virens*)

For this year this was a very rare fall passage migrant. For the early fall passage there was one by Lake Apopka north of the Lust Road pump house on August 20 with another by Lake Apopka south of the Hooper Farms Road extension on September 3. Finally for the early fall passage there was one at the Sand Farm on September 29. For the late fall passage there was one on the eastern border north of the McDonald Canal on November 2.

Acadian Flycatcher (*Empidonax virescens*)

A quite common fall passage migrant this year, I do wonder how many would have been seen if I had access to the Nursery during this passage. For the early fall passage there was one by Lake Apopka to the south of the Hooper Farms Road extension on August 20 with another north of the Lust Road pump house on September 7. Note the similarity in the dates and locations for these two records with the sightings of the Eastern Wood-Pewee. On September 10 there were four; there were three at the Sand Farm with one by Lake Apopka to the south of the Hooper Farms Road extension. The count of four is still (2013) the highest count for Zellwood. One continued to be seen at the Sand Farm on September 14, September 16 and September 19. On September 14 there was also one on the eastern border north of the McDonald Canal. Those were the records for the early fall passage. For the late fall passage there were three on October 5, I did not note their locations. For the following early fall passage there were two on August 11 by Lust Road.

Alder Flycatcher (*Empidonax traillii*)

This was a vagrant. For the early fall passage there was an adult calling at the Sand Farm on September 14 and September 16.

Least Flycatcher (*Empidonax minimus*)

This was a common passage migrant and winter visitor this year; there are not many (if any) other sites in Florida where this could be said. Whilst I noted the location of all sightings there are just too many records for me to detail them using that data. So for the early fall

passage there were singles on August 27 (the Sand Farm) and September 19 with two on September 21 and three on September 24, then one seen on September 29. That was the extent of the early fall passage. For the main fall passage there were two on October 2 with three on October 5, then two seen on October 9 with one on October 12 and October 15. There were two on October 19 with five on October 26, then two seen on October 29. There were five on November 2 with 11 on November 5 and 14 on November 12, then nine seen on November 16 with one on November 20. That appeared to be the end of the main fall passage. For the winter passage there were six on November 23 with 12 on November 28, then seven seen on December 1 with six on December 3 and three on December 7. There were eight on December 9 with two to December 21. There were four on December 26 with 11 on December 28, 13 on December 31, 15 on January 4, 18 on January 14 and 20 on January 19, then 14 seen on January 21 with eight to February 4 and four on February 8. At some point a winter influx was hijacked by an incoming early spring influx so I cannot identify the join between these two events. The count of 20 was the highest count for Zellwood but the highest count is now (2013) that of 23 on December 19, 2007. To continue with the early spring passage there were 12 on February 11 with seven to February 22 and four to March 3. That ended the early spring passage. For the late spring passage there were five on March 7 and March 10 with seven on March 19, then six seen on March 24 with four on March 31. Later there were two on April 18 with singles on April 21 and April 23. I estimated that I saw 19 birds in the fall with 33 in the winter and 26 in the spring. This comes to a total of 78 birds making this the best year to date (2013).

Eastern Phoebe (*Sayornis phoebe*)

This was a very common fall passage migrant with decreasing numbers through to the spring. For the fall passage there were five on October 5 with ten on October 9, 18 on October 12, 39 on October 15, 191 on October 19, 268 on October 22 and 416 on October 26, then 315 seen on October 29 with 210 on November 2, 171 on November 5 and 108 on November 9. That influx lasted over a month; the count of 416 is still (2013) the highest count for Zellwood. There were 216 on November 12 with 158 on November 16 and 143 on November 20. There were 171 on November 23 with 120 on December 1 and 72 on December 3. That closed the fall passage. For the winter passage there were 125 on December 7 with 111 on December 15, 69 on December 21 and 62 on December 26. There were 96 on December 28 with 125 on December 31, then 108 seen on January 4 with 66 on January 11. That completed the winter passage. For the early spring passage there were 116 on January 14 with 119 on January 16, then 109 seen on January 19 with 108 on January 21, 92 on January 25 and 54 on January 28. There were 111 on February 2 with 85 on February 4 and 51 on February 8. There were 88 on February 11 with 67 on February 16 and 54 on February 18. There were 91 on February 22 with 37 on February 27. That concluded the early spring passage. For the late spring passage there

were 73 on February 29 with 72 on March 3, 57 on March 10, 15 on March 14, eight on March 19, three on March 24 and singles on March 28 and April 4.

Vermillion Flycatcher (*Pyrocephalus rubinus*)

This was a vagrant. For the late fall passage there was a female at the Sand Farm on October 22 with an immature male by Pole Road on November 2.

Ash-throated Flycatcher (*Myiarchus cinerascens*)

A quite common winter visitor and spring passage migrant; the greatest numbers were seen during the early spring passage. For the fall passage there was one on November 5. For the winter passage there were two on December 1 and December 7 with three on December 9, then singles seen on December 15 and December 21. There were two on December 26 with three on December 28 and December 31, then two seen on January 4 with one on January 11. That completed the winter passage. For the early spring passage there were three on January 14 and January 19 with five on January 21 and ten on February 2, then four seen on February 8 with two on February 11 and singles to February 27. That closed the early spring passage. For the late spring passage there were singles on March 3, March 7, March 10 and March 14. Exceptionally there were also two on April 7. I estimated that there was one for the fall passage, eight for the winter passage and 23 for the spring passage; making for a total of 32 birds. Whilst I have not detailed them I do have a record of where the birds were seen.

Great Crested Flycatcher (*Myiarchus crinitus*)

A summer visitor to the wooded borders; there was little to show a separate passage. During the Breeding Bird Survey a total of 33 pairs located. Early fall records: *there were four from June 23 to July 4 with ten on July 6, then two seen to July 21 with singles to July 27. There were two from July 30 to August 8 with eight on August 10, then four seen on August 20 with three on August 27, two to September 7 and one on September 10.* That marked the departure of the summer visitors and the end of the early fall passage. For the late fall passage there was one on October 5. There were no winter records. For the spring passage there were singles on March 22 and March 28 with two on April 7 and four on April 18, then one seen on April 21. There were two on April 23 with three on April 25, seven on April 28, ten on May 2 and 15 on May 5, then eight seen on May 14 with four to May 20. That closed the spring passage. For the summer passage there were ten on May 23 with six on May 26 and one on May 30. There were two on June 2 with four on June 6 and five on June 9, then two seen on June 13 with one on

June 16. That ended the summer passage. For the early fall passage there were two on June 20 with four on June 28 and 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.

Brown-crested Flycatcher (*Myiarchus tyrannulus*)

This was a vagrant. For the early spring passage there was one at the Sand Farm on January 19 with another by Lust Road on February 2.

Tropical Kingbird (*Tyrannus melancholicus*)

This was a vagrant that stayed for the winter! There was one by the pump house at the end of Lust Road on November 12. It stayed through the fall, the winter, the early spring passage and the late spring passage.....Up to April 21 it stayed by the pump house but on April 23 it was at the junction of Lust and Airport Roads. It stayed at this last location to April 28 when it was last seen. From November 20 to January 28 it was joined by a Gray Kingbird, that species is not meant to winter in Florida. This had to be one of the major events of the year.

Cassin's Kingbird (*Tyrannus vociferans*)

This was a vagrant that has taken to wintering at Zellwood. There was one by Hooper Farms Road from December 26 to March 28 with two from February 21 (per Lyn Atherton) to March 10. The second bird was an immature. The count of two is still (2013) the highest count for Zellwood.

Western Kingbird (*Tyrannus verticalis*)

A passage migrant and winter visitor, this species roosted in citrus across CR 437 from Hooper Farms Road. For the fall passage there was one on October 19 with two on October 26, then one seen on November 2. There were four on November 5 and November 9 with six on November 16 and November 23, then five seen on November 28 with one on December 3. That closed the fall passage. For the winter passage there were three on December 7 with 13 on December 15 and December 20, then eight seen to December 26. There were 28 on December 28 and December 31 with 18 on January 4 and three on January 11. That completed the winter passage. For the early spring passage there were 18 on January 14 with 21 on January 16, then

eight seen on January 21 with one on January 25. There were two on January 28 with 11 on February 2, then ten seen on February 4 with four on February 16. There were 14 on February 22 with 23 on February 29, then 11 seen on March 7 with six on March 10. That was the end of the early spring passage. For the late spring passage there were eight on March 14 with 13 on March 19, then ten seen on March 22 with two on March 28 and one on April 4. There were four on April 7 with later singles on April 21, April 23 and May 2. These last individuals were all seen by the Hooper Farms Road gate.

Eastern Kingbird (*Tyrannus tyrannus*)

A fall passage migrant with lesser numbers in the spring; there were indications that two pairs may have bred however breeding was not proved. Early fall records: *there were singles on June 26, June 29 and July 6 with two on July 9, then singles seen again on July 13, July 19 and July 21.* For this year there was one on August 24 with two on August 27 and three on September 1, then one seen on September 3. There were three on September 10 with 14 on September 16 and 15 on September 19, then two seen on September 21 with one on September 24. That was the early fall passage. For the late fall passage there was one on October 12. For the spring passage there was one on March 31 with four on April 7 and 16 on April 18, then nine seen on April 21 with one on April 25. There were also two on April 28 with three on May 2 and May 5, then one seen on May 10. That was the end of the spring passage. For the summer passage there were four on May 20 with three on May 23 and singles to June 13. There was one on June 20 with two on June 28, then singles seen on July 2, July 4, July 11 and July 21. It is interesting that in both years there was a gap after July 21, perhaps that date marks the departure of the local summer visitors.

Gray Kingbird (*Tyrannus dominicensis*)

This is meant to be a vagrant but this year it was a winter visitor and a passage migrant; this was perhaps the first time that this species has wintered in the United States. For the early fall passage there was one by Lake Apopka to the north of the Lust Road pump house on August 20. For the main fall passage there was an immature by Interceptor Road on October 2 with an adult by Lust Road on October 9. There was also one by the McDonald Canal on November 5, it was not aged. That was the extent of the main fall passage that on its own made for an exceptional year. A Tropical Kingbird had taken up residence at the Lust Road pump house on November 12 and a Gray Kingbird joined it on November 20. They stayed together until January 28 when the Gray Kingbird was last seen. In the late spring there was one by Lake Apopka to the south of the Hooper Farms Road extension on April 23. Just to complete the year there was

one by Pole Road on June 9. I do not know whether to treat this as a late spring passage migrant or as a summer passage migrant.

Scissor-tailed Flycatcher (*Tyrannus forficatus*)

An uncommon passage migrant and winter visitor, most sightings were by either Lust or Hooper Farms Road. For the late fall passage there was an adult by Hooper Farms Road on October 19 and October 29. There were two immatures at the eastern end of the McDonald Canal on November 16. None were now aged or their locations noted. There was one on November 23 with two on November 28. That closed the late fall passage. For the winter passage there were three on December 26 and December 28 with seven on December 31, then three seen on January 4. That completed the winter passage. For the early spring passage there was one on January 14 with two on January 16, then one seen on February 4. Lyn Atherton saw seven at the roost on February 21; so had this flock been around since December 31? There were four on February 22 with five on February 29, then two seen on March 3 with one on March 7. That was the early spring passage. For the late spring passage there were two on March 14 with three on March 19, then singles seen on March 22, March 24 and March 28.

Loggerhead Shrike (*Lanius ludovicianus*)

Present all year even though numbers were very low from January to April. Despite this during the Breeding Bird Survey five pairs were located. Recently fledged young were first seen from May 20. Early fall records: *there was one on June 26 with three on June 29, then two seen on July 2. There were three on July 4 with five on July 6, then four seen to July 19 with two on July 21 and one on July 23. There were three on July 25 and July 27 with two to August 10 and one on August 13.* For this year there were six on August 20 with two on August 24. There were three on August 27 with five on September 1, then one seen on September 3. There were four on September 7 with five on September 10 and seven on September 14, then six seen on September 16 with five on September 19. There were nine on September 21 with three on September 24. That was the early fall passage. For the main fall passage there were five from September 29 to October 5 with seven on October 9, then five seen to October 19 with three to October 26. There were four on October 29 with five on November 2, then four seen to November 9. There were seven on November 12 with six on November 16, three on November 20, two on November 23 and one on November 28. That closed the main fall passage. For the winter passage there were three on December 1 and December 3 with two on December 7. There were three on December 9 with six on December 15, then one seen on December 17. There were two on December 20 with four on December 21, then three seen on December 28 with two to January 4 and one on January 11. That completed the winter passage. For the early

spring passage there was one on January 14 with five on January 16, then singles seen to January 25. There were two on January 28 and February 2 with three on February 4, then two seen to February 16. There were three on February 18 with five on February 22, then four seen on February 27 with one on February 29. That concluded the early spring passage. As this species nests so early for the summer passage there were singles from March 3 to March 19 with two from March 22 to March 28, then singles seen to May 5. That finished the summer passage so for the extended early fall passage there were two on May 10 with three on May 14 and May 16, five on May 20 and ten on May 23, then five seen on May 30 with one on June 2. There were two on June 6 with three on June 9 and four on June 13, then two seen to June 20. 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 one on August 11.

White-eyed Vireo (*Vireo griseus*)

A common resident with a significant fall passage; during the Breeding Bird Survey a total of 16 pairs located. Early fall records: *there were three on June 23 with four on June 26 and July 2, then two seen to July 6. There were four on July 9 and July 19 with two on July 21 and one on July 23. There were two from July 25 to August 20 with singles to August 27.* There were three on September 1 with two on September 3. Now the main passage started there were five on September 7 and September 14 with nine on September 16, 14 on September 19 and 32 on September 24, then 23 seen on September 29 with 17 on October 2. There were 53 on October 5 with 40 on October 9, 36 on October 15, 13 on October 19, 12 on October 22, 11 on October 29, nine on November 2, five on November 5 and one on November 9. That ended this event the decline lasted over a month. The count of 53 was the highest count for Zellwood but the highest count is now (2013) that of 74 on October 5, 2008. That is the third peak count on October 5 (2000, 2003 and 2008). There were five on November 12 with six on November 16, then five seen on November 23 with two on November 28. That closed the fall passage. For the winter passage there were singles on December 7 and December 9 with three on December 15, then one seen on December 21. There were three on December 26 with five on December 31, then two seen on January 4. That completed the winter passage. For the early spring passage there were five from January 11 to January 21 with two to January 28. There were three on February 2 with five to February 8 and 12 on February 11, then eight seen to February 22 with seven on February 29, five on March 3 and two on March 7. That concluded the early spring passage. For the main spring passage there were two on March 10 with nine on March 14, then six seen to March 24. There were ten on March 28 with 11 on March 31, then ten seen on April 7 with eight on April 14 and seven to April 23. There were 11 on April 25 with 12 on April 28, then 11 seen on May 2 with eight on May 5. That was the end of the main spring passage. For the summer passage there were 14 on May 10 with seven to May 16 and three on May 20.

There were eight on May 23 with two to June 6 and one on June 9. There were two on June 13 with four on June 16 and six on June 23, then five seen on June 28 with two on July 2. That closed the summer passage. For the early fall passage there were six from July 4 to 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.

Bell's Vireo (*Vireo bellii*)

This was a vagrant. For the early fall passage there was an adult at the Sand Farm on September 3.

Yellow-throated Vireo (*Vireo flavifrons*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 14 with another on the eastern border north of the McDonald Canal on September 16.

Blue-headed Vireo (*Vireo solitarius*)

A very uncommon passage migrant and winter visitor; access to the Nursery came too late for this year's records. For the fall passage there were singles on October 22, October 29 and November 16. For the winter passage there were two on December 1 with one on December 7. There were two on December 15 with later two on December 28, then singles seen on December 31, January 4 and January 11. That completed the winter passage. For the early spring passage there were singles on January 14 and January 16 with three on January 19, then singles seen to February 8. There were six on February 11 with one on February 16. The count of six was the highest count for Zellwood but the highest count is now (2013) that of 19 on November 23, 2008. There were three on February 18 with later one on February 29. That closed the early spring passage, there were no later records.

Philadelphia Vireo (*Vireo philadelphicus*)

This was a vagrant. For the late fall passage there was one by Lake Apopka north of the Lust Road pump house on October 5.

Red-eyed Vireo (*Vireo olivaceus*)

This was an uncommon passage migrant in the wooded borders. Early fall records: *there were singles on July 30 and August 8*. For this year there were singles on August 20, September 3, September 19, September 21 and September 24. That was the early fall passage. For the main fall passage there were nine on September 29 with three on October 2, two on October 5 and singles on October 12 and October 22. That closed the main fall passage. For the spring passage there was one on April 28 with two on May 5, then singles seen on May 10 and May 20. For the early fall passage there were singles on August 8 and August 11 (these were at the Nursery).

Blue Jay (*Cyanocitta cristata*)

A resident in the wooded borders, there was a significant fall passage. During the Breeding Bird Survey a total of 70 pairs located. Early fall records: *there were nine on June 23 with 19 on June 26, 28 on June 29 and 31 on July 4, then 22 seen on July 6 with 17 on July 9. There were 25 on July 13 with 19 on July 19 and 17 on July 21. There were 21 on July 23 with 25 on July 27, then 23 seen on August 5 with 18 on August 10 and 15 on August 13*. For this year there were 22 on August 20 with 25 on August 24 and 29 on August 27, then 24 seen on September 1 with 20 on September 7 and 12 on September 10. Now the major event started there were 34 on September 14 with 47 on September 19, 76 on September 24 and 83 on September 29, then 80 seen on October 2 with 68 on October 9 and 64 on October 12. There were 102 on October 15 with 46 on October 19, 29 on October 22 and 20 on October 26. The count of 102 was the highest count for Zellwood, but the highest count is now (2013) that of 180 on October 17, 2007. Again note the closeness in the dates. There were 23 on October 29 with 28 on November 2. That was the end of the major event. Numbers were now much lower through to January. After the 28 on November 2 there were 12 on November 5 with nine on November 9. There were 12 on November 12 with 19 on November 16, then 13 seen on November 23 with two to December 3. That closed the fall passage. For the winter passage there were 16 on December 7 with six on December 9. There were nine on December 15 with ten on December 17, 15 on December 26 and 20 on December 28, then ten seen on December 31 with eight on January 4. That completed the winter passage. For the early spring passage there were 14 on January 11 with 18 on January 14 and 21 on January 19, then 16 seen on January 21 with 11 on January 25. There were 12 on January 28 with 38 on February 2, then 17 seen on February 4 with ten on February 8. There were 32 on February 11 with 14 on February 16. There were 16 on February 18 with 24 on February 22, then 22 seen on February 27 with 14 on February 29. That concluded the early spring passage. For the main spring passage there were 24 on March 3 with 15 on March 7 and 11 on March 10. There were 26 on March 14 with 18 on March 22, 16 on March 28, 13 on March 31 and ten on April 4. There were 13 on April 7

with 16 on April 14, 19 on April 18 and 20 on April 21, then 19 seen on April 23 with 14 on April 25 and 11 to May 2. That was the end of the main spring passage. For the summer passage there were 21 on May 5 with 20 to May 16, 17 on May 20, 16 on May 26, nine on May 30 and eight on June 2. There were 11 on June 6 with 19 on June 9, then 14 seen on June 16 with 12 on June 20. There were 19 on June 23 with 27 on June 28, then 16 seen on July 2. That closed the summer passage. For the early fall passage 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*.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

This was a vagrant even though there is a population within five miles. For the winter passage there was one at the Sand Farm on December 31. For the late spring passage there was another at the Sand Farm on April 7. Two in one year is unheard of.

American Crow (*Corvus brachyrhynchos*)

During this year it was seen during the winter and the spring passages; it was mainly absent in the summer and the fall. Early fall records: *there were six on July 4 with two on August 13*. Those were the only records for the early fall passage. For the late fall passage there was one on October 15 that was it. For the winter passage there were two on December 1 and December 7 with singles on December 15, December 21, December 28 and December 31. That completed the winter passage. For the early spring passage there was one on January 11 with two on January 14 and three on January 19, then two seen on January 21. There were three on February 4 with singles on February 8 and February 11. There were also two on February 16. That closed the early spring passage. There was now a two week break until the start of the late spring passage. For the late spring passage there were singles on February 29, March 10, March 19 and March 22 with three on March 28, then singles seen on March 31, April 7, April 18, April 23 and April 28. That was the end of the late spring passage. For the summer passage there were two on May 16 with one on May 23. There was one on June 6; there were no further sightings until August so for the early fall passage there were two on August 1.

Fish Crow (*Corvus ossifragus*)

There were a total of ten pairs located during the Breeding Bird Survey otherwise this was a passage migrant and winter visitor with the greatest numbers from late November to

mid-February. Early fall records: *there were 21 on June 29 with 26 to July 4 and 28 on July 6, then three seen on July 9. There were seven on July 13 with 110 on July 19, then 45 seen on July 23 with three on July 25. There were four on July 27 with 14 on July 30, 28 on August 5 and 76 on August 8, then 39 seen on August 10 with one on August 13. Included in these figures were the counts for the passage to the south-east with the birds flying very fast in tight flocks as if driven; there were 110 on July 19 with 22 on July 21, 45 on July 23 and 76 on August 8.* For this year there were singles on August 24, August 27 and later September 29. That was the early fall passage. For the late fall passage there were four on October 12 with ten on October 19, then two seen to November 5. There were three on November 9 with nine on November 12, then one seen on November 16. There were 160 on November 23 with 86 on November 28, two on December 3 and one on December 7. That closed the late fall passage. For the winter passage there were nine on December 9 with 40 on December 21, then four seen on December 28. That completed the winter passage. There was now a two week gap in the sightings. For the early spring passage there were 850 on January 14 with 390 on January 19 and two on January 21. There were three on January 25 with 60 on January 28, then 20 seen on February 2 with one on February 8. There were 160 on February 11 with 455 on February 16, then one seen on February 18. There were 11 on February 22 with ten on February 27 and three on February 29. That concluded the early spring passage. This species nests early so for the summer passage there were 16 on March 3 with 20 on March 7, then four seen to March 14. There were five on March 19 with nine on March 24, 14 on March 28 and 131 on March 31, then eight seen on April 4 with six on April 7. There were eight on April 14 with 13 on April 18, and 19 on April 21, then 15 seen to April 25 with 12 on May 2 and 11 on May 5. There were 19 on May 10 with 13 on May 14, eight on May 20, seven on May 26, six on May 30 and four on June 2. That closed the summer passage. For the post-breeding gathering there were six on June 6 and June 9 with 12 on June 13 and 24 on June 16, then 16 seen on June 20 with nine on June 23. There were 46 on June 28 with six 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.* Numbers for this event were exceptionally low this year.

Purple Martin (*Progne subis*)

A non-breeding summer visitor there was for this year an exceptionally strong fall passage. Early fall records: *there were 11 on May 18 with 13 on May 21 and 1,440 on May 26, then 395 seen to June 4 with 370 on June 8, 320 on June 16, 180 on June 18, 155 on June 23, 54 on June 26, 28 on June 29 and two on July 2. That decline went on for over a month. There were 11 on July 4 with 610 on July 6, then 15 seen on July 13 with later seven on August 8 and two on August 10.* For this year there were three on August 20. There were no later fall records. For the spring passage there were four on January 21 and January 25 with 23 on January 28, then

one seen on February 2. There were nine on February 4 with 20 on February 8 and 40 on February 11, then 13 seen on February 18 with one on February 22. There were two on February 27 with 23 on February 29, then one seen on March 3. That closed the spring passage. For the summer passage there were two on March 7 with 21 on March 10, then 11 seen on March 22 with eight on March 24, two on March 28 and one on March 31. There were seven on April 4 with 23 on April 14, then two seen to April 21 with one on April 23. There were two on April 28 with singles to May 10. That completed the summer passage. For the fall passage there were 14 on May 14 with 19 on May 20, 73 on May 23 and 345 on May 26, then 210 seen on June 2 with 140 on June 9, 43 on June 13 and 22 on June 16. In an ordinary year that would be considered a heavy passage however there were 2,850 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.

Tree Swallow (*Tachycineta bicolor*)

A passage migrant and winter visitor; again the biggest numbers were seen during the spring passage. Early fall record: *there was one by Lust Road on July 30*. For the main fall passage there were singles on September 10 and September 14 with five on September 19, then one seen on September 21. There were two on September 24 with 11 on September 29 and 31 on October 2, then 20 seen on October 5. There were 23 on October 9 with 212 on October 12, then 51 seen on October 15 with seven on October 19. There were 30 on October 22 with 31 on October 29, then 30 seen on November 2 with 29 on November 5. There were 32 on November 9 with 58 on November 16, 170 on November 23 and 340 on November 28, then 29 seen on December 1 with four on December 3. That closed the fall passage. For the winter passage there were 137 on December 7 with 77 on December 15 and one on December 17. There were 11 on December 21 with 545 on December 26, then 171 seen on December 28 with 53 on December 31 and 45 on January 4. That completed the winter passage. For the early spring passage there was one on January 11 with 100 on January 14, then 55 seen on January 16 with 11 on January 19. There were 33 on January 21 with 72 on January 25, then seven seen on January 28 with six on February 2. There were 41 on February 4 with 280 on February 11, then 18 seen on February 16. There were 26 on February 18 with 875 on February 22, then one seen on February 27. That concluded the early spring passage. For the main spring passage there were 44 on February 29 with 129 on March 3, then 84 seen on March 7. There were 111 on March 10 with 300 on March 14, then 227 seen on March 22 with 54 on March 24. There were 225 on March 28 with 1,400 on March 31 and 6,200 on April 7, then 144 seen on April 14 with 26 on April 18, 20 on April 21, 11 on April 23 and five on April 25. There were eight on May 10 with 15 on May 14. That was the end of the main spring passage. There were no summer sightings. For the early fall passage there were single juveniles by Lust Road on July 14 and July 21.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

This was an uncommon passage migrant; exceptionally there were no June sightings. Early fall record: *there were two on August 10*. For this year there were two on August 20 and August 27 with later singles on September 14 and September 19. That was the extent of the early fall passage. For the late fall passage there were two on September 29. Later there were two on October 9 with one on October 15. Finally for the late fall passage there was one on November 5. For the spring passage there was one on March 10. There were eight on April 4 with later one on April 23. There were no later spring records. The count of eight was the highest count for Zellwood but the highest count is now (2013) that 28 on October 11, 2004. For the early fall passage there was one on July 7 with two on July 21, then one seen on July 24.

Bank Swallow (*Riparia riparia*)

A quite common fall passage migrant; there were lower numbers in the spring. Early fall records: *there were singles on July 19 and July 21 with five on August 10*. For this year flying to the south there were 14 on August 20 with 56 on August 24 and 83 on August 27, then 30 seen on September 1. All later sightings relate to birds off passage feeding out over the fields. There were 29 on September 3 with three on September 7 and one on September 10. There were three on September 14 with two to September 21 and one on September 24. That was the early fall passage. Finally for the late fall passage there was one on October 12. For the spring passage there was one on April 14 with two on April 18, three on May 2 and five on May 5, then singles seen on May 10 and May 14. Finally for the spring passage there was one on May 30. For the early fall passage there was one on July 21 with three on August 9.

Cliff Swallow (*Petrochelidon pyrrhonota*)

A quite common fall passage migrant, there were a few spring sightings. Very exceptionally there was one from the south-western United States. Early fall records: *there were singles on June 11, June 16, July 2 and August 5 with three on August 8, then one seen on August 10*. For this year a total of ten flew to the south on August 20. Also on August 20 there was an adult in breeding plumage at the Sod Farm, this showed the characteristics of the south-western race *P.p.melanogaster*. There is a description in Appendix B. Also flying to the south were two on August 24 with four on August 27 and two on September 1. The later records relate to birds feeding over the fields or perched on the utility wires. There were 41 on September 14 with one on September 19. That closed the fall passage. For the spring passage there were five on April 14 with one on April 21. Finally for the spring passage there were four on April 25. For the early fall passage 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.

Cave Swallow (*Petrochelidon fulva*)

This was a vagrant. There were two adults of the western race *P.f.pelodoma* on April 14; they were making their way to the west along the shore of Lake Apopka to the north of the Lust Road pump house. There had been a very strong westerly wind blowing for three days.

Barn Swallow (*Hirundo rustica*)

A summer visitor and passage migrant; there was a very strong fall passage this year. During the Breeding Bird Survey a total of 36 pairs located. The first fledged young (four) were seen by Interceptor Road on May 14. Early fall records: *there were 59 on June 26 with 60 on June 29, 62 on July 4, 85 on July 6, 107 on July 9 and 170 on July 19, then 90 seen on July 21 with 82 on July 25, 49 to July 30 and 43 on August 5. There were 330 on August 8 with 64 on August 10 and 50 on August 13.* For this year there were flying to the south 332 on August 20 with 2,600 on August 24, 2,025 on August 27 and 1,300 on September 1. The count of 2,600 was the highest count for Zellwood but the highest count for Zellwood is now (2013) that of 19,500 on August 29, 2012. In the area there were 750 on September 3 with 415 on September 10, 235 on September 19, 152 on September 21, 85 on September 24, 44 on October 2, 22 on October 5, 18 on October 9, 13 on October 15 and two on October 19. That decline lasted for over six weeks; such events do suggest that there were no arrivals during that period. There were however 33 on October 22 with 30 on October 29, 14 on November 2, eight on November 5 and six on November 12. These larger at the end of passage influxes are not uncommon it would appear that this influx gathered up all the stragglers. That was the end of the fall passage. For the spring passage there was one on February 22 with four on March 3, 11 on March 7, 17 on March 14, 22 on March 19, 28 on March 22, 32 on March 24, 44 on March 28 and 49 on March 31, then 47 seen on April 7 with 39 on April 14, 37 on April 18 and 34 on April 21. There were 45 on April 23 with 49 to April 28, 65 on May 2 and 83 on May 5, then 77 seen on May 14 with 70 on May 16 and 57 on May 20. That completed the spring passage. Locally the summer will have started way back in mid-March with the first young on the wing on May 14. However more northerly populations were still passing through to May 20. So for the combined summer passages there were 60 on May 23 with 116 on May 26, then 83 seen on May 30 with 62 on June 6, 59 on June 9 and 56 on June 13. That influx showed the local young fledging and then dispersing. There were 63 on June 16 with 69 on June 23, then 47 seen on June 28 with 40 on July 2. That was the end of the summer passage. For the early fall passage 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. Flying to the south there were 105 on July 29 with 48 on August 1, 118 on August 4 and 120 on August 9. There were also 53 seen in the area on August 11.

Carolina Chickadee (*Poecile carolinensis*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 7.

Tufted Titmouse (*Baeolophus bicolor*)

A resident in the wooded borders; there was nothing to suggest passage. During the Breeding Bird Survey a total of 16 pairs located. The first fledged young (two) were seen on June 2. Normally one to two seen daily through the year; there were higher counts of: three on September 10, three on November 5, three on December 28, six on April 18, three on April 23, four on June 2, four on June 16, four on July 29, eight on August 1, five on August 4 and four on August 11. The count of eight was the highest count for Zellwood; the highest count is now (2013) that of 16 on September 15, 2010. The higher counts in late July and early August relate to roaming family parties.

Brown-headed Nuthatch (*Sitta pusilla*)

This was a vagrant. There was one in a group of pines at the Sand Farm on December 17; a winter record. This was the first record for Zellwood.

Carolina Wren (*Thryothorus ludovicianus*)

A common resident throughout the area; during the Breeding Bird Survey a total of 171 pairs located. Early fall records: *there were 25 on July 19 with 28 on July 21, then 27 seen on July 23 with 25 to July 27. There were 26 on July 30 with 19 on August 5 and 13 on August 8. There were 26 on August 10 with 29 on August 20 and 37 on August 24, then 27 seen on August 27 with 13 on September 1. There were 32 on September 3 with 30 on September 7, 22 on September 14 and 18 on September 16. There were 49 on September 19 with 18 on September 21. That was the end of the early fall "passage". For the late fall "passage" there were 22 on September 24 with 24 on September 29 and 31 on October 5, then 18 seen to October 12. There were 22 on October 15 with 13 on October 19. There were 20 on October 22 with 29 on*

October 26, then 25 seen on October 29 with 20 on November 5, 13 on November 12 and 12 on November 16. There were 17 on November 20 with 15 on November 23, nine on November 28, seven on December 1 and five on December 3. That closed the late fall "passage". For the winter "passage" there were ten on December 7 and December 9 with nine on December 15 and seven on December 17. There were ten on December 21 with 17 on December 26 and 19 on December 28, then 14 seen on December 31 with 11 on January 4 and nine on January 11. That completed the winter "passage". For the early spring "passage" there were 11 on January 14 with 18 on January 16, 20 on January 19 and 21 on January 25, then five seen on January 28. There were 20 on February 2 with 22 on February 4, then 20 seen to February 16 with 15 on February 22 and 13 on February 27. That concluded the early spring "passage". For the main spring "passage" there were 17 on February 29 with 19 on March 3, 23 on March 7 and 28 on March 14, then 25 seen on March 19 with 18 on March 22. There were 19 on March 24 with 29 on March 28 and 30 on March 31, then 18 seen on April 4. There were 21 on April 7 with 22 on April 14, 26 on April 18, 45 on April 21, 47 on April 25 and 61 on May 2, then 53 seen on May 5 with 36 on May 10. That was the end of the main spring "passage". For the summer "passage" there were 39 on May 14 with 43 on May 16, then 39 seen on May 20 with 36 on May 23 and 34 on May 26. There were 39 on May 30 with 28 on June 6 and 15 on June 9. 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 closed the summer "passage" so for the early fall "passage" 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 24 on August 11 *and two on August 15.*

Bewick's Wren (*Thryomanes bewickii*)

This was a vagrant. There was an adult by Lake Apopka to the south of the Hooper Farms Road extension on October 15. This was the second record for Zellwood.

House Wren (*Troglodytes aedon*)

A common fall passage migrant; there were lesser numbers through to the spring. For the fall passage there were four on September 29 with six on October 2, 20 on October 5, 52 on October 9, 101 on October 12, 218 on October 19, 260 on October 22 and 344 on October 26, then 236 seen on October 29 with 230 on November 2. There were 311 on November 5 with 294 on November 12, 213 on November 16, 189 on November 23, 97 on December 1 and 96 on December 3. That closed the fall passage. For the winter passage there were 134 on December 7 with 138 on December 9, then 95 seen on December 15 with 27 on December 17. There were 77 on December 21 with 87 on December 26 and 114 on December 28, then 78 seen on January 4 with 40 on January 11. That completed the winter passage. For the early spring

passage there were 96 on January 14 with 87 on January 19, 77 on January 21, 55 on January 25 and 53 on January 28. There were 109 on February 2 with 75 on February 4, 71 on February 11, 51 on February 16 and 48 on February 18. There were 58 on February 22 with 22 on February 27. That concluded the early spring passage. For the late spring passage there were 50 on February 29 with 72 on March 3, then 57 seen on March 7 with 44 on March 10. There were 48 on March 14 with 52 to March 22 and 96 on March 28, then 53 seen on April 4 with 42 on April 7, 29 on April 18, seven on April 21, three on April 23 and two on April 25. Finally for the late spring passage there were three on April 28.

Sedge Wren (*Cistothorus platensis*)

A passage migrant and winter visitor they were only seen in low numbers. For the fall passage there was one on October 2 with two on October 9 and five on October 12, then two seen on October 15. There were three on October 19 with seven on October 22 and eight on October 26, then five seen to November 2. There were nine on November 5 with eight on November 12 and five on November 16. There were six on November 20 with nine on November 23, then six seen on November 28. That closed the fall passage. For the winter passage there were nine on December 1 with 11 on December 3, then ten seen on December 9 with four on December 15 and two on December 17. There were six on December 21 with seven on December 26, then four seen on December 28. There were five on December 31 with six on January 4, then five seen on January 11. That completed the winter passage. For the early spring passage there were nine on January 14 with six on January 19 and five on January 21. There were nine on January 25 with ten on February 2, then five seen on February 4 with two on February 8. There were four on February 11 and February 16 with five on February 18 and eight on February 22, then four seen on February 29 with three on March 3. That was the early spring passage. For the late spring passage there were four on March 7 and March 10 with three on March 14 and two to March 22. There were three on March 24 and March 28 with two to April 4. There were five on April 7 with two to April 18 and singles to April 28.

Marsh Wren (*Cistothorus palustris*)

A quite common passage migrant and winter visitor the greatest numbers were seen during the fall passage. For the fall passage there was one on September 29 with two on October 2, four on October 5 and nine on October 9, then eight seen to October 15. There were 13 on October 19 with 36 on October 22 and 77 on October 26, then 35 seen on November 2 with 31 on November 5 and 20 on November 9. There were 24 on November 12 with 26 on November 16, then 19 seen on November 20. There were 20 on November 23 with 23 on November 28, then 15 seen on December 3. That closed the fall passage. For the winter

passage there were nine on December 7 with 22 on December 9, then 13 seen on December 15 with 12 on December 21 and 11 on December 26. There were 16 on December 28 with 13 on January 4 and five on January 11. That completed the winter passage. For the early spring passage there were 14 on January 14 with 15 on January 16, 17 on January 19 and 18 on January 21, then ten seen on January 25 with six on January 28. There were 18 on February 2 with four on February 4 and two on February 8. There were 11 on February 11 with six on February 22 and three on February 27. That was the early spring passage. For the late spring passage there were six on February 29 with four on March 3 and three to March 10. There were eight on March 14 and March 22 with 15 on March 24, then 11 seen on March 28 with eight on March 31. There were nine on April 4 with 12 on April 7 and 18 on April 18, then ten seen to April 23 with nine to April 28, five on May 2 and two on May 10.

Ruby-crowned Kinglet (*Regulus calendula*)

Uncommon passage migrant and winter visitor there were no major influxes this year. For the fall passage there were singles on October 2 and October 15 with five on October 19, then singles seen to November 2. There were two on November 5 with four on November 9 and November 12, then two seen on November 16 with one on November 20. There were seven on November 23 with two on November 28. That closed the fall passage. For the winter passage there were three on December 1 with four to December 15, then five seen on December 21 and December 28 with three on January 4. That completed the winter passage. For the early spring passage there were eight on January 11 with six on January 14, four to January 21, three on January 25 and two on January 28. There were three on February 2 with five on February 8 and eight on February 11, then four seen on February 18 with three on February 22. There were four on February 27 with five on February 29, then two seen on March 3. That ended the early spring passage. For the late spring passage there were five on March 10 with three on March 19, two on March 24 and singles on March 28 and March 31.

Blue-gray Gnatcatcher (*Poliioptila caerulea*)

A common passage migrant and winter visitor; there were no summer sightings this year. Early fall records: *there were singles on July 25, July 27, July 30, August 8 and August 10 with three to August 20*, five on August 24 and six on August 27, then five seen to September 3. There were 18 on September 7 with 33 on September 10, then 27 seen on September 14 with 22 on September 16. There were 73 on September 19 with 25 on September 21. There were 42 on September 24 with 47 on September 29, 56 on October 5, 60 on October 9 and 67 on October 15, then 40 seen on October 19 with 38 on October 22. There were 50 on October 26 with 48 on October 29, 46 on November 5, 45 on November 12, 41 on November 16, 30 on

November 20, 26 on November 23 and 17 on November 28. That decline lasted for a month. Clearly the winter passage was a totally separate event from the fall passage. For the winter passage there were 41 on December 1 with 15 on December 3. There were 33 on December 7 with 38 on December 9 and 53 on December 15, then 14 seen on December 17. There were 28 on December 21 and December 26 with 37 on December 28 and 38 on December 31, then 32 seen to January 11. That completed the winter passage. For the early spring passage there were 48 on January 14 with 34 on January 16. There were 35 on January 19 with 48 on January 21, then 40 seen on January 25 with 21 on January 28. There were 69 on February 2 with 111 on February 4, then 67 seen on February 11 with 50 on February 18, 36 on February 22 and 25 on February 27. The count of 111 was the highest count for Zellwood but the highest count is now (2013) that of 173 on December 7, 2007. That concluded the early spring passage. For the late spring passage there were 51 on February 29 with 35 on March 3, 14 on March 10 and one on March 14. That was the end of the late spring passage. There were no summer sightings. For the early fall passage 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.

Eastern Bluebird (*Sialia sialis*)

This was a vagrant. For the winter passage there was an immature at the Sand Farm on December 7.

Veery (*Catharus fuscescens*)

This was a rare fall passage migrant. For the early fall passage there was one on September 16 with two on September 19. There was also one on September 29 with five on October 2. That completed the early fall passage. For the late fall passage there was one on October 12.

Gray-cheeked Thrush (*Catharus minimus*)

This was another rare fall passage migrant. For the early fall passage there was one on September 19 with two on October 2. For the late fall passage there were singles seen on October 9 and October 12.

Swainson's Thrush (*Catharus ustulatus*)

An uncommon fall passage migrant, this is normally the commonest of these three migrant thrushes. For the early fall passage there was one on September 16 with two on September 19, then one seen on September 24. There were two on September 29 with 12 on October 2, then three seen on October 5 with two on October 9 and one on October 12.

Hermit Thrush (*Catharus guttatus*)

For this year it was a very rare passage migrant and winter visitor; access to the Nursery is awaited. For the late fall passage there was one at the Sand Farm on November 2 with one on the eastern border north of the McDonald Canal on November 9. Finally for the late fall passage there was one at the Sand Farm on November 20. For the winter passage there was one at the Sand Farm on December 31. For the early spring passage there was one on the eastern border north of the McDonald Canal on January 21 with one at the Sand Farm on February 11.

Wood Thrush (*Hylocichla mustelina*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on October 2 with one on the eastern border south of the McDonald Canal on October 15.

American Robin (*Turdus migratorius*)

A common early spring passage migrant; there were only small numbers in the fall and the winter. For the late fall passage there was one on November 2 with four on November 12 and November 20. That was the extent of the late fall passage. For the winter passage there were two on November 28 with 42 on December 1, then two seen on December 7. There were two on December 17 with singles on December 21 and December 26. There were three on December 28 with 20 on January 4. That completed the winter passage. For the early spring passage there were three on January 14 with 112 on January 19, then three seen on January 21. There were 61 on January 25 with 1,670 on January 28, then 456 seen on February 2. There were 10,300 on February 4 flying north at dusk to roost; this was at the Lust Road gate. The count of 10,300 was the highest count for Zellwood but the highest count is now (2013) that of 240,000 on December 29, 2006. There were 46 on February 8 with 2,040 on February 11, then seven seen on February 16. There were 21 on February 18 with 10,000 on February 22; these were seen at the Hooper Farms Road gate going to roost. There were 143 on February 27 with 2,800 on February 29, then 12 seen on March 7 with singles on March 10 and March 14.

Gray Catbird (*Dumetella carolinensis*)

There was a major passage in the fall with very much smaller numbers for the winter and the spring passages. Early fall record: *there were two on July 30*. For this year there were three on August 20 with singles on August 24, September 7 and September 19. There were two on September 24 with 23 on September 29, 86 on October 2, 185 on October 5, 413 on October 9 and 660 on October 12, then 272 seen on October 19 with 220 on October 22. The count of 660 was the highest count for Zellwood but the highest count is now (2013) that of 713 on October 17, 2008. There were 339 on October 26 with 213 on October 29 and 193 on November 2. There were 282 on November 5 with 214 on November 12, 170 on November 16, 133 on November 20, 84 on November 23, 77 on November 28 and 46 on December 1. That closed the fall passage. For the winter passage there were 66 on December 3 with 84 on December 9, then 49 seen on December 15 with eight on December 17. There were 90 on December 21 with 53 on December 26, 48 on December 31, 24 on January 4 and 19 on January 11. That completed the winter passage. For the early spring passage there were 74 on January 14 with 56 on January 19, 50 on January 21, 45 on January 25 and 33 on January 28. There were 84 on February 2 with 48 on February 4 and 21 on February 8. There were 59 on February 11 with 40 on February 16, 34 on February 22 and 18 on February 27. That was the end of the early spring passage. For the late spring passage there were 24 on February 29 with 58 on March 3, then 52 seen on March 7 with 20 on March 10 and 18 on March 14. There were 34 on March 19 with 13 on March 22. There were 25 on March 24 with 31 on March 28, then 15 seen on March 31. There were 24 on April 4 with 34 on April 7, 38 to April 21 and 49 on April 23, then 34 seen on April 25 with 23 on April 28, 21 on May 2 and 12 on May 5. This was another case where there was a roundup influx. There was a male singing near Hogshead Road on May 14 and there was one at the Sand Farm on May 16. That closed the late spring passage. There were no summer sightings. For the early fall passage there were singles on August 1 and August 9.

Northern Mockingbird (*Mimus polyglottos*)

A resident; however there did appear to be a fall passage and the post-breeding gathering was even more significant this year. During the Breeding Bird Survey a total of 60 pairs located. The first fledged brood of two was seen on June 2. Early fall records: *for the post-breeding gathering there were 18 on June 16 with 21 on June 18, 23 on June 26, 40 on June 29, 46 on July 2, 84 on July 4 and 102 on July 6, then 65 seen on July 13 with 52 on July 19, 32 on July 23, 26 on July 27 and 23 on July 30. The count of 102 was the highest count for Zellwood but see the count for July 11, 2004. That influx lasted six weeks. That was the end of the post-breeding gathering. For the fall passage there were 24 on August 5 with 32 on August 8, then 28 seen on August 10 with 14 on August 13. There were 22 on August 20 with 27 on August 24,*

then 23 seen on September 1 with 14 on September 3. Now the passage started there were 26 on September 7 with 37 on September 14, 44 on September 19, 57 on September 24 and 74 on October 2, then 55 seen on October 5. There were 60 on October 9 with 96 on October 12, then 61 seen on October 15 with 31 on October 19, 29 on October 22, 22 on October 26 and 20 on October 29. That was the end of what appeared to be a passage. There were 23 on November 2 with 15 to November 9. There were 17 on November 12 with 18 on November 20, then 14 seen on November 23 with ten on December 1 and nine on December 3. That closed the fall passage. For the winter passage there were 15 on December 7 with ten on December 15 and nine on December 17. There were 13 on December 21 with 15 on December 28, then 12 seen to January 11. That completed the winter passage. For the early spring passage there were 17 on January 14 with 14 to January 21, ten on January 25 and nine on January 28. There were 16 on February 2 with 12 to February 8. There were 24 on February 11 with 15 on February 16 and eight on February 18. There were 21 on February 22 with six on February 27. That concluded the early spring passage. For the main spring passage there were 13 on February 29 with 21 on March 3, 25 on March 7 and 27 on March 14, then 21 seen on March 22 with 17 on March 24. There were 24 on March 28 with 22 on April 4, 21 on April 7 and nine on April 14. That closed the main spring passage so for the summer passage there were 16 on April 18 with 19 on April 21, 21 on April 23, 25 on April 25, 31 on May 2 and 34 on May 5, then 29 seen on May 10 with 26 on May 14. There were 34 on May 16 with 29 on May 20, 22 on May 23, 17 on May 30 and 15 on June 2. There were 19 on June 6 with 18 on June 9 and 12 on June 13. There were 29 on June 16 with 27 on June 20 and 21 on June 23. That ended the summer passage. For the post-breeding gathering 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 early fall passage there were 20 on August 4 and August 9 with six on August 11 *and one on August 15.*

Brown Thrasher (*Toxostoma rufum*)

This was one of the puzzle species; whilst it was a resident did the majority leave for the winter or did they just hideaway in the thick cover? During the Breeding Bird Survey a total of 38 pairs located. The first fledged young (one) was seen on May 23. Early fall records: *there were two on June 16 with four on June 18, then nine seen on June 26 and July 2 with seven to July 13, five to July 23, four on July 25, three on July 27 and one on July 30. There were five on August 5 with four on August 10, three on August 13 and one on August 20.* There were four on August 24 and September 1 with ten on September 3 and September 7, then seven seen on September 14 with four on September 16. There were nine on September 19 with three on September 21, two on September 24 and one on September 29. That was the early fall passage.

For the late fall passage there were two on October 2 with nine on October 5, then five seen on October 9 with three to October 15 and one on October 19. There were two on October 22 and October 26 with singles to November 9. There were two on November 12 and November 16 with singles to December 1. That closed the late fall passage. For the winter passage there were two on December 7 with later singles on December 26 and December 28. Those were the only winter sightings. For the early spring passage there were two on January 14 with singles to January 21. There were two on January 25 with four on February 2 and six on February 4, then two seen on February 8 with singles to February 18. There were two on February 22 with singles to March 3. That concluded the early spring passage. For the main spring passage there were singles on March 7 and March 10 with three to March 19, then four seen on March 22 and March 28 with three to April 7 and two on April 14. There were three on April 18 with two on April 21 and one on April 23. That was the end of the main spring passage. For the summer passage there were three on April 25 and April 28 with six on May 2, then three seen on May 5 with one on May 10. There were six on May 14 with ten on May 16 and 11 on May 20, then ten seen on May 23 with five on May 26 and three on May 30. There were five on June 2 with seven on June 6, then three seen to June 13. There were ten on June 16 with six on June 23 and five on June 28. That ended the summer passage. For the early fall passage 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.*

European Starling (*Sturnus vulgaris*)

Present all year but normally only seen in small numbers, there was however a major post-breeding gathering as they congregated to feed on the fruit of the elderberry. During the Breeding Bird Survey a total of seven pairs located. Early fall records: *for the post-breeding gathering there were five on June 4 with 155 on June 8, then 77 seen on June 11 with 33 on June 16. There were 130 on June 18 with 49 on June 23 and 24 on June 26. There were 230 on June 29 with 22 on July 2 and five on July 4. There were 86 on July 6 with 46 on July 9 and six on July 13. There were 25 on July 19 with 34 on July 21 and 75 on July 23, then 57 seen on July 25 with five to July 30, three to August 8, two to August 20 and one on August 24.* That was the end of a minimal post-breeding gathering. For the early fall passage there were 16 on August 27 with 15 on September 3, seven on September 7, four on September 10 and three on September 14. There were six on September 16 with four on September 21, three on September 29 and two on October 2. That was the early fall passage. For the late fall passage there were two on October 5 with singles to October 12. There were two on October 15 and October 19 with 12 on October 22, then two seen on October 26. There were three on November 2 with 13 on November 5, then singles seen to November 23. That closed the late fall passage. For the

winter passage there were 65 on November 28 with 230 on December 3, then 26 seen on December 7. There were 55 on December 9 with 75 on December 17, then 15 seen on December 26 with six on December 28. There were 30 on December 31 with four on January 4. That completed the winter passage. For the early spring passage there were 53 on January 11 with three on January 14 and two on January 16. There were 360 on January 19 with two to January 25. There were four on January 28 with three to February 8 and two to February 18. There were three on February 22 with four on February 27, then singles seen to March 3. That concluded the early spring passage. For the main spring passage or in this case the summer passage as this species breeds so early there was one on March 7 with six on March 10 and 28 on March 14, then three seen on March 19. There were eight on March 22 with 30 on March 24, then 11 seen on March 28 with seven on April 4, three on April 14 and one on April 18. There were six on April 21 and April 23 with one on April 25. There were five on April 28 with nine on May 2, then two seen on May 5. The first juveniles were seen on May 14. That was the summer passage. For the post-breeding gathering there were seven on May 10 with 22 on May 14, then eight seen on May 16. There were ten on May 20 with 21 on May 23, 26 on May 26, 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. There were 190 on July 14 with 1,250 on July 18, then 750 seen on July 24 with 22 on July 29 and ten to August 4. The counts of 1,070 and then 1,250 were the highest counts for Zellwood but the highest count is now (2013) that of 2,040 on July 13, 2007. That was the end of the post-breeding gathering.

American Pipit (*Anthus rubescens*)

An uncommon winter visitor and spring passage migrant; there were a few records for the fall passage. For the fall passage there were two on November 16 with six on November 23 and November 28, then one seen on December 1. Those were the records for the fall passage. For the winter passage there were three on December 3 and December 9 with two on December 15 and one on December 17. There were two on December 21 with five to December 28 and eight on January 4, then three seen on January 14. That completed the winter passage. For the early spring passage there were 41 on January 16 with 35 on January 19, six on January 25 and one on January 28. There were two on February 2 and February 4 with 80 on February 8 and 123 on February 11, then three seen on February 18 with one on February 22. Finally for the early spring passage there were two on February 27.

Cedar Waxwing (*Bombycilla cedrorum*)

This is normally a common spring passage migrant but this year it had near vagrant status. For the winter passage there was one on December 1. There were no records for the early spring passage. For the main spring passage there were two on April 25 with 15 on May 2, 21 on May 5 and 49 on May 10, then 28 seen on May 14. That was a pathetic showing.

Tennessee Warbler (*Vermivora peregrina*)

A quite common early fall passage migrant; there was one by Lake Apopka to the south of the Hooper Farms Road extension on September 10 with another on the eastern border south of the McDonald Canal on September 24. There were also six on September 29 with eight on October 2; I did not note their locations. There were no later records. The count of eight was the highest count for Zellwood but the highest count is now (2013) that of 29 on October 21, 2004.

Orange-crowned Warbler (*Vermivora celata*)

A passage migrant and winter visitor; there were quite good numbers this year even if there were no major influxes. For the fall passage there was one on October 9 with later two on October 26, then one seen on October 29. There were two on November 2 and November 5 with five on November 12, six on November 16 and seven on November 20, then five seen on November 23 with four on November 28 and three on December 1. That was the fall passage. For the winter passage there were four on December 3 with five on December 7 and six on December 15, then four seen to December 28 with three on January 4. That completed the winter passage. For the early spring passage there were four on January 11 with 11 on January 14, then five seen to January 28 (there were five counts of five). There were eight on February 2 with three on February 4. There were four on February 8 with eight on February 11, then six seen on February 16 with five on February 22, four to February 29, two to March 14 and one on March 19.

Nashville Warbler (*Vermivora ruficapilla*)

This was a vagrant. There was one near the Workshops from December 15 to January 14; a winter record.

Northern Parula (*Parula americana*)

A summer visitor, there was little by way of passage this year. During the Breeding Bird Survey a total of seven pairs located; the first fledged young (two) were seen on June 13. Early fall records: *there were singles on June 23 and June 26 with two on June 29.* For this year there were singles on August 20, August 24, September 3 and September 14. That was the early fall passage. For the main fall passage there were four on September 29 with two to October 5. There were five on October 12 with one on October 15. Finally for the main fall passage there was one at the Sand Farm on November 2 with one at the Workshops on November 9 and November 16. There were no winter sightings. For the early spring passage there were three on February 27 with singles to March 3. There were four on March 14 with two to March 22 and one on March 24. There were two on March 28 and April 7 with one on April 14. That was the early spring passage. As this species nests so early we go straight to the summer passage there were two on April 21 and April 23 with one on April 25. There were three on April 28 and May 2 with four on May 5, then two seen to May 14 with singles on six dates to June 9. Later there were four on June 13 with one on June 16; that closed the summer passage. For the early fall passage there were two on July 24 with one on August 1.

Yellow Warbler (*Dendroica petechia*)

A common fall passage migrant; the greatest numbers were seen along the bank of Lake Apopka. Early fall records: *there were singles from July 19 to July 25 with three on July 27, five to August 8, 14 on August 10, 36 on August 13, 136 on August 20 and 145 on August 24, then 70 seen to September 3 with 62 on September 10, 38 on September 14, 37 on September 16, 26 on September 19 and 15 to September 24.* The count of 145 was the highest count for Zellwood but the highest count is now (2013) that of 232 on September 15, 2006. There were 22 on September 29 with ten on October 2, five on October 5, three on October 12 and two on October 15. That was the fall passage. There were no spring sightings. For the early fall passage 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. I have shown the bulk of the 2004 early fall passage.*

Chestnut-sided Warbler (*Dendroica pensylvanica*)

A rare late fall passage migrant; there were two at the Workshops on September 29 with one there on October 2. There was also one at the Sod Farm on October 9.

Magnolia Warbler (*Dendroica magnolia*)

This was a vagrant. For the late fall passage on October 9 there were singles at the Sand Farm and at the Sod Farm.

Cape May Warbler (*Dendroica tigrina*)

An uncommon late spring passage migrant; there were at the Sand Farm three on April 25 with two on April 28 and one on May 5.

Black-throated Blue Warbler (*Dendroica caerulescens*)

A very rare passage migrant; there were singles for the early fall passage on September 14 and October 2. For the late spring passage there were five on April 28.

Yellow-rumped Warbler (*Dendroica coronata*)

A common passage migrant and winter visitor, there was no major invasion this year. For the late fall passage there were singles on October 12, October 15, October 19 and October 22 with 13 on October 26, 17 on November 2, 68 on November 9, 100 on November 16, 132 on November 20 and 145 on November 23, then 45 seen on November 28. That was the late fall passage. For the winter passage there were 65 on December 1 with 92 on December 3, 103 on December 9 and 260 on December 15, then 100 seen on December 17 with 95 on December 21. There were 145 on December 26 with 135 on December 28, 125 on December 31 and 85 on January 4. That completed the winter passage. For the early spring passage there were 120 on January 11 with 110 on January 14, 90 on January 16 and 50 on January 19. There were 130 on January 21 with 160 to February 2 and 340 on February 4, then 190 seen on February 11 with 65 on February 16, 60 on February 22, 56 on February 29, 45 on March 7, 32 on March 10, 12 to March 19 and three to March 31. From February 11 there was a steady decline meaning that there was no incoming late spring passage influx all we see is the decline of the early spring passage.

Black-throated Green Warbler (*Dendroica virens*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on October 9.

Blackburnian Warbler (*Dendroica fusca*)

This was a rare early fall passage migrant. There were four on September 29 with two on October 2 and one on October 5. The count of four was a joint high count as there were also four on September 19, 2000.

Yellow-throated Warbler (*Dendroica dominica*)

A very uncommon fall passage migrant; there were no winter or spring records. Early fall record: *there were two on August 10*. For this year there were singles on August 20 and August 27 with three on September 10, then one seen on September 19. For the late fall passage there was one on October 15. The count of three was the highest count for Zellwood but the highest count is now (2013) that of eight on September 26, 2007. For the following early fall passage there was one on August 1; it was at the Sand Farm.

Pine Warbler (*Dendroica pinus*)

An uncommon passage migrant and winter visitor; most were seen at the Sand Farm. For the early fall passage at the Sand Farm there was one on August 27 with two on September 7, then one seen on September 14. That was the early fall passage. For the main fall passage there were two on September 29 with singles to October 9. To this point all sightings were from the Sand Farm. That was the end of the early fall passage. For the late fall passage I did not record their locations. There were two on October 15 and October 22 with one on October 26. That was the extent of the late fall passage. For the winter passage at the Sand Farm there were singles on December 21, December 28, December 31 and January 4. That completed the winter passage. For the early spring passage at the Sod Farm there was one on January 25, February 8, February 11 and later March 3. There was also one at the Sand Farm on February 11. That closed the early spring passage. For the main spring passage there were two on March 7, March 10 and March 14 at the Sand Farm. Later there were two there on March 31. Finally for the main spring passage there was a male singing at the Sand Farm on April 21 and April 23. For the early fall passage there was one at the Nursery on August 9.

Prairie Warbler (*Dendroica discolor*)

An early fall passage migrant otherwise present in low numbers from the late fall to the spring. Early fall records: *there was one on July 21 with six on July 23, ten to July 27 and 30 on July 30, then 19 seen on August 5 with eight on August 8, seven on August 10 and five on August 13.* For this year there were ten on August 20 with 15 on August 24, then ten seen on August 27. There were 13 on September 1 with 19 on September 3 and 83 on September 10, then 22 seen on September 14 with 17 on September 16. The count of 83 is still (2013) the highest count for Zellwood (had 82 on August 24, 2012). There were 33 on September 19 with 16 on September 21. There were 18 on September 24 with 19 on September 29, then 12 seen on October 2 with six on October 5. That was the early fall passage. For the late fall passage there were 14 on October 9 with six to October 19, four on October 26, two on November 2 and one on November 5. There were three on November 12 with two to November 23 and one on November 28. That closed the late fall passage. For the winter passage there were two from December 1 to December 17 with singles to December 26. There were two on December 28 with singles to January 4. That completed the winter passage. For the early spring passage there were up to two a day seen from January 11 to February 4. There were three on February 8 with two to February 18. There were four on February 22 with two on February 27 and one on February 29. That ended the early spring passage. For the late spring passage there was one on March 3 with two on March 10, then singles seen to March 24. There were two on March 28 with one on March 31. There were two from April 4 to April 18 with singles to April 25. There were also two on May 5; that was the end of the late spring passage. For the early fall passage there were singles 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.*

Palm Warbler (*Dendroica palmarum*)

A common passage migrant and winter visitor; the greatest numbers were seen during the fall passage. For the fall passage there were two on September 10 with six to September 16, 23 on September 19, 26 on September 24 and 732 on September 29, then 316 seen on October 2 with 188 on October 5, 54 on October 9 and 47 on October 12. There were 390 on October 15 with 216 on October 19, 185 on October 22, 181 on October 26 and 142 on October 29. There were 203 on November 2 with 146 on November 5, 121 on November 9 and 101 on November 12. There were 105 on November 16 with 162 on November 20, then 122 seen on November 23 with 120 on November 28. That was the fall passage. For the winter passage there were 145 on December 1 with 235 on December 7 and 290 on December 15, then 225 seen on December 21 with 165 on December 26. There were 255 on December 28 with 175 on January 4 and 110 on January 11. That completed the winter passage. For the early spring passage there were 200 on January 14 with 165 to January 19, 160 on January 25 and 155 on January 28. There were

430 on February 2 with 235 on February 4, 160 on February 11, 150 on February 16, 120 on February 18 and 70 on February 22. That closed the early spring passage. For the late spring passage there were 85 on February 27 with 130 on February 29 and 135 on March 3, then 105 seen on March 7 with 85 on March 10 and 70 on March 14. There were 90 on March 19 with 130 on March 24, then 92 seen on March 28 with 45 on March 31 and 43 on April 4. There were 89 on April 7 with 40 on April 14, 12 on April 18, six on April 23 and one on April 25. It is normal for this species to finish with a larger influx; in this case there were 13 on April 28. That was the end of the late spring passage. Very exceptionally there was a very late individual at the Workshops on May 26.

Last year I noted just three "Yellow" Palm Warblers *D.p.hypochrysea* but this year I started to pay attention to this race. For the winter passage there was one at the Sand Farm on December 15. There was one at the Workshops on December 21 with two from December 26 to December 28 and three on December 31, then one seen on January 4. There were also two on January 11. There was one at the Sand Farm on January 11 and January 14. That completed the winter passage. For the early spring passage there was one at the Hooper Farms Road gate on February 8. Later on February 22 there were singles by Hooper Farms Road gate, at the Sand Farm and by Lust Road gate. At Hooper Farms Road gate singles were also seen on February 29 and March 3. That was the early spring passage. Finally for the late spring passage there were on March 19 two at the Sand Farm with one by the Hooper Farms Road gate.

Bay-breasted Warbler (*Dendroica castanea*)

This was a vagrant. For the late fall passage there was a female by Lake Apopka to the south of the Hooper Farms Road extension on October 15 with another female by the Lake Level Canal on November 5.

Blackpoll Warbler (*Dendroica striata*)

A quite common spring passage migrant; there was a single fall sighting. For the fall passage there was one by the Lake Level Canal on October 22. For the spring passage there were three on April 25 with 20 on April 28, then one seen on May 2. There were eight on May 5 with one on May 16. The count of 20 was the highest count for Zellwood; the highest count is now (2013) that of 73 on May 5, 2006.

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

An uncommon passage migrant; there was a solitary winter record. For the early fall passage there was one on September 10. For the main fall passage there were singles on October 2 and October 9 with two on October 22, then one seen on October 26. That was the main fall passage. For the winter passage there was one on December 28. For the early spring passage there were singles on January 16 and January 19. For the late spring passage there was one on May 5. That shows how little is seen without access to a wood. That all changed in the fall with the access to the Nursery; so for the early fall passage there were two on August 4 with six on August 9, then three seen on August 11. The count of six was a joint high count as there had been six on April 17, 1999, the highest count is now (2013) that of ten on September 22, 2004.

American Redstart (*Setophaga ruticilla*)

A quite common fall and spring passage migrant; numbers overall were a little higher in the spring. For the early fall passage there were singles on August 20, August 24, August 27 and September 1. Later there was one on September 24. That was the early fall passage. For the main fall passage there were ten on September 29 with five on October 2. There were also ten on October 5 with two to October 12 and one on October 15. That closed the main fall passage. For the spring passage there was one on April 7. Later there was one on April 25 with three on April 28 and May 2, then 24 seen on May 5 with six on May 10. That was the spring passage. Exceptionally there was a first-summer male on June 2 at the Sand Farm. Perhaps that should be treated as a summer record. For the early fall passage there were singles on August 4 and August 9 with three on August 11 *and four on August 19, then two seen to September 1.*

Prothonotary Warbler (*Protonotaria citrea*)

This was a rare passage migrant although there were more sightings than normal this year. For the early fall passage there were singles on August 24 and September 10, locations not noted. For the late fall passage there was one on October 12; again the location was not noted. For the spring passage there was one at the Sand Farm on March 24 and March 28. For the early fall passage there was one on August 1 at the Sand Farm with two at the Nursery on August 9.

Swainson's Warbler (*Limnothlypis swainsonii*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 14.

Ovenbird (*Seiurus aurocapilla*)

A fall passage migrant, there was only a trace of passage in the winter and the spring. For the early fall passage there were singles on August 20, September 1 and September 3 with four on September 7, eight on September 14, nine on September 16 and 18 on September 19, then six seen on September 21 with four on September 24. That was the end of the early fall passage. For the main fall passage there were 12 on September 29 with 15 on October 2 and October 5, then 13 seen on October 12 with eight on October 15, five on October 19, four to October 26 and singles to November 12. There were two on November 16 with singles to November 28. That closed the main fall passage. For the winter passage there were singles on December 1 and December 7. Later there were singles on December 26, December 28 and December 31. That was the extent of the winter passage. For the early spring passage there were singles on January 14 and January 16 with two on January 19, then singles seen on January 21 and February 4. For the late spring passage there were singles on February 27, March 19, March 31 and April 21.

Northern Waterthrush (*Seiurus noveboracensis*)

A common fall and late spring passage migrant however numbers were very low for the winter and the early spring passages. For the fall passage there was one on August 20 with two on August 24, three to September 3, eight on September 7, 38 on September 10 and 51 on September 14, then 35 seen on September 16 with 26 on September 19. There were 28 on September 21 with 36 on September 24 and 45 on September 29, then 43 seen on October 2 with 33 on October 5, 27 on October 9, 21 on October 12, 12 on October 19, ten on October 22, seven on October 29, five to November 12, three to November 28 and one on December 1. That closed the fall passage. For the winter passage there were two on December 7 with one on December 9. There were two from December 21 to December 28 with singles to January 11. That completed the very weak winter passage. For the early spring passage there was one on January 14 with two on January 16 and four on January 19, then singles seen to January 28. There were three on February 2 with five on February 4, then two seen on February 11 with singles to February 29. That was the end of the early spring passage. For the main spring passage there were three on March 3 with singles to March 22. There were two on March 24 and March 28 with five on March 31, then two seen to April 7. Now the heavier passage started

there were three on April 14 with 11 on April 18, 14 on April 21, 15 on April 23 and 20 on April 28, then 14 seen to May 5 with one on May 10.

Because the books say that this species does not normally sing in Florida I have been keeping a record of those that do. This year there were singing: five on April 21, five on April 23, six on April 25 (13 seen on that date), ten on April 28, seven on May 2, ten on May 5 and one on May 10. This singing really only depends on there being two in close proximity.

Louisiana Waterthrush (*Seiurus motacilla*)

A passage migrant; significant numbers were only seen this year in the early fall. Early fall records: *there were two on July 13 with one on July 21. There were two on August 8 and August 10 with one on August 13.* For this year there were two on August 20 with seven on August 24, 16 on August 27 and 41 on September 3, then ten seen on September 7 with eight on September 10, four on September 14, three on September 16 and two on September 19. That influx lasted for a month. The count of 41 was the highest count for Zellwood; the highest count is now (2013) that of 98 on August 27, 2010. There were five on September 21 with two on September 24 and September 29. That was the end of the early fall passage. For the early spring passage there was one at the Sand Farm on February 11. For the main spring passage there were two on February 29 with three on March 3 and four on March 7, then two seen to March 14. There were seven on March 19 with four on March 24 and one on March 28. There were also two on March 31, April 4 and April 7. That closed the main spring passage. For the early fall passage there was very exceptionally one by the Pole Road extension on June 23, it was singing. For the "real" early fall passage 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 another temporary high count for Zellwood. There were 29 on September 9 with five on September 16, two on September 19 and one on September 22.*

Common Yellowthroat (*Geothlypis trichas*)

A common passage migrant and winter visitor; there was a major invasion in the fall. Early fall records: *there were singles from June 26 to July 2 with two on July 4, then singles seen to July 9. There were two on July 13 with singles to August 10.* For this year there were three on August 24 with singles to September 1. There were seven on September 3 with 39 on September 10, 55 on September 14 and 97 on September 19, then 40 seen on September 21. There were 88 on September 24 with 235 on September 29, 613 on October 2 and 706 on October 5, then 294 seen on October 12 with 204 on October 15, 197 on October 19, 153 on

October 26, 83 on November 2, 81 on November 5 and 51 on November 9. That mega influx lasted for six weeks. The count of 706 was the highest count for Zellwood; the highest count is now (2013) that of 856 on September 22, 2004. Even so the count of 706 was a very high count as the previous high count was only that of 321 on October 2, 2002. There were 130 on November 12 with 121 on November 16, 109 on November 23, 105 on December 1 and 70 on December 3. That closed the single fall passage. For the winter passage there were 81 on December 7 with 97 on December 9, then 86 seen on December 15 with 24 on December 17. There were 75 on December 21 with 86 on December 26 and 90 on December 28, then 78 seen on December 31 with 52 on January 4 and 30 on January 11. That completed the winter passage. For the early spring passage there were 115 on January 14 with 125 on January 19, then 96 seen on January 25 with 52 on January 28. There were 122 on February 2 with 92 on February 4, 70 on February 11, 63 to February 18 and 54 on February 22. There were 60 on February 27 with 77 on February 29 and March 3, then 40 seen on March 7. That concluded the early spring passage. For the late spring passage there were 47 on March 10 with 63 on March 14, then 43 seen on March 19 with 41 on March 24, 25 on March 28, 18 on March 31, 16 on April 4, 15 on April 7 and 11 on April 14. There were 23 on April 18 with 25 on April 21 and 26 on April 25, then 21 seen on April 28 with 19 on May 2. There were 28 on May 5 with five on May 10, two on May 14 and singles on May 16 and May 23. That ended the late spring passage. There were again summer records but there was no evidence of breeding. This year there were singles at the Sand Farm on June 2, June 16 and July 2. For the early fall passage there was one on July 24 with three on August 9.

Hooded Warbler (*Wilsonia citrina*)

This was a vagrant. For the early fall passage there was a female at the Sand Farm on August 24 with an immature there on September 1. For the late spring passage there was a male on the northern border on March 22.

Wilson's Warbler (*Wilsonia pusilla*)

This was a rare passage migrant; there were more records than normal. For the early fall passage there was a male at the Sand Farm on August 24 with another male by the Workshops on September 29. For the late fall passage there was a female by the Lake Level Canal on October 26. Finally for the early spring passage there was a male at the Sand Farm on January 21 and January 25.

Canada Warbler (*Wilsonia canadensis*)

This was a vagrant. For the early fall passage there was a female by the Sod Farm on August 24. This was the first record for Zellwood. There is a description in Appendix B.

Yellow-breasted Chat (*Icteria virens*)

A common breeding species; well that is probably the correct description for this summer visitor. During the Breeding Bird Survey a total of 103 singing males located on territory, there were 56 last year. Early fall records: *there were 21 on June 26, July 2 and July 6 with 13 on July 9, eight on July 19, two to July 30 and one on August 5.* For this year there were two on September 3 with singles on September 10 and September 24. That was the early fall passage. For the late fall passage there were singles on October 5 and October 26. For the winter passage there were also singles on December 15 and December 31. The early spring passage was no better there were singles on February 2 and February 4. For the main spring passage there were singles on February 27, March 19, March 28, April 4 and April 18. Now the main arrival started as there were five on April 21 with eight on April 23, 20 on April 25 and 24 on May 2, then 13 seen on May 5. That closed the main spring passage. For the summer passage there were 23 on May 10 with 37 on May 14, then 32 seen on May 16 with nine on May 20. There were 41 on May 23 with 24 on May 26 and 21 on May 30. The count of 41 is still (2013) the highest count for Zellwood. There were 32 on June 2 with seven on June 6. There were 16 on June 9 with 23 on June 13, then 12 seen to June 28 with 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.

Summer Tanager (*Piranga rubra*)

This was a vagrant. For the early fall passage there were single male and females at the Sand Farm on September 29.

Eastern Towhee (*Pipilo erythrophthalmus*)

A common resident; numbers were much higher in the fall. During the Breeding Bird Survey a total of 207 pairs located; there were only ten pairs in 1999... Early fall records: *there were 47 on June 18 with 57 on June 23, 129 on June 26, 135 on June 29 and 191 on July 2, then 172 seen on July 4 with 156 on July 6, 147 on July 9, 118 on July 13, 84 on July 19 and 63 on July 21. There were 65 on July 23 with 103 on July 25, 109 on July 27 and 228 on July 30, then 83 seen on August 5 with 77 on August 10 and 54 on August 13.* The count of 228 is still (2013) the

highest count for Zellwood. Perhaps this should be treated as a post-breeding gathering; whatever its name that was the end of the event. For the remainder of the early fall passage there were 69 on August 20 with 76 on August 24 and 87 on August 27, then 54 seen on September 3 with 36 on September 7 and 29 on September 10. There were 43 on September 14 with 46 on September 19, then 27 seen on September 21 with 20 to September 29. That closed the early fall passage. For the late fall passage there were 32 on October 2 with 35 on October 5 and 61 on October 12, then 28 seen on October 15 with six on October 19. There were 31 on October 22 with 48 on October 26, then 28 seen on October 29 with 21 on November 5, 16 on November 12, 14 on November 16 and 12 on November 20. There were 17 on November 23 with three on November 28. That closed the late fall passage. For the winter passage there were seven on December 1 with 14 on December 3 and 25 on December 7, then 20 seen on December 15 with 17 on December 21 and 12 on December 26. There were 18 on December 28 with 22 on January 4, then 20 seen on January 11. That completed the winter passage. For the early spring passage there were 25 on January 14 with 32 on January 19, then 30 seen to January 25 with 21 on January 28. There were 38 on February 2 with 32 on February 4 and 26 on February 8. There were 36 on February 11 with 48 on February 16, then 45 seen on February 22 with 30 on February 27 and 20 on February 29. That concluded the early spring passage. For the main spring passage there were 43 on March 3 with 65 on March 7, then 29 seen on March 14 with 28 to March 22. There were 29 on March 24 with 36 on March 28, then 27 seen on March 31 with 22 on April 4. There were 40 on April 7 with 19 on April 14. There were 21 on April 18 with 59 on April 21, then 40 seen on April 23 with 37 on April 25. That ended the main spring passage. For the summer passage there were 42 on April 28 with 81 on May 2, then 44 seen on May 5. There were 48 on May 10 with 51 on May 14, 57 on May 16, 60 on May 20 and 67 on May 23, then 31 seen on May 26. There were 53 on May 30 with 56 on June 2 and 63 on June 6, then 49 seen on June 9 with 47 on June 13 and 38 on June 16. That ended the summer passage. For what may be a post-breeding gathering there were 84 on June 20 with 56 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. Finally on January 11 at the Sand Farm there was a male of the race *P.e.rileyi*.

Chipping Sparrow (*Spizella passerina*)

A very uncommon passage migrant and winter visitor for the late fall passage there was one by the Sod Farm on October 15 with an adult still in breeding plumage by Lake Apopka to the south of the Hooper Farms Road extension on November 23. For the winter passage there were two by the Hooper Farms Road gate from December 21 to December 31. For the early

spring passage at the Sand Farm there was one on January 19 with two on January 28 and February 2.

Clay-colored Sparrow (*Spizella pallida*)

An uncommon passage migrant and winter visitor; it seems strange that this western sparrow is commoner in most years than the eastern Chipping Sparrow. For the late fall passage there were two at the Sand Farm on November 16. For the winter passage there were two at the Sand Farm on December 3 with one at the Workshops on December 7. There were three at the Sand Farm on December 15 with singles there on December 17 and December 21. There were also three there on December 26 with singles there on December 28 and December 31. There were two on January 4 at the Sand Farm with one at the Sod Farm on January 11. That completed the winter passage. For the early spring passage there was one at the Sand Farm on January 14 with two on January 19 and three there on January 28, then two seen there to February 8. During this period there were two at the Workshops on January 19. That closed the early spring passage. For the late spring passage there were two at the Sand Farm on April 25.

Field Sparrow (*Spizella pusilla*)

An uncommon winter visitor and spring passage migrant; it is normal with this species for there to be no fall records. For the winter passage there was one at the Sand Farm on December 7, December 9, December 15, December 17 and December 21. There were two there on December 26, December 28, December 31 and January 4. That completed the winter passage. For the early spring passage there were three at the Sand Farm on January 11 with two to January 21 and one on January 25. There were five at the Sand Farm on January 28 with two on February 2 and February 4. There were five on February 8 with three to February 27 and two on March 3. All were at the Sand Farm. That was the end of the early spring passage. For the late spring passage there were two at the Sand Farm on March 22.

Vesper Sparrow (*Pooecetes gramineus*)

A winter and early spring passage migrant; there were lesser numbers seen during the late fall passage. For the late fall passage there were two on November 5 and November 9 with singles on November 12 and November 20. That was the early end of the late fall passage. For the winter passage there were three on November 23 with eight to December 1, ten on December 7 and 22 on December 15, then 11 seen to December 28 with eight to January 11, five on January 14, four on January 16 and two on January 21. That was a very long running

winter influx; an early spring influx is missing. For the balance of the early spring passage there were four on January 25 with nine on February 2, then four seen on February 4 with singles on February 18 and February 22. For the late spring passage there were two on March 3 with one on March 7. There were two from March 10 to March 24. Finally there was one by Hooper Farms Road gate on March 28 with one at the Sand Farm on March 31.

Lark Sparrow (*Chondestes grammacus*)

This was a vagrant. For the winter passage there was one at the Sand Farm on December 28.

Savannah Sparrow (*Passerculus sandwichensis*)

A common passage migrant and winter visitor; the greatest numbers were seen during the winter and the early spring passages. For the late fall passage there were three on October 5 with four on October 12, five on October 15, six on October 19, 15 on October 22 and 30 on October 26, then 16 seen on October 29. There were 22 on November 2 with 35 on November 5, 38 on November 9, 45 on November 2, 62 on November 16 and 64 on November 23, then 44 seen on November 28 with 35 on December 1. That was the late fall passage. For the winter passage there were 50 on December 3 with 113 on December 7, 121 on December 15, 141 on December 17 and 157 on December 21, then 135 seen on December 28 with 89 on December 31. There were 118 on January 4 with 182 on January 11, then 137 seen on January 14. That completed the winter passage. For the early spring passage there were 151 on January 16 with 176 on January 19, 198 on January 21 and 312 on January 28, then 214 seen on February 2 with 89 on February 4. There were 103 on February 8 with 104 on February 11, 116 on February 16 and 155 on February 18, then 83 seen on February 27 with 41 on February 29, 28 on March 3 and 24 on March 7. That concluded the early spring passage. Numbers were now much lower. For the late spring passage there were 42 on March 10 with 22 on March 14. There were 40 on March 19 with 42 on March 22, then 29 seen on March 24 with 19 on March 28. There were 39 on March 31 with 21 on April 7, 17 on April 18, nine on April 21 and six on April 23. There were 11 on April 25 with two to May 2. There were also three on May 5. Exceptionally there was a late individual by the Lake Level Canal on May 30.

Grasshopper Sparrow (*Ammodramus savannarum*)

An uncommon winter and early spring passage migrant; there was just one fall record. For the late fall passage there was one at the Sand Farm on October 19. For the winter passage

there were singles at the Sand Farm on December 3 and December 7 with another there on December 17. There was one at the Sand Farm on December 26, December 28 and December 31 with two on January 4 and January 11. There was also one at the Workshops on January 4 and January 11. That completed the winter passage. For the early spring passage locations were not noted so there were three on January 14 with singles on January 19, January 21, January 25, January 28 and February 2. There were two on February 4 and February 8 with one on February 11.

Henslow's Sparrow (*Ammodramus henslowii*)

This was a vagrant. For the winter passage there was one at the Sand Farm on December 21.

Song Sparrow (*Melospiza melodia*)

A passage migrant and winter visitor, numbers of this secretive species were higher this year. For the early fall passage there was one at the Sand Farm on September 16. For the main fall passage there were two on November 5 with five on November 12, then four seen to November 23 with three on November 28. That was the main fall passage. For the winter passage there were four on December 1 and December 7 with seven on December 9, then five seen on December 15 with one on December 17. There were three on December 21 with four on December 26, seven on December 28 and nine on January 4, then two seen on January 11. That completed the winter passage. For the early spring passage there were seven on January 14 with four on January 16, three on January 21, two on January 25 and one on January 28. There were four on February 2 with three on February 4 and two on February 8. There were five on February 11 with two to February 18 and singles to February 29. That closed the early spring passage. For the late spring passage there were five on March 3 with two to March 14 and one on March 19.

Lincoln's Sparrow (*Melospiza lincolnii*)

An uncommon passage migrant and winter visitor; except for two records this was one of the earliest sparrows to leave in the spring. For the fall passage there were singles on October 26, November 16 and November 20. For the winter passage there was one on December 1 with two on December 3 and five on December 7, then two seen on December 9. The counts of five are still (2013) the highest count for Zellwood as there were also five on November 17, 2002. There were singles on December 15 and December 17 with two from

December 21 to December 31, then one seen on January 4. That completed the winter passage. For the early spring passage there were singles on January 14, January 19, January 21, January 28 and February 2. That closed the early spring passage. For the late spring passage there was one at the Sand Farm on March 19 with another there on April 18, this one was singing.

Swamp Sparrow (*Melospiza georgiana*)

There was a strong fall passage with lower numbers for the winter and the early spring passages, numbers then significantly lower for the late spring passage. For the fall passage there was one on October 9 with three on October 15, seven on October 19, eight on October 22, 78 on October 26, 140 on October 29, 188 on November 5 and 287 on November 12, then 230 seen on November 16 with 171 on November 20. There were 435 on November 23 with 263 on December 1 and 189 on December 3. That was the fall passage. For the winter passage there were 283 on December 7 with 197 on December 9, 180 on December 15 and 19 on December 17. There were 237 on December 21 with 186 on December 28, 119 on December 31, 111 on January 4 and 78 on January 11. That completed the winter passage. For the early spring passage there were 200 on January 14 with 176 on January 19, 73 on January 21, 68 on January 25 and 57 on January 28. There were 204 on February 2 with 76 on February 4 and 24 on February 8. There were 89 on February 11 with 45 on February 18, 39 on February 22 and 17 on February 27. That closed the early spring passage. For the late spring passage there were 72 on February 29 with 70 on March 7, 43 on March 14, 37 on March 19 and 26 on March 22. There were 46 on March 24 with 115 on March 28, then 53 seen on March 31. There were 61 on April 4 with 67 on April 7, then 47 seen on April 18 with 18 on April 21, eight on April 23 and seven on April 25. There were 12 on April 28 with two on May 5, then singles seen on May 10 and May 14.

White-throated Sparrow (*Zonotrichia albicollis*)

This was a rare fall passage migrant and winter visitor. For the late fall passage there were singles at the Sand Farm on October 19 and November 23. For the winter passage there was one at the Sand Farm on November 28 and December 1 with one at the Workshops on December 1 and December 3. There were two at the Sand Farm on December 7 with one on December 9. There were singles at the Sand Farm on December 26 and January 4. Finally for the winter passage there was one at the Workshops on December 28 and January 11. There were no later records.

White-crowned Sparrow (*Zonotrichia leucophrys*)

A quite common passage migrant and winter visitor; there were no large flocks this year. For the late fall passage there were 11 on November 5 with 12 on November 12 and 14 on November 16, then 11 seen on November 20 with six to November 28, three on December 1 and one on December 3. That was the strongest influx of the year. That marked the end of the late fall passage. For the winter passage there were two on December 7 with seven on December 15, then five seen on December 21 with two on December 26. There were six on December 28 with four on December 31 and one on January 4. That completed the winter passage. For the early spring passage there was one on January 14 with five on January 16, then four seen on January 25 with one on January 28. There were four from February 2 to February 11 with two on February 16 and one on February 18. There were five on February 22 with one on February 27. That ended the early spring passage. For the late spring passage there were four on February 29 with three on March 3 and one on March 10. Later there was one on April 7 with five on April 18, then one seen at the Workshops on April 25 and April 28.

Dark-eyed Junco (*Junco hyemalis*)

This was a vagrant. For the winter passage there was a "slate-colored" *J.h.hyemalis* at the Sand Farm on December 17. There is a description in Appendix B.

Northern Cardinal (*Cardinalis cardinalis*)

A common resident; during the Breeding Bird Survey a total of 593 pairs located; there had been 179 pairs in 1999. Early fall records: there were 93 on June 16 with 96 on June 18, 99 on June 23, 148 on June 26, 180 on June 29 and 186 on July 2, then 137 seen on July 4 with 133 on July 6. There were 140 on July 9 with 131 on July 13, 69 on July 19, 66 on July 21 and 56 on July 23. There were 58 on July 25 and July 27 with 103 on July 30, then 45 seen on August 5 with 36 on August 8. There were 67 on August 10 with 38 on August 13. For this year there were 59 on August 20 with 78 on August 24, then 50 seen on August 27 with 46 on September 1. There were 74 on September 3 with 69 on September 10 and 63 on September 14. There were 68 on September 16 with 85 on September 19, then 83 seen on September 24 with 74 on September 29. That was the early fall passage. For the main fall passage there were 99 on October 2 with 127 on October 5, 130 on October 9 and 140 on October 12, then 88 seen on October 15 with 85 on October 19, 80 on October 22, 72 on October 29, 63 on November 5 and 46 on November 9. That influx lasted for over a month, could this influx actually relate to passage? There were 66 on November 12 and November 16 with 36 on November 23, 26 on December 1 and 14 on December 3. That closed the main fall passage so for the winter passage there were 30 on

December 7 with 38 on December 9, then 30 seen on December 15 with 20 on December 17. There were 38 on December 21 with 50 on December 28, then 31 seen on December 31 with 28 on January 4. That completed the winter passage. For the early spring passage there were 32 on January 11 with 53 on January 14, then 49 seen on January 19 with 43 on January 21. There were 52 on January 25 with 54 on January 28 and 101 on February 2, then 76 seen on February 4 with 70 on February 8. There were 117 on February 11 with 57 to February 18. There were 82 on February 22 with 111 on February 29, then 108 seen on March 3 with 63 on March 7. That concluded the early spring passage. For the main spring passage there were 65 on March 10 with 83 on March 14, 99 on March 19, 112 on March 24 and 152 on March 28, then 67 seen on March 31 with 48 on April 4. There were 99 on April 7 with 150 on April 18, then 121 seen on April 21 with 120 on April 23. That ended the main spring passage so for the summer passage there were 125 on April 25 with 131 on April 28 and 168 on May 2, then 142 seen on May 5 with 130 on May 10 and 126 on May 14. There were 137 on May 16 with 153 on May 20 and 184 on May 23, then 138 seen on May 26 with 133 on May 30 and 110 on June 2. There were 144 on June 6 with 137 on June 9, 117 on June 13, 114 on June 20 and 75 on June 23. There were 129 on June 28 with 106 on July 4 and 66 on July 7. That was the end of the summer passage. For the early fall passage 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.*

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant. For the late fall passage there was a female by the Lake Level Canal on October 12. For the early spring passage there was a male at the Workshops on February 27.

Blue Grosbeak (*Guiraca caerulea*)

A common summer visitor that remained through the winter; that is an exceptional statement as this species is not meant to winter in the United States. During the Breeding Bird Survey a total of 81 pairs located. The first birds heard singing on territory were four on April 18. The first fledged young (two) were seen on June 9. Early fall records: *there were 27 on July 9 and July 13 with 21 on July 19, 17 on July 23, 15 on July 25 and 11 on July 27. There were 19 on July 30 and August 5 with 22 on August 10,* then 16 seen on August 20 with 14 on August 24 and six on August 27. There were 15 on September 1 with eight on September 3 and seven on September 7. There were 12 on September 10 with seven on September 14 and six on September 16. There were eight on September 19 with 14 on September 21, then nine seen on September 24 with two on September 29. That was the early fall passage. For the late fall passage there were 16 on October 2 with nine to October 9, six on October 15, three to

October 22 and one on October 26. There were two on October 29 with six on November 2 and November 5, then four seen on November 12 with three to November 20. That closed the late fall passage. For the winter passage there were five on November 28 with three to December 7. There were four on December 9 with eight on December 15, then four seen on December 21 with three on December 26. There were five on December 28 with 16 on December 31, then one seen on January 4. That was not bad for a passage that was not meant to exist. For the early spring passage there were three on January 11 and January 14 with two to January 21. There were three on January 25 and February 2 with two on February 4 and singles to March 3. For this species the early spring passage is normally weaker than the winter passage. For the main spring passage there was one on March 19 that was the only sighting until late April. There were eight on April 18 with 18 on April 21, 19 on April 25 and 44 on May 2, then 23 seen to May 10 with 19 on May 14. That concluded the main spring passage. For the summer passage there were 21 on May 16 with 29 on May 20, then 24 seen on May 23 with 23 on May 30 and 18 on June 2. There were 19 on June 6 with 25 on June 9 and 33 on June 13, then 16 seen on June 20 with 13 on June 23. There were 24 on June 28 with 14 to July 7 and nine on July 11. There were 14 on July 14 with 31 on July 18, then 19 seen on July 21. That closed the summer passage. For the early fall passage 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.*

Indigo Bunting (*Passerina cyanea*)

Present all year, there was a major fall influx. During the Breeding Bird Survey a total of 157 pairs located; there were only 11 pairs in 1999. The first to sing on territory were four on April 21 and the first fledged young (three) were seen on August 1. Early fall records: *there were 43 on July 6 with 25 on July 9 and 11 on July 13. There were 18 on July 19 with 19 on July 21, 21 on July 23 and 26 on July 25, then 23 seen on July 30 with nine on August 5. There were 17 on August 8 with 19 on August 10, then nine seen on August 13 with two on August 20. There were five on August 24 with three on August 27, two on September 1 and singles to September 14. There were two on September 16 with three on September 19, then two seen on September 21. That was the end of the early of fall passage. Now to the main event the main fall passage there were three on September 24 with 15 on September 29 and 43 on October 2, then 16 seen on October 5. There were 22 on October 9 with 26 on October 12 and 336 on October 15, then 88 seen on October 19 with 52 on October 26, 13 on October 29, 12 on November 5 and six on November 9. Of the 336 a total of 225 were on the eastern border to the north of the Hooper Farms Road gate. The count of 336 was also the highest count for Zellwood; the highest count is now (2013) that of 840 on October 26, 2007. There were 17 on November 12 with nine on November 16, six on November 20, five on November 23 and three on November 28. That closed the main fall passage. For the winter passage there were five from December 1 to*

December 15 with 32 on December 21, then 19 seen on December 26 with 14 to December 31, three on January 4 and one on January 11. Now that influx clearly showed that there was passage during the winter. That completed the winter passage. For the early spring passage there were two from January 14 to January 19 with 12 on January 21, then three seen to February 2 with two on February 4 and singles to February 11. There were also two on February 16 and February 18. There was now a short break until March 3. That was also the early end of the early spring passage. For the main spring passage there were two on March 3 with singles to March 14. There was now a longer break until April 14 when one seen on April 14 with two on April 18, nine on April 21, ten on April 25, 14 on April 28 and 30 on May 2, then 14 seen on May 5. There were 17 on May 10 with 28 on May 14, then 27 seen on May 16 with 18 on May 20. That ended the main spring passage. For the summer passage there were 26 on May 23 with 37 on May 26 and 49 on June 2, then 45 seen on June 9 with 30 on June 13 and 25 to June 20. There were 28 on June 23 with 34 on June 28, then 30 seen on July 4 with 28 on July 7. There were 32 on July 11 with 29 on July 14, 28 to July 24 and 16 on July 29. That was the end of the summer passage. For the early fall passage 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.*

Painted Bunting (*Passerina ciris*)

A non-breeding summer visitor; during the Breeding Bird Survey a total of 22 adult or immature males were found on territory. Breeding has never been proved. Outside of the summer this species is probably resident but as it is very secretive it is hard to locate. Early fall records: *there were four on June 16 and June 18 with five on June 26 and July 2, then three seen to July 9 with two on July 13. There were three on July 19 with two on July 21 and singles to July 27. There were two on July 30 and August 8 with one on August 10.* There were singles on September 1 and September 21 with two on September 24, then one seen on September 29. That was the extent of this passage; that was such a sharp contrast to the summer passage. For the “main” fall passage there was one on October 19 with two on November 12, then singles seen on November 16, November 20 and November 28. That closed the “main” fall passage, another minor event. For the winter passage there were singles on December 9 and December 17 with two on December 21 and three on December 26 and December 28, then two seen to January 11. That completed a stronger winter passage. For the early spring passage there was one on January 14 with three on January 16, then singles seen to January 21. There were two on February 2 with singles to February 18. There were also two on March 3. That concluded the early spring passage. Perhaps surprisingly the winter passage was the strongest of the last three passages. For the main spring passage there was one on April 18 with two on April 21 and four on April 25, then singles seen to May 2. That was the extent of the main spring passage. For the summer passage there were two on May 5, May 14 and May 16 with singles to May 23. There were 12 on May 26 with four on June 2 and two on June 6. The count of 12 is still (2013) the

highest count for Zellwood. There were four on June 9 with six on June 13, then three seen on June 16 with two on June 23 and singles to July 14. That was the end of the summer passage. For the early fall passage there were two on July 18 with three on July 24, then two seen on July 29 with singles to August 4.

Dickcissel (*Spiza americana*)

A summer visitor; there were sightings for eight months of the year. During the Breeding Bird Survey a total of four pairs located; these were by Hooper Farms Road. Single females were seen on three dates. There was also a male by Lust Road on May 16 which may indicate an additional pair. No young seen but that is not surprising as this species keeps out of sight as much as possible. This is another of the species that is not meant to breed in central Florida or in this case Florida as a whole. Early fall records: *there were four on June 18 (Airport Road) with three there on June 29, two on July 4 and one on July 6. There were four on July 13 and July 23.* For this year there was one on September 3 at the Sand Farm with three there on September 19, then two seen there on September 21, September 24 and September 29.. That was the early fall passage. There was no "late" fall passage. For the winter passage there were six by Hooper Farms Road gate on December 21 with four to December 28 and two on December 31. That completed the winter passage. For the early spring passage there were singles by the Hooper Farms Road gate on January 21 and February 29. For the late spring/summer passage there was on April 18 a male singing by Hooper Farms Road with three there to April 23 and five to April 28. Only four males then seen to May 14 with two to May 23. Single females were seen on May 2, May 5 and May 10. There was also a singing male by Lust Road on May 16. By Hooper Farms Road there were two on May 26 with three on June 2, then two seen to June 9. There were three on June 13 with singles on June 16, June 20 and July 4. As this is such a secretive species I do not know if any young raised and if all four males actually nested.

Bobolink (*Dolichonyx oryzivorus*)

A very common spring passage migrant; there were much smaller numbers in the fall. For the fall passage there were two on August 24 with three on September 1, seven on September 3, 12 on September 7, 14 on September 10, 68 on September 16 and 73 on September 19, then 57 seen on September 21 with 41 on September 24, 26 on September 29, 16 on October 2, four on October 5, two on October 9 and one on October 15. That influx covered most of two months. Whilst the influx had a peak count of 73 I believe that many more individuals actually passed through the area. Finally for the fall passage there were three on October 19 with one at the Sand Farm on October 29. For the spring passage there were 16 on

April 21 with 205 on April 23, 1,935 on April 25 and 2,590 on April 28, then 620 seen on May 2 with 450 on May 5, 309 on May 10 (the majority were now females) and ten on May 14.

Red-winged Blackbird (*Agelaius phoeniceus*)

A very common bird during the Breeding Bird Survey a total of 1,537 pairs located. On June 13 a nest located with three young, their feathers were still in their quills. These were fed a large green grasshopper. There was a major post-breeding gathering in 2003 with an even larger event in 2004. This year there was also a major winter invasion. Early fall records: *for the post-breeding gathering there were 600 on June 11 with 1,200 on June 16, 1,800 on June 18 and 2,390 on June 23, then 450 seen on June 29 with 370 on July 4, 190 on July 6 and 125 on July 9. There were 240 on July 13 with 280 on July 19, 290 on July 23, 930 on July 25, 2,030 on July 27, 3,020 on July 30, 5,075 on August 5, 13,970 on August 8, 18,030 on August 10, 27,000 on August 13, 37,650 on August 20, 52,000 on August 24, 52,400 on August 27, 70,000 on September 1 and 74,000 on September 3, then 72,000 seen on September 7 with 69,000 on September 10. There were 96,000 on September 14 with 115,000 on September 16, then 100,000 seen on September 21 with 80,000 on September 24, 31,000 on September 29, 11,100 on October 2 and 170 on October 5. That was the end of the post-breeding gathering which took up the whole of the early fall passage. The count of 115,000 was the highest count for Zellwood but read on. For the late fall passage there were 250 on October 9 with 80 on October 12. This gap between two strong events lasted for a month. There were 210 on October 15 with 450 on October 19, 1,100 on October 22, 1,420 on October 26 and 14,800 on November 2, then 10,670 seen on November 5 with 9,800 on November 9. There were 14,100 on November 12 with 24,100 on November 16, 30,400 on November 20, 40,000 on November 23 and 53,000 on November 28, then 41,000 seen on December 1 with 31,000 on December 3. That closed the fall passage but not the event. For the winter passage there were 35,000 on December 7 with 54,000 on December 15, then 51,000 seen on December 17 with 30,400 on December 21, 9,200 on December 26, 7,200 on December 28, 6,330 on December 31, 3,300 on January 4, 3,100 on January 11, 2,200 on January 14, 950 on January 16 and 310 on January 19. That was the end of this late fall/winter event and the end of the winter passage. The passage over-ran this year as there was not a large enough early spring passage to cover the decline of the winter passage so for the spring passage there were 1,150 on January 21 with 950 on January 28 and 810 on February 2. There were 1,100 on February 4 with 1,530 on February 8, 1,650 on February 16, 2,130 on February 22, 2,230 on February 29 and 3,250 on March 3, then 3,050 seen on March 7 with 2,150 on March 10, 1,870 on March 14 and 1,150 on March 19. That influx covered what would normally be the split between the two spring passages so in this instance I am treating it as a single spring passage. There were 2,150 on March 22 with 320 on March 24. There were 520 on March 28 with 2,250 on March 31, then 2,150 seen on April 7 with 420 on April 14 and 220 on April 18. That ended the spring passage. For the summer passage there were 770 on*

April 21 with 250 on April 23 and 140 on April 25. There were 250 on April 28 and May 2 with 280 on May 10, then 60 seen on May 14. There were 270 on May 16 with 450 on May 20, then 750 seen on May 23 and May 26 with 255 on May 30 and 170 on June 2. That was the end of the summer passage. For the post-breeding gathering 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. The count of 208,000 was the highest count for Zellwood but the highest count is now (2013) that of 303,000 on July 17, 2005. That was the end of the post-breeding gathering; whilst the numbers were much higher this event finished a month earlier this year.

Eastern Meadowlark (*Sturnella magna*)

A resident at the Sod Farm, the Sand Farm and near the Lust Road gate; during the Breeding Bird Survey a total of 43 pairs located. There were suggestions of passage in the fall. Early fall records: *there were 11 on July 4 with six to July 9. There were seven on July 13 with three on July 21 and one on July 23. There were four on July 25 with two on July 30 and singles to August 13.* It is likely that these birds went silent with the onset of their molt and the lack of records to the end of September was the result. From August 20 to September 24 singles seen on 11 dates with two on September 14. Coincidentally that was the end of the early fall "passage". For the main fall passage there were 15 on September 29 with six on October 2. There were ten on October 5 with 11 from October 9 to October 15, then nine seen on October 19 with six to November 2 and one on November 5. There were eight on November 9 with three to November 16. There were four on November 20 with 37 on November 23, then 13 seen on December 1 with three to December 7. The count of 37 may indicate a passage at that time. That closed the main fall passage. For the winter passage there were nine on December 9 with one on December 15. There were two on December 17 with three on December 21, five on December 26 and ten on December 28, then six seen on January 4 with two on January 11. That completed the winter passage. For the early spring passage there were five on January 14 with three to January 19 and two on January 21. There were six on January 25 with seven on February 2, then five seen on February 4 with three on February 8. There were 14 on February 11 with five on February 16 and three to February 22. That was the early end of the early spring passage. For the main spring passage there were six on February 27 with ten to March 3, then 12 seen on March 7 and March 14 with 11 on March 19, nine to March 28, seven on March 31, six on April 7 and two on April 14. There were nine on April 18 with ten on April 21 and 19 on April 23, then 11 seen on April 25 with ten on April 28. There were 19 on May 2 with seven on May 5. That closed the main spring passage. For the summer passage there were 12 on May 10

with 22 on May 14 and 32 on May 20, then 27 seen on May 23 with 13 on May 30, 12 on June 6 and five to June 13. There were nine on June 16 with 14 on June 20, then ten seen on June 28 with 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. That was the end of the summer passage.

Common Grackle (*Quiscalus quiscula*)

Seen in small numbers through the year with the exception of a post-breeding gathering; during the Breeding Bird Survey a total of 45 pairs located in the wetter pieces of woodland. Early fall records: *there were three on June 18 with 20 on June 23 and 330 on June 29, then 17 seen on July 2. There were 47 on July 4 with 87 on July 6, then 54 seen on July 7 with eight on July 13. There were 72 on July 19 with 21 on July 21, 12 on July 23 and eight to July 27. There were 44 on July 30 with 110 on August 5, then 26 seen on August 10 with two on August 13.* There was clearly no post-breeding gathering this year. There were 52 on August 20 with 53 on August 24, then 45 seen on September 1 with seven on September 3, three on September 7 and two on September 10. There were five on September 14 with seven on September 19 and 176 on September 21, then five seen on September 24 with four on September 29. These one day peak counts are a feature of this species; there would appear to be roving flocks that do not settle in any one place. That was the end of the early fall passage. For the late fall passage there were 32 on October 2 with 26 on October 5 and five to October 15. There were 23 on October 19 with five on October 22. There were seven on October 26 with eight on October 29, 20 on November 2 and 85 on November 5, then 74 seen on November 9 with ten on November 12, seven on November 16 and four on November 20. There were 21 on November 23 with seven on December 1 and five on December 3. That closed the late fall passage. For the winter passage there were 15 on December 7 with 187 on December 9 and 390 on December 17, then 21 seen on December 21 with 16 on December 28, five on December 31, four on January 4 and two on January 11. That completed the winter passage. For the early spring passage there were four on January 14 with six on January 16 and 21 on January 19, then 11 seen on January 21. There were 18 on January 25 with 33 on January 28, then ten seen to February 4 with eight on February 8. There were 23 on February 11 with eight on February 18 and six on February 22. That concluded the early spring passage. For the late spring passage there were 32 on February 27 with 12 on February 29 and seven to March 7. There were 27 on March 10 with 45 on March 19, then 38 seen on March 24 with 33 on March 28, six on March 31 and four on April 4. There were 14 on April 7 and April 18 with ten on April 21. There were 11 on April 23 with 16 on April 25 and 17 on April 28, then 14 seen on May 2 with ten on May 5. That closed the late spring passage. For the summer passage there were 16 on May 10 with eight on May 16 and five to May 23. There were 15 on May 26 and June 2 with ten on June 6 and three on June 9. There were four on June 13 with ten on June 16, then nine seen on June 20. There were 11 on June 23 with 26 on June 28, 37 on July 2 and 76 on July 4, then 72 seen on July 7 with 30 on July 11.

That was the end of the summer passage. For the post-breeding gathering there were 65 on July 14 with 130 on July 18, 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. The count of 23,000 was the highest count for Zellwood but the highest count is now (2013) that of 117,000 on July 17, 2005. That ended the post-breeding gathering.*

Boat-tailed Grackle (*Quiscalus major*)

There were major post-breeding gatherings in 2003 and 2004; there was also a significant winter passage. At other times only small numbers seen. During the Breeding Bird Survey a total of 154 pairs located which might come to a total population of 500 birds for the post-breeding gathering. So just where did all these icterids come from? Early fall records: *for the post-breeding gathering there were 150 on July 4 with 275 on July 6, 395 on July 9, 1,000 on July 19, 1,650 on July 21, 2,430 on July 23, 4,500 to July 27, 5,100 on August 5, 5,360 on August 8, 5,410 on August 10 and 5,510 on August 13, then 5,140 seen on August 24 with 4,770 on August 27. There were 5,300 on September 1 with 5,410 on September 3, then 5,030 seen on September 7 with 5,020 on September 10. There were 6,700 on September 14 with 7,300 on September 16 and September 19, then 5,280 seen on September 21 with 1,850 on September 24, 1,650 on September 29, 265 on October 2 and 20 on October 5. The counts of 7,300 were the highest counts for Zellwood but look at the winter influx. That was the end of the post-breeding gathering. There was of course no early fall passage so for the late fall passage there were 40 on October 9 with 45 on October 12 and 65 on October 19, then 50 seen on October 26 with 25 to November 2 and 15 on November 5. At this point a new event started. There were 85 on November 9 with 310 on November 12, then 135 seen on November 16. There were 240 on November 20 with 1,660 on November 23 and 4,850 on November 28, then 3,800 seen on December 1. That closed the fall passage. For the winter passage there were 4,150 on December 3 with 5,100 on December 7 and 9,550 on December 15, then 8,200 seen on December 17 with 3,700 on December 21, 2,020 on December 26, 550 on December 28, 110 on December 31 and 105 on January 4. The count of 9,550 was the highest count for Zellwood but see the post-breeding gathering. That was the end of this event; it was also the end of the winter passage. For the early spring passage there were 450 on January 11 with two on January 14. There were six on January 16 with 315 on January 19, then 150 seen on January 21 with 65 on January 28 and 33 on February 2. There were 400 on February 4 with 345 on February 8 and 30 on February 11. There were 48 on February 16 with 545 on February 18, then 65 seen on February 22 with 60 on February 27. That completed the early spring passage. For the main spring passage or in this case the summer passage (this is such an early nester) there were 300 on February 29 with 81 on March 7 and 77 on March 10. There were 90 on March 14 and March 19 with 85 to March 24, 67 on March 31 and 55 on April 4. There were 120 on April 7*

with 165 on April 14, then 150 seen to April 21 with 120 on April 23. There were 150 on April 25 with 140 on April 28 and 100 on May 2. There were 180 on May 5 with 80 on May 10 and 70 on May 14. That closed the summer passage. The first flocks of juveniles were seen on May 20. For the post-breeding gathering there were 80 on May 16 with 150 on May 20, 490 to May 26, 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 June 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, 250 on August 11 *and ten on August 15*. That ended the post-breeding gathering; this event lasted three months. The count of 97,000 was the highest count for Zellwood (the third such count this year now that may be a first) but the highest count is now (2013) that of 167,000 on July 14, 2005.

Shiny Cowbird (*Molothrus bonariensis*)

This was a vagrant. Records from the previous survey year: *there was one on June 8, June 11, June 16 and June 29 with two on July 2, then one seen on July 4. There were two on July 13 with singles on July 19 and July 21*. For this year for the winter passage there was a female by the Lust Road pump house on December 3. There was another female by Interceptor Road on May 20; the timing of this means that it could be a spring or a summer record.

Brown-headed Cowbird (*Molothrus ater*)

Present all year with the greatest numbers during the winter and early spring passages. During the Breeding Bird Survey a total of eight pairs located; juveniles were seen from June 13. Early fall records: *there were four on July 6 and July 13 with three on July 19, two on July 21 and singles to August 5. There were two on August 8 with singles on August 10 and August 13*. For this year there were singles on August 20, August 24 and August 27 with two on September 1 and ten on September 3, then one seen on September 7. There were three on September 10 with 12 on September 16, then one seen on September 19. There were two on September 21 with 31 on September 29 and 65 on October 2, then two seen to October 12 with one on October 22. There were two on October 26 with four on October 29, seven on November 12 and 205 on November 20, then 64 seen on November 23 with four on November 28. That closed what appeared to be a single fall passage. For the winter passage there were 170 on December 1 with 275 on December 3, then 53 seen on December 7 with 21 on December 9 and five on December 15. There were 40 on December 21 with 350 on December 28, then 194 seen on January 4 with 150 on January 11, 60 on January 14 and 20 on January 19. That was a long running winter passage. For the early spring passage there were 33 on January 21 with five on

January 28 and one on February 2. There were 86 on February 4 with 150 on February 8, 290 on February 16 and 490 on February 22, then four seen on February 27. That concluded the early spring passage. For the late spring passage there were 20 on February 29 with 30 on March 3, then 20 seen on March 7 with 15 on March 10 and two on March 14. That was the early end of the late spring passage as there were no further sightings until April 7. For the summer passage there were singles on April 7 and April 18 with two on April 21, seven on April 25 and 13 on May 2, then five seen to May 16 with four on May 23, three on May 26, two to June 6 and one on June 9. The juveniles now arrived; there was one on June 13 and June 16 with two on June 20, four on June 23, five on June 28, 11 on July 2 and 15 on July 4. I did not note any juveniles after that date. There were also adults as follows: there were two on June 16 and June 20 with one on June 23. There were four on June 28 but only juveniles seen on July 2 and July 4. There were five on July 7 with four on July 11 and three on July 14. That was the end of the summer passage. Adults were now back in the picture with the early fall passage. For the early fall passage there were six on July 18 with two to July 29 and singles to August 9. Going back to July 4 the juveniles were seen as follows: there were seven by the Hooper Farms Road gate, one by the Lust Road gate, four at the Sand Farm, one at the eastern end of the McDonald Canal, one by the Workshops and one by Canal Road. The only site where a pair was present during the summer and no juvenile seen on this date was Interceptor Road. There had been a juvenile there on June 28.

Orchard Oriole (*Icterus spurius*)

A summer visitor, there is little to suggest passage. During the Breeding Bird Survey a total of 22 adult or immature males were located on territory. Early fall records: *there were five on June 8 with seven to June 16, ten on June 18 and 14 on June 26, then nine seen on June 29 with eight on July 2, three on July 4 and two on July 6. There were five on July 9 with two on July 13 and singles to July 27.* For this year there was an immature on August 20 with two on August 24 and four on September 3. There were no later records. For the spring passage there was one on April 18 with three on April 21 and 12 on April 25, then six seen on May 2 with five on May 5. That ended the spring passage. For the summer passage there were six on May 10 with eight on May 14, ten to May 23 and 12 on May 26, then ten seen on May 30 with seven on June 2. There were 12 on June 6 with 14 on June 9, then ten seen on June 13 with nine on June 16. 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. Finally there were three immatures on July 29.

Baltimore Oriole (*Icterus galbula*)

This was probably the best showing for what is normally a very rare passage migrant. For the early fall passage there was one on September 10 with two on September 19 and September 21, five on September 24 and seven on September 29, then four seen on October 2. The count of seven is still (2013) the highest count for Zellwood. That was the early fall passage. For the late fall passage there was one on October 15. Later there were three on November 9 with one on November 20. That completed the late fall passage. There were no winter records. For the early spring passage there was one on January 21 with one later on February 4. For the late spring passage there were singles on March 7 and later on April 28. The last individual was an adult male it was at the Workshops.

American Goldfinch (*Spinus tristis*)

A winter visitor and spring passage migrant; there were no large flocks this year. For the late fall passage there were four on November 20 that was it. For the winter passage there were five on December 1 with 19 on December 3 and 27 on December 7, then six seen on December 9 with five on December 15. There were 11 on December 21 with 17 on December 26 and 24 on December 28, then 17 seen on January 4 with five on January 11 and four on January 14. That completed the winter passage. For the early spring passage there were six on January 16 with seven on January 19 and 24 on January 21, then two seen to February 16 with one on February 18. That closed the early spring passage. For the late spring passage there was one on February 29 with four on March 3, then singles seen to March 14. Finally for the late spring passage there was one on March 28.

House Sparrow (*Passer domesticus*)

A rare and irregular visitor; Early fall record: *there was one on July 2*. For this year's late fall passage there was one on November 16. For the late spring passage there was one on March 19. Finally for the early fall passage there were two on July 18. This was the first year without a pair breeding on the northern border.

Table A

The Spreadsheet - August 15, 2003 to August 14, 2004.

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.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	2	6	1	.	.	.	.	.	.	.	.	.	1	1	.	1
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	9	1	7	2	6	10	5	5	6	3	5	7	3	5	8	5
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	13	5	7	6	16	16	13	17	8	19	10	18	34	114	30	15
2	American Bittern	.	.	.	1	1	3	1	1	4	3	2	3	6	7	8	2
2	Least Bittern	1	1	1	.	1	1	.	.	.	.	.	.	.	.	.	1
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	13	11	8	14	11	11	19	15	7	13	10	17	13	21	20	16
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	9	6	10	33	23	7	3	6	4	1	4	3	8	4	3	10
2	Snowy Egret	5	32	27	50	23	7	8	10	4	3	5	6	16	3	6	7
2	Little Blue Heron	29	27	35	63	55	57	34	28	20	39	22	20	34	24	24	40
2	Tricolored Heron	11	19	29	35	46	31	19	14	3	2	2	2	12	4	4	11
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1,045	1,330	850	850	280	325	550	235	190	360	525	158	305	580	950	285
2	Green Heron	15	16	14	14	16	19	6	4	.	5	2	6	6	6	9	6
2	Black-crowned Night-Heron	1	1	.	1	.	1	.	.	.	.	3	2	.	1	2	1
2	Yellow-crowned Night-Heron	1	.	.	.	1	.	.	.	.	.	.	.	.	2	.	.
2	White Ibis	545	67	36	150	31	115	74	17	12	16	9	1	62	15	28	8
2	Glossy Ibis	450	62	70	192	190	115	130	110	34	6	20	27	69	17	70	175
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
2	Wood Stork	2	.	.	1	3	.	.	.	.	.	.	.	.	.	.	2
7	Black Vulture	2	23	2	9	3	6	6	3	5	.	.	5	4	1	.	5
7	Turkey Vulture	11	21	15	9	12	6	5	7	4	3	9	5	3	7	3	13
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	2	1	.	1	4	3	.	.	.	2	2	2	1	1	1	.
3	Fulvous Whistling-Duck	7	15	2	2	2	45	1	.	.	2	2	9	9	16	31	71
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	3	.	.	.	.	2	.	.	.	.	.	3	1	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	.	1	3	3	4	2	1	1	.	1	.	.	1	1	1
3	Mottled Duck	1	2	2	8	13	18	19	17	4	6	3	1	2	3	10	10
3	Blue-winged Teal	5	27	2	14	3	30	31	8	22	3	2	7	19	43	30	108
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	5	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	1	.	.	.	.	2	.	.	.	.	.	.	2	2	2
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	7	1	3	2	3	7	8	8	5	5	5	6	5	7	2	5
7	Swallow-tailed Kite	78	.	1	4	3	1	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	.	1	.	1	1	.	2	2	1	3	2	3	2	1	5	2
7	Northern Harrier	.	1	.	2	2	.	1	1	2	3	2	.	4	7	6	6
8	Sharp-shinned Hawk	.	.	.	.	1	1	1	.	.	.	.	1	.	.	1	.
8	Cooper's Hawk	4	5	2	5	2	8	4	1	1	.	1	1	.	1	1	1
8	Red-shouldered Hawk	15	13	8	12	13	18	12	11	7	14	8	12	10	20	19	12
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	10	12	10	10	4	12	4	6	8	14	6	5	9	16	8	6
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	1	1	1	1	1	.	1	3	11	3	12	9	6	12
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	1	.	.	.	2	1	4	1	2	3
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	4	2	1	7	3	2	6	5	5	5	4	2	8	3	3	2
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	11	10	11	15	17	11	18	18	18	26	19	22	13	18	23	27
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	2
2	Sora	.	.	.	.	2	.	.	.	1	1	1	4	8	18	32	15
2	Purple Gallinule	6	8	5	4	10	17	5	6	8	5	4	4	2	6	2	4
4	Common Moorhen	160	140	250	150	280	335	210	240	90	100	105	150	150	162	165	155
1	American Coot	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	1	29	33	3	3	14	3	35	50	32	55	37	12	2	5	15
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	1	.	.	.	1	.	1	.	.	.	.	.	.	.	.
4	Lesser Yellowlegs	.	7	.	.	1	3	.	1	.	.	1	.	.	2	1	3
4	Solitary Sandpiper	.	.	.	1	1	1	1	.	.	.	1	.	.	.	1	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	2	.	.	.	.	2	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	2	.	.	1	1	.	.	.	.	.	.	.
4	Least Sandpiper	.	6	2	.	4	14	16	1	6	.	30	1	.	.	.	6
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	1	.	1	1	10	6	.	.	.	2	.	14	14	3	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	8

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
6	Buff-breasted Sandpiper	.	.	.	.	1	.	.	.	.	.	.	.	.	.	2	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	1	4	7	1	2	2	.	4	6	3	5	39
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.
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	.	.	2	.	.	.	.	.	2	1	1	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	1	.	.	.	10	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	20	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	2	3	5	1	3	4	2	7	1	2	2	6	4	1	1	2

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove		1					2									
8	Mourning Dove	7	49	106	50	22	65	83	38	63	100	33	135	167	125	20	30
8	Common Ground-Dove	16	15	24	18	14	19	21	23	14	25	17	16	21	11	27	12
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo		1														1
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	7	9	8	14	12	6	4	1	2	0	2	1	1	5	1	1
8	Eastern Screech-Owl								1								
8	Great Horned Owl		1		1		1										2
8	Burrowing Owl																
8	Barred Owl			1									2				
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk		1			1								1			
8	Chuck-will's-widow																
8	Eastern Whip-poor-will							1	1	1			1				
7	Chimney Swift	34	5	143	260	20	260	1,840	220	9	22	36	38	12	26	33	12
8	Ruby-throated Hummingbird														1		
8	Black-chinned Hummingbird																
5	Belted Kingfisher	1					3	5	1	1	2	1		2	9	4	4
8	Red-headed Woodpecker	1						3									
8	Red-bellied Woodpecker	10	25	22	14	20	10	17	17	20	39	13	22	35	32	34	29
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	5	8	6	5	6	4	6	10	3	9	6	5	22	9	14	10
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	2	3	1	1	1		2	2	1	1	3	1	2	4	3
8	Pileated Woodpecker	2	3	2			1	1			4		2	1	5	3	2

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	1	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	1	.	.	.	.	1	4	2	1	1	.	.	.	.	3	.
8	Alder Flycatcher	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	1	.	.	.	.	.	.	1	2	3	1	2	3	2
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	10
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	4	2	3	.	2	2	1	.	.	.	.	.	.	.	1	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	1	2	3	1	.	3	1	14	15	2	1	.	.	.	.
8	Gray Kingbird	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	6	2	3	5	1	4	5	7	6	5	9	3	5	5	5	7
8	White-eyed Vireo	2	1	1	3	2	5	3	5	9	14	13	32	23	17	53	40
8	Bell's Vireo	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Red-eyed Vireo	1	.	.	.	1	.	.	.	.	1	1	1	9	3	2	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	22	25	29	24	19	20	12	34	31	47	37	76	83	80	44	68
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fish Crow	.	1	1	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Purple Martin	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	.	.	.	.	.	.	1	1	.	5	1	2	11	31	20	23
7	Northern Rough-winged Swallow	2	.	2	.	.	.	.	1	.	1	.	.	2	.	.	2
7	Bank Swallow	14	56	83	30	29	3	1	3	.	2	2	1	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
7	Cliff Swallow	11	2	4	2	.	.	.	41	.	1	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	332	2,600	2,025	1,300	750	10	415	235	165	235	152	85	11	44	22	18
8	Carolina Chickadee	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	2	1	1	1	2	3	2	2	2	1	2	2	1	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	29	37	27	13	32	30	17	22	18	49	18	22	24	21	31	18
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	4	6	20	52
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	2
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	1	2	4	9
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Blue-gray Gnatcatcher	3	5	6	5	5	18	33	27	22	73	25	42	47	44	56	60
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	1	2	.	.	1	5	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	1	.	.	.	2	.	1
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	1	2	.	1	2	12	3	2
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	3	1	.	.	.	1	.	.	.	1	.	2	23	86	185	413
8	Northern Mockingbird	22	27	22	23	14	26	20	37	21	44	48	57	44	74	55	60
8	Brown Thrasher	1	4	3	4	10	10	4	7	4	9	3	2	1	2	9	5
7	European Starling	2	1	16	2	15	7	4	3	6	2	4	1	3	2	2	1
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	1	.	.	.	.	1	6	8	.	1
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	1	.	.	1	.	.	1	.	.	.	.	4	2	2	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
7	Yellow Warbler	136	145	56	70	70	29	62	38	37	26	15	15	22	10	5	2
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	2	1	.	1
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.	.
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	4	2	1	.
8	Yellow-throated Warbler	1	.	1	.	.	.	3	.	.	1	.	.	.	.	.	.
8	Pine Warbler	.	.	1	.	.	2	.	1	.	.	.	.	2	1	.	1
7	Prairie Warbler	10	15	10	13	19	14	83	22	17	33	16	18	19	12	6	14
7	Palm Warbler	.	.	.	.	.	.	2	6	6	23	15	26	732	316	188	54
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	1
8	American Redstart	1	1	1	1	.	.	.	.	.	.	.	1	10	5	10	2
8	Prothonotary Warbler	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	1	1	4	3	8	9	18	6	4	12	15	15	11
7	Northern Waterthrush	1	2	3	2	3	8	38	51	35	26	28	36	45	43	33	27
7	Louisiana Waterthrush	2	7	16	3	41	10	8	4	3	2	5	2	2	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	3	1	1	7	2	39	55	18	97	40	88	235	613	706	250
8	Hooded Warbler	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	1	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Canada Warbler	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	2	.	1	.	.	.	.	1	.	.	1	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
7	Eastern Towhee	69	76	87	48	54	36	29	43	19	46	27	20	20	32	35	32
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.
7	Grasshopper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
7	White-throated	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	59	78	50	46	74	54	69	63	68	85	80	83	74	99	127	130
8	Rose-breasted	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	16	14	6	15	8	7	12	7	6	8	14	9	2	16	9	9
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	2	5	3	2	1	1	1	1	2	3	2	3	15	43	16	22
8	Painted Bunting	.	.	.	1	.	.	.	.	.	.	1	2	1	.	.	.
7	Dickcissel	.	.	.	.	1	.	.	.	.	3	2	2	2	.	.	.
7	Bobolink	.	2	1	3	7	12	14	7	68	73	57	41	26	16	4	2
7	Red-winged	37,65	52,00	52,40	70,00	74,00	72,00	69,00	96,00	115,00	96,00	100,00	80,00	31,00	11,1	170	250
6	Eastern Meadowlark	1	1	1	1	1	1	1	2	1	1	1	1	15	6	10	11
7	Yellow-headed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	52	53	6	45	7	3	2	5	4	7	176	5	4	32	26	5
7	Boat-tailed Grackle	4,020	5,140	4,770	5,300	5,410	5,030	5,020	6,700	7,300	7,300	5,280	1,850	1,650	265	20	40

Table A. Part 1

Hab	SPECIES	8/20	8/24	8/27	9/1	9/3	9/7	9/10	9/14	9/16	9/19	9/21	9/24	9/29	10/2	10/5	10/9
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed	1	1	1	2	10	1	3	2	12	1	2	.	31	65	.	2
8	Orchard Oriole	1	2	.	.	4	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	1	.	.	2	2	5	7	1	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	85	94	79	78	91	86	92	85	78	82	81	88	100	102	91	100
	TOTAL	45,052	62,365	61,412	79,011	81,805	79,042	78,146	104,608	123,561	105,171	107,095	83,336	35,394	14,549	3,586	2,894

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
1	Pied-billed Grebe	1	2	2	1	3	3	4	1	5	8	7	4	3	3	2	4
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	60
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	6	4	40	9	69	13	47	13	47	32	26	21	266	42	61	68
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	37	16	16	13	29	21	13	15	28	21	32	32	31	19	15	30
2	American Bittern	3	4	9	2	9	8	4	11	8	3	5	4	18	7	7	5
2	Least Bittern	.	1	1	1	.	1	.	1	.	.	1	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	18	13	16	13	23	22	19	13	16	21	16	31	25	15	25	30
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	13	10	10	6	4	4	6	4	4	6	3	8	5	3	3	14
2	Snowy Egret	4	3	4	5	3	2	13	1	1	1	1	1	1	2	4	7
2	Little Blue Heron	23	18	23	17	23	31	22	12	25	25	41	28	35	38	33	49
2	Tricolored Heron	11	14	15	5	4	6	5	2	5	6	5	10	7	8	3	9
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	490	490	300	655	1,860	1,045	240	51	410	275	290	885	535	285	315	355
2	Green Heron	7	5	5	6	6	5	5	3	5	6	7	6	7	4	7	5
2	Black-crowned Night-Heron	1	1	1	7	1	1	2	3	.	2	1	1	5	2	1	.
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	2	15	4	1	45	9	11	56	75	28	10	72	3	20	13	63
2	Glossy Ibis	122	124	94	79	43	52	10	19	48	69	17	11	10	43	12	9
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	2	.	1	.	.	.	.	2	.	.	3	.	1	.	.
7	Black Vulture	4	9	21	3	3	3	16	3	1	1	4	13	6	6	4	5
7	Turkey Vulture	7	41	16	7	27	40	40	33	29	18	22	17	40	86	28	29
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	193	625	695	840	31	52	83	16	22	12	16	183	77	11	35	61
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	2	.	.	.	.	.	.	.	2	.	.	.	.	4	.
3	Gadwall	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	.
3	Mallard	3	1	1	4	.	.	.	.	.	.	1	.	.	.	.	.
3	Mottled Duck	5	10	7	3	.	2	.	.	.	2	4	2	4	.	6	4
3	Blue-winged Teal	10	29	20	22	2	24	16	5	26	2	15	30	9	24	16	39
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	6	6	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	1	2	2	.	.	.	.	.	.	.	.	.	2	.	.
3	Green-winged Teal	.	2	19	6	2	15	2	1	4	42	3	10	3	2	2	32
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	108	55	.	1	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	3	1	.	.	.	4
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	.	.	6	220	380	.	1	.	20	.
5	Osprey	6	6	12	8	4	11	7	6	8	10	5	12	7	3	7	7
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	4	9	6	4	6	13	9	5	5	7	5	10	6	10	16	18
7	Northern Harrier	3	9	11	8	13	17	27	14	24	24	42	53	44	84	69	104
8	Sharp-shinned Hawk	.	.	1	3	.	3	1	2	2	3	5	4	5	1	1	4
8	Cooper's Hawk	1	2	1	1	.	.	2	2	2	1	1	2	1	2	.	2
8	Red-shouldered Hawk	22	10	13	19	18	20	6	8	7	17	21	13	18	15	12	13
8	Broad-winged Hawk	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Red-tailed Hawk	9	7	8	10	6	9	10	9	8	9	15	15	23	18	18	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	11	18	24	22	34	36	33	38	34	27	29	33	31	31	38	33
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	2	1	2	1	1	.	1	1	.	.	1	1	.	.	1	1
7	Peregrine Falcon	.	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	2	3	2	1	3	2	.	9	2	3	.	.	.	1	5
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
2	King Rail	25	25	32	36	30	45	31	32	48	54	58	63	57	69	53	53
2	Virginia Rail	1	.	1	1	.	1	.	3	.	1	1	1	2	2	2	2
2	Sora	24	11	45	110	59	42	18	49	41	46	81	90	132	91	80	54
2	Purple Gallinule	6	.	.	.	.	.	.	3	1	1	1	1	1	1	2	2
4	Common Moorhen	180	125	110	90	118	135	98	85	105	140	115	180	290	220	225	345
1	American Coot	.	.	1	4	2	3	14	8	12	8	7	9	13	11	13	17

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	37	41	.	.	.	5	2
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	18	12	6	11	9	4	9	54	49	168	168	215	188	384	20	87
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	3	6	1	3	.	.	.	5	1	2	1	.	3	.
4	Lesser Yellowlegs	3	4	1	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	.	.	42	18	.	.	.	.	.	.	5	.	.	.	.	.
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 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	7	20	.	1	.	.	.	.	.	.	.	.	.	2
4	Wilson's Snipe	3	6	20	11	17	2	11	14	13	22	30	30	39	65	43	18
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	1	.	.	.	.	2	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	4	1	1	11
5	Ring-billed Gull	.	.	.	.	.	2	8	.	28	74	70	36	50	69	6,200	38
5	Herring Gull	.	.	1	.	.	.	.	.	.	1	.	.	3	1	.	1
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	1	.	.	1	1	.	.	1	.	1	1	2	12	.	5
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	11	.	.	.	9	.	5	9	11	49
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	3	1	2	2	.	2	1	1	2	3	1	2	2	1	2

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	45	15	11	9	30	20	32	58	23	15	21	65	17	3	22	37
8	Common Ground-Dove	9	14	5	3	11	5	8	8	2	2	4	3	3	2	4	6
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani							1	1		3	1					
8	Barn Owl	16	2	10	2	3	1	3	3	3	2	3	3	1	1	2	1
8	Eastern Screech-Owl																
8	Great Horned Owl				2				1	1		2		1			
8	Burrowing Owl																
8	Barred Owl	1													1		1
7	Long-eared Owl																
7	Short-eared Owl													1	1	2	2
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk	1															
8	Chuck-will's-widow																
8	Eastern Whip-poor-will									1							
7	Chimney Swift	30		8	12	2											
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	7	3	5	8	6	7	9	8	8	9	8	8	8	7	9	11
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	32	25	12	20	22	12	10	12	16	16	16	8	10	10	8	5
8	Yellow-bellied Sapsucker				3				1	1			1			1	
8	Downy Woodpecker	5	6	4	4	3	2	3	3	4	2	6		3	2	2	1
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	4	2	2	2	2	2	2	3	1	2		1	1		1
8	Pileated Woodpecker	1	3	1	2	2	2	1	2	2	1	3	1	2	1	1	

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	1	1	2	1	5	2	5	11	2	14	9	1	6	12	7	6
7	Eastern Phoebe	18	39	191	268	416	315	210	171	108	216	158	143	171	109	120	72
8	Vermilion Flycatcher	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	1	.	.	.	.	.	.	2	1
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	1	.	2	.	1	4	4	.	6	.	6	5	.	1
8	Eastern Kingbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	1	.	.	.	1	1	1	1	1
8	Scissor-tailed Flycatcher	.	.	1	.	.	1	.	.	.	.	2	.	1	2	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	5	5	5	3	3	4	5	4	4	7	6	3	2	1	3	3
8	White-eyed Vireo	25	36	13	12	10	11	9	5	1	5	6	3	5	2	.	.
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	1	.	1	.	.	.	.	1	.	.	.	2	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	64	102	46	29	20	23	28	12	9	12	19	4	13	2	2	2
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	1	.	.	.	.	.	.	.	.	.	.	.	.	2	.
7	Fish Crow	4	2	10	2	2	.	.	2	3	9	1	.	160	86	.	2
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	212	51	7	30	9	31	30	29	32	20	58	16	170	340	29	4
7	Northern Rough-winged Swallow	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Bank Swallow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	5	13	2	33	7	30	14	8	3	6	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	1	2	2	1	2	1	3	2	2	1	1	1	.	1	.
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	18	22	13	20	29	25	18	20	10	13	12	17	15	9	7	5
8	Bewick's Wren	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	101	82	218	260	344	236	230	311	78	294	213	120	189	66	97	96
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	5	2	3	7	8	5	5	9	4	8	5	6	9	6	9	11
7	Marsh Wren	8	8	13	36	77	30	35	31	20	24	26	19	20	23	14	15
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	1	5	1	1	1	1	2	4	4	2	1	7	2	3	2
8	Blue-gray Gnatcatcher	59	67	40	38	50	48	22	46	16	45	41	30	26	17	41	15
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	1	.	1	.	.	1	.	.	.	.
8	Wood Thrush	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	1	.	.	4	.	4	.	2	42	.
8	Gray Catbird	660	165	272	220	339	213	193	282	29	214	170	133	84	77	46	66
8	Northern Mockingbird	96	61	31	29	22	20	23	15	15	17	15	18	14	4	10	9
8	Brown Thrasher	3	3	1	2	2	1	1	.	1	2	2	.	1	.	1	.
7	European Starling	1	2	2	12	2	.	3	13	.	.	1	.	1	65	.	230
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	2	.	6	6	1	3
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	2	1	2	2	1	5	6	7	5	4	3	4
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	5	1	.	.	.	.	1	.	1	.	1	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
7	Yellow Warbler	3	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	1	1	1	1	13	4	17	7	68	61	100	132	145	45	65	92
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	2	.	2	1	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	4	6	6	2	4	1	2	1	.	3	2	2	2	1	2	1
7	Palm Warbler	47	390	216	185	181	142	203	146	121	101	105	162	122	120	145	135
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	2	1	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	13	8	5	4	4	.	1	1	.	1	2	.	1	1	1	.
7	Northern Waterthrush	21	7	12	10	6	7	2	5	1	5	3	3	1	3	1	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	294	204	197	119	153	77	83	81	51	130	121	95	109	69	105	70
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Ha	SPECIES	10/1	10/1	10/1	10/2	10/2	10/2	10/2	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3	
7	Eastern Towhee	61	28	6	31	48	28	11	21	6	16	14	17	12	3	7	14		
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	2	2	1	.	.	1	3	8	8	2	
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	4	5	6	15	30	16	22	35	38	45	62	64	27	44	35	50		
7	Grasshopper Sparrow	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	2	.	5	4	4	3	4	4	2		
7	Lincoln's Sparrow	.	.	.	.	1	.	.	.	.	.	1	.	1	.	1	2	2	
7	Swamp Sparrow	.	3	7	8	78	140	39	188	37	287	230	435	171	200	263	189		
7	White-throated	.	.	1	.	.	.	.	.	.	.	.	.	.	1	1	2	1	
7	White-crowned	.	.	.	.	.	.	.	11	1	12	14	11	6	6	3	1		
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	140	88	85	80	71	72	58	63	46	66	66	36	35	21	26	14		
8	Rose-breasted	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	5	6	3	3	1	2	6	6	1	4	3	.	3	5	3	.		
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	26	336	88	22	52	13	10	12	6	17	9	5	6	3	5	.		
8	Painted Bunting	.	.	1	.	.	.	.	.	.	2	1	.	1	.	.	.		
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	1	3	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	80	210	450	1,10	1,42	160	14,80	10,67	9,80	14,10	24,10	40,00	30,40	53,00	41,00	31,00		
6	Eastern Meadowlark	11	11	9	6	6	6	6	1	8	3	3	37	4	3	13	3		
7	Yellow-headed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	5	5	23	5	7	8	20	85	74	10	7	21	4	6	7	5		
7	Boat-tailed Grackle	45	25	65	35	50	25	25	15	85	310	135	1,660	240	4,850	3,800	4,150		

Table A. Part 2

Hab	SPECIES	10/12	10/15	10/19	10/22	10/26	10/29	11/2	11/5	11/9	11/12	11/16	11/20	11/23	11/28	12/1	12/3
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	2	.	.	1	2	4	.	.	.	7	.	205	64	4	170	275
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	1	.	.	.	.	.	.	3	.	.	1	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	4	.	.	5	19
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	94	100	100	102	88	85	88	92	95	95	106	95	102	102	102	100
	TOTAL INDIVIDUALS	3,492	3,778	3,802	4,812	6,072	3,467	17,073	13,032	12,041	17,638	27,439	34,328	45,713	60,998	53,607	38,419

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	3	6	5	3	1	6	5	10	6	2	5	9	6	9	11	11
1	Horned Grebe	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	40	49	3	.	.	28	34	1	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	46	57	69	87	65	62	78	154	23	231	174	123	36	120	226	58
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	19	22	25	9	28	33	30	48	54	38	28	37	29	32	35	40
2	American Bittern	6	11	10	10	.	8	9	13	23	11	11	13	11	13	14	8
2	Least Bittern	2	.	1	2	.	1	1	1	1	1	1	.	.	.	.	.
2	Gray Heron	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	16	22	24	18	16	23	21	25	18	23	22	29	25	21	25	21
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	13	11	9	7	4	8	9	12	7	5	6	8	7	8	20	15
2	Snowy Egret	6	3	5	17	6	27	10	15	16	25	16	7	24	26	27	22
2	Little Blue Heron	28	35	35	32	30	31	40	56	40	26	29	50	45	65	64	58
2	Tricolored Heron	4	5	6	6	2	6	12	10	6	5	4	6	4	16	12	3
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	810	410	450	750	400	1,065	540	1,840	12	90	715	1,250	1,050	810	1,080	805
2	Green Heron	9	4	2	3	5	6	2	2	7	5	2	6	4	3	7	3
2	Black-crowned Night-Heron	4	7	1	1	2	2	2	1	1	4	.	2	1	1	.	2
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	23	17	7	2	2	7	20	23	5	21	.	13	25	8	34	7
2	Glossy Ibis	2	2	16	7	10	8	10	21	3	1	3	5	11	20	37	307
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	2	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
7	Black Vulture	4	13	11	1	1	1	1	3	12	5	5	3	2	4	7	7
7	Turkey Vulture	33	11	24	43	.	16	23	39	48	16	20	10	51	25	55	53
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	38	65	6	3	.	18	4	4	8	34	3	.	.	1	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	1	.	.	.	.	.	.	.	10	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	1	2	.	2	.	.	2	4	1	1	.	12	4	4	4	7
3	Gadwall	.	.	.	.	.	.	1	1	2	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
3	American Black Duck	.	2	2	2	.	2	1	1	1	.	.	1	1	.	2	.
3	Mallard	.	.	.	.	.	1	1	2	3	2	.	.	1	3	1	2
3	Mottled Duck	5	.	7	5	.	10	6	15	9	7	2	1	12	5	11	12
3	Blue-winged Teal	18	30	24	13	.	48	38	45	51	151	62	55	34	74	45	70
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	8	2	9	3	.	4	5	18	12	8	20	25	15	21	15	20
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	3	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	12	.	.	1	12	.	.	.	.	12	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	5	11	5	4	.	4	4	5	4	6	3	4	3	5	2	4
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
1	Ruddy Duck	140	470	50	3	.	830	.	2,720	5,600	10,300	.	2,400	2	.	100	70
5	Osprey	11	12	9	7	6	8	7	7	11	6	5	10	4	9	9	13
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	12	11	7	13	7	6	7	6	5	5	11	6	15	7	11	5
7	Northern Harrier	79	74	40	53	.	51	37	44	57	41	45	20	45	15	26	29
8	Sharp-shinned Hawk	4	5	1	1	.	2	2	3	6	4	4	4	1	4	1	2
8	Cooper's Hawk	2	2	2	2	.	1	3	1	3	2	2	1	3	3	3	2
8	Red-shouldered Hawk	17	18	14	4	.	13	10	13	11	12	12	10	13	10	17	15
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Red-tailed Hawk	23	26	25	14	.	16	18	25	14	14	17	12	23	8	22	23
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	32	34	30	21	.	36	28	29	25	20	15	21	14	13	18	17
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	1	.	1	1	.	2	1	1	1	1	.	.	1	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	2	2	1	1	.	1	1	2	1	2	1	1	1	1	.	.
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	25	34	14	19	.	7	5	17	7	16	3	21	21	15	6	10
2	Virginia Rail	1	2	.	1	.	1	2	4	1	3	1	2	3	5	1	1
2	Sora	78	156	45	51	.	120	69	124	60	85	76	91	66	67	29	60
2	Purple Gallinule	1	1	1	1	.	1	1	1	1	2	2	1	3	1	1	3
4	Common Moorhen	325	400	290	365	.	565	440	510	465	455	370	360	335	380	500	310
1	American Coot	25	23	11	8	.	18	10	16	5	8	28	19	19	13	21	11

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
2	Sandhill Crane	57	.	5	.	3	.	.	65	11	6	.	.	1	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	1	1	.	2	.	1	.	.	1	1
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	238	390	215	520	.	555	550	410	555	1,040	345	525	175	470	400	655
4	Black-necked Stilt	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	3	1	.	1	1	.	.	.	.	.	.	.	.	.
4	Lesser Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	26	33	64	129	.	12	125	270	962	1,090	121	36	14	42	56	38
4	American Woodcock	.	.	.	1	.	1	.	.	.	2	1	1	.	1	3	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	1	10	3	.	.	35	22	53	75	40	152	136	86	8	4	51
5	Ring-billed Gull	130	34	130	140	160	572	8,100	1,850	11,500	12,250	730	582	1,150	985	1,110	2,840
5	Herring Gull	3	.	1	3	.	2	1	1	1	1	2	1	2	.	1	5
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	1	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	1	14	4	.	.	1	4	1	2	25	1	3	3	1	7	15
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	31	129	6	6	45	58	15	72	6	5	8	6	12	3	28	19
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	3	1	3	2	.	2	3	1	2	3	1	3	2	2	1	1

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	33	36	24	8		15	19	70	165	21	50	6	16	170	38	40
8	Common Ground-Dove	8	4	6	1		3	8	8	5	12	12	17	8	16	18	14
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	2	3	2	8		3	1	2	5	4	1	2		2	2	6
8	Eastern Screech-Owl																1
8	Great Horned Owl	2	2	3	1		1	3	3	3	3	3	7	2	2	2	4
8	Burrowing Owl																
8	Barred Owl		2					1	2	1	1				1	1	2
7	Long-eared Owl											1					
7	Short-eared Owl		1		1			2	2	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		1
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	8	8	6	4	5	3	3	1	5	5	4	4	7	4	4	6
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	10	10	6	6		9	5	13	9	14	10	15	15	11	18	9
8	Yellow-bellied Sapsucker			1					1	1	1	1	1	2		1	1
8	Downy Woodpecker	3	1	2	1		2	2	4	3	2	1	4	4	5	5	2
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	1	1	1		1	1	2	1	1	1	1	1	3	1	2
8	Pileated Woodpecker	3	1	3			1	1	2	4	2	1	2	3	1	3	2

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	3	8	2	.	.	2	4	11	13	15	1	18	15	20	14	8
7	Eastern Phoebe	125	102	111	29	.	69	62	96	125	108	66	116	119	109	108	92
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	2	3	1	.	.	1	2	3	3	2	1	3	1	3	5	2
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Tropical Kingbird	1	1	1	.	1	1	1	1	1	1	1	1	1	1	1	1
8	Cassin's Kingbird	.	.	.	.	.	.	1	1	1	1	.	1	1	.	1	1
8	Western Kingbird	3	.	13	1	13	8	8	28	28	18	3	18	21	.	8	1
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	1	1	1	.	1	1	1	1	1	1	1	1	1	1	1	1
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	3	3	7	3	.	1	2	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	3	6	1	2	4	2	3	2	2	1	1	5	1	1	1
8	White-eyed Vireo	1	1	3	.	.	1	3	2	5	2	5	5	5	3	5	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	1	.	2	.	.	.	.	2	1	1	1	1	1	3	1	1
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	16	6	9	10	.	2	15	20	10	8	14	18	7	21	16	11
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
7	American Crow	2	.	1	.	.	1	.	1	1	.	1	2	.	3	2	.
7	Fish Crow	1	9	.	.	4	40	.	4	.	.	.	850	305	390	2	3
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	4
7	Tree Swallow	137	4	77	1	.	11	545	171	53	45	1	100	55	11	33	72
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	.	.	1	.	2	2	3	1	2	2	1	1	2	1	1
8	Brown-headed Nuthatch	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	10	10	9	7	.	10	17	19	14	11	9	11	18	20	13	21
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	134	138	95	27	.	77	87	114	69	78	40	96	80	87	77	55
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	8	10	4	2	.	6	7	4	5	6	5	9	3	6	5	9
7	Marsh Wren	9	22	13	2	.	12	11	16	11	13	5	14	15	17	18	10
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	4	1	4	1	.	5	3	5	2	3	8	6	4	2	4	3
8	Blue-gray Gnatcatcher	33	38	53	14	.	28	28	37	38	32	32	48	34	35	48	40
8	Eastern Bluebird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	2	.	.	2	.	1	1	3	.	20	.	3	.	112	3	61
8	Gray Catbird	46	84	49	8	.	90	53	47	48	24	19	74	51	56	50	45
8	Northern Mockingbird	15	5	10	9	.	13	4	15	10	12	12	17	14	9	14	10
8	Brown Thrasher	2	.	.	.	.	.	1	1	.	.	.	2	1	1	1	2
7	European Starling	26	55	.	75	.	4	15	6	30	4	53	3	2	360	2	2
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	2	3	2	1	.	2	5	5	1	8	.	3	41	35	1	6
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	5	2	6	4	.	4	3	4	2	3	4	11	5	5	5	5
8	Nashville Warbler	.	.	1	.	.	1	.	1	1	.	1	1	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	48	103	260	100	.	95	145	135	125	85	120	110	90	50	130	160
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	2	.	1	1	1	.	.	.	.	.	1
7	Prairie Warbler	2	2	2	2	.	1	1	2	1	1	2	1	1	2	1	1
7	Palm Warbler	235	175	290	55	.	225	165	255	165	175	110	200	165	165	120	160
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	1	.	.	.	.	.	1	1	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	.	.	1	1	1	.	.	1	1	2	1	.
7	Northern Waterthrush	2	1	.	.	.	2	2	2	1	1	1	1	2	4	1	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	81	97	86	24	.	75	86	90	78	52	30	115	93	125	56	96
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Ha	SPECIES	12/7	12/9	12/15	12/17	12/2	12/21	12/2	12/2	12/3	1/4	1/11	1/14	1/1	1/1	1/21	1/2
7	Eastern Towhee	25	16	20	7	.	17	12	18	15	22	20	25	23	32	30	30
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	2	1	2	2	.	.	.	.	1	.	.
7	Clay-colored Sparrow	1	.	3	1	.	1	3	1	1	2	1	1	.	4	2	.
7	Field Sparrow	1	1	1	1	.	1	2	2	2	2	3	2	.	2	2	1
7	Vesper Sparrow	10	3	22	3	.	11	5	11	6	8	8	5	4	.	2	4
7	Lark Sparrow	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Savannah Sparrow	113	51	121	141	.	157	99	135	89	118	182	137	151	176	198	166
7	Grasshopper Sparrow	1	.	.	1	.	.	1	1	1	3	3	3	.	1	1	1
7	Henslow's Sparrow	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	4	7	5	1	.	3	4	7	5	9	2	7	4	.	3	2
7	Lincoln's Sparrow	5	2	1	1	.	2	2	2	2	1	.	1	.	1	1	.
7	Swamp Sparrow	283	197	180	19	.	237	101	186	119	111	78	200	124	176	73	68
7	White-throated Sparrow	2	1	.	.	.	.	1	1	.	1	1	.	.	.	.	.
7	White-crowned Sparrow	2	.	7	4	.	5	2	6	4	1	.	1	5	.	4	4
7	Dark-eyed Junco	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	30	38	30	20	.	38	31	50	31	28	32	53	31	49	43	52
8	Rose-breasted	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	3	4	8	2	.	4	3	5	16	1	3	3	2	2	2	3
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	3	5	5	2	.	32	19	14	14	3	1	2	2	2	12	3
8	Painted Bunting	.	1	.	1	.	2	3	3	1	2	2	1	3	1	1	.
7	Dickcissel	.	.	.	.	.	6	4	4	2	.	.	.	.	.	1	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	35,00	33,00	54,00	51,00	.	30,40	9,20	7,20	6,33	3,30	3,10	2,20	950	310	1,15	250
6	Eastern Meadowlark	3	9	1	2	.	3	5	10	5	6	2	5	3	3	2	6
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	15	187	12	390	.	21	10	16	5	4	2	4	6	21	11	18
7	Boat-tailed Grackle	5,100	3,400	9,550	8,200	.	3,700	2,02	550	110	105	450	2	6	315	150	28

Table A. Part 3

Hab	SPECIES	12/7	12/9	12/15	12/17	12/20	12/21	12/26	12/28	12/31	1/4	1/11	1/14	1/16	1/19	1/21	1/25	
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	53	21	5	.	.	40	.	350	5	194	150	60	.	20	33	.	
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	27	6	5	.	.	11	17	24	11	17	5	4	6	7	24	1	
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	118	101	105	104	26	116	117	129	128	121	104	116	109	111	117	111	
	TOTAL INDIVIDUALS	44,106	40,532	66,870	62,606	831	39,845	23,213	18,479	27,661	30,918	7,765	10,582	5,983	6,397	6,701	7,350	

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	13	17	15	9	14	12	10	12	15	10	13	10	7	9	14	16
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	24	9	6	.	.	2	1	1	23	16	2	6	33	40
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	94	111	54	98	56	122	171	7,800	98	156	1,404	112	202	270	385	236
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	22	44	35	25	37	33	24	30	15	42	20	16	12	18	22	8
2	American Bittern	10	10	12	4	22	13	11	14	14	16	32	39	15	45	52	44
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	1	1	.	1	1	.
2	Gray Heron	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	18	15	26	19	29	28	25	25	20	22	30	21	25	28	27	22
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	10	7	11	5	7	7	10	7	25	7	23	7	2	7	4	1
2	Snowy Egret	43	34	23	22	34	22	27	29	27	31	27	10	12	11	8	6
2	Little Blue Heron	36	33	35	31	34	47	52	45	35	49	60	42	55	37	22	21
2	Tricolored Heron	5	7	7	5	3	4	7	4	9	9	8	2	10	11	4	3
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1,080	1,100	980	500	1,150	1,160	610	1,255	310	525	80	305	250	165	165	205
2	Green Heron	4	3	3	8	6	2	6	2	5	3	13	15	1	20	13	8
2	Black-crowned Night-Heron	.	.	.	.	2	.	.	.	.	.	1	1	.	1	2	2
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	4	31	15	3	17	19	4	12	175	6	68	72	97	120	231	10
2	Glossy Ibis	6	10	8	27	12	14	8	32	390	17	17	29	4	8	6	6
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	3	.	1	.	1	.	.	.
7	Black Vulture	11	3	2	3	30	13	2	5	6	2	1	1	3	7	2	6
7	Turkey Vulture	80	28	25	70	16	15	68	23	16	43	21	22	19	14	8	12
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	11	.	2	.	.
3	Fulvous Whistling-Duck	.	.	2	.	2	7	3	11	2	7	31	18	7	13	7	13
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	.	7	5	4	1	3	.	.	.	4	1	.	1	3	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	2	2	2	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2
3	Mottled Duck	6	8	8	6	9	11	7	6	11	9	5	8	7	10	4	11
3	Blue-winged Teal	48	39	44	49	85	51	33	6	19	4	2	7	19	4	.	8
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	12	2	14	7	38	12	24	3	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	30	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	32	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	9	7	2	6	1	3	3	3	3	3	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	11,000	12,000	.	3,900	.	.	230	.	.	2,800	4,230	.	.	.	.
5	Osprey	19	16	25	16	17	14	13	18	18	22	27	12	13	11	21	12
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	7	7	6	10	7	4	9	10	7	8	12	6	5	4	8	4
7	Northern Harrier	27	12	42	39	30	25	24	18	20	22	13	19	15	10	16	16
8	Sharp-shinned Hawk	2	3	3	.	2	2	.	2	2	1	2	2	1	.	2	2
8	Cooper's Hawk	1	.	1	1	.	2	.	2	1	4	1	3	2	2	3	1
8	Red-shouldered Hawk	7	8	7	2	5	10	10	8	2	2	4	1	1	5	2	4
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	17	23	14	15	18	11	15	19	13	15	10	14	8	11	7	9
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	14	15	17	12	12	19	18	15	16	14	16	17	19	17	22	26
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	1	.	1	1	.	2	.	.	.	1	.	.	.	.	1	.
7	Peregrine Falcon	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	1	1	1	1	1	1	.	1	.	.	3	3	13	3	2
2	Yellow Rail	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	9	10	1	1	7	12	10	13	11	8	7	14	13	3	10	9
2	Virginia Rail	1	2	.	.	.	.	.	.	.	.	3	.	.	.	.	.
2	Sora	47	27	8	12	10	13	23	15	18	10	8	19	22	7	13	9
2	Purple Gallinule	2	3	2	3	2	2	3	3	4	3	3	3	4	7	4	3
4	Common Moorhen	345	405	460	290	245	293	170	165	250	180	200	115	170	75	135	95
1	American Coot	10	16	23	9	14	31	33	26	31	31	17	11	16	16	26	20

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	3	.	126	.	91	.	5	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	148	400	255	128	30	18	16	138	5	11	13	23	2	4	9	8
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	1	.	.	6	.	.	.	.	.	1	3	.	.	.	.
4	Lesser Yellowlegs	.	.	.	2	.	2	.	.	.	.	1	1	.	.	.	.
4	Solitary Sandpiper	.	.	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	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	69	136	205	11	54	45	14	11	25	13	7	9	4	4	26	21
4	American Woodcock	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	1	.	.	.	1	.	.	.	.	.	.	.	2	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	1	310	.	1	24	3	13	1	.	10	1	.	12	2	14	.
5	Ring-billed Gull	795	8,450	660	540	2,020	405	1,620	1,200	340	134	4,400	13	220	217	220	18
5	Herring Gull	1	1	.	.	.	.	1	1	.	.	.	.	2	2	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	8	6	6	6	6	.	.	2	.	5	6	.	9	2	2
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	3	15	12	71	74	66	23	2	27	71	15	13	63	20	2	3
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Eurasian Collared-Dove	2	8	3	2	2	1	1	1	2	2	1	4	2	2	2	1

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
8	Diamond Dove																
8	African Collared-Dove		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove		.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
8	Mourning Dove	84	21	4	8	8	12	15	8	9	14	46	11	46	46	46	21
8	Common Ground-Dove	17	15	29	40	31	30	23	17	20	11	23	4	22	16	22	6
8	Cockatiel		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Smooth-billed Ani		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	1	7	6	2	1	1	1	2	1	1	1	4	.	1	1	.
8	Eastern Screech-Owl		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	5	1	2	.	1	1	.	3	3	2	.	.	1	.	1
8	Burrowing Owl		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl		2	.	.	.	.	.	.	.	1	.	.	1	.	.	.
7	Long-eared Owl		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl		.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Northern Saw-whet Owl		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chuck-will's-widow		.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Eastern Whip-poor-will		1	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Chimney Swift		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-throated Hummingbird		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	3	5	6	2	4	7	5	6	5	7	5	5	3	4	4	3
8	Red-headed Woodpecker		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	6	18	11	6	12	12	9	17	11	12	21	13	3	12	19	9
8	Yellow-bellied Sapsucker		.	.	.	.	.	.	.	.	.	1	.	1	.	.	.
8	Downy Woodpecker	2	6	4	2	5	4	2	1	4	1	4	4	1	1	2	2
8	Hairy Woodpecker		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	1	4	2	1	6	1	1	1	1	4	2	1	2	1	2	2
8	Pileated Woodpecker	2	3	2	1	2	1	1	4	2	1	2	3	1	1	4	2

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	3	8	8	4	12	4	7	7	4	4	4	5	5	4	7	5
7	Eastern Phoebe	54	111	85	51	88	67	54	91	37	73	72	35	57	15	8	2
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	10	2	4	2	1	1	1	1	.	1	1	1	1	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Brown-crested Flycatcher	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	1	.	1	.	1	1	.	1	.	.	1	1	1	1	1	1
8	Cassin's Kingbird	.	1	1	.	.	1	.	1	.	2	1	1	2	1	1	1
8	Western Kingbird	2	11	10	.	4	.	.	14	.	23	8	11	6	8	13	10
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	1	.	.	.	.	4	.	5	2	1	.	2	3	1
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	2	3	2	2	2	3	5	4	1	1	1	1	1	1	2
8	White-eyed Vireo	2	3	5	5	12	8	2	8	5	7	5	2	2	9	6	6
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	1	1	1	6	1	3	.	.	1	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	12	38	17	10	32	14	16	24	22	14	24	15	11	26	13	18
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	3	1	1	2	.	.	.	1	.	.	1	.	1	1
7	Fish Crow	60	20	.	1	160	455	1	11	10	3	16	20	4	4	5	3
7	Purple Martin	23	1	9	20	40	6	13	1	2	23	1	2	21	6	.	11
7	Tree Swallow	7	6	41	.	280	18	26	875	1	44	129	84	111	300	190	227
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	1	.	.	4	11	9	17	22	28
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	1	1	1	2	1	1	1	1	1	2	2	1	2	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	5	20	22	10	20	20	12	15	13	17	19	23	15	28	25	18
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	53	109	75	45	71	51	48	58	22	50	72	57	44	48	52	52
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	3	10	5	2	4	4	5	8	3	4	3	4	4	3	2	2
7	Marsh Wren	6	18	4	2	11	6	6	6	3	6	4	3	3	8	4	8
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	2	3	2	5	8	2	4	3	4	5	2	.	5	2	3	1
8	Blue-gray Gnatcatcher	21	69	111	53	67	31	50	36	25	51	35	8	14	1	.	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	1,670	456	10,300	46	2,040	7	21	10,000	143	2,800	5	12	1	1	.	.
8	Gray Catbird	33	84	48	21	59	40	17	34	18	24	58	52	20	18	34	13
8	Northern Mockingbird	9	16	12	12	24	15	8	21	6	13	21	25	15	27	15	21
8	Brown Thrasher	1	4	6	2	1	1	1	2	.	1	1	1	1	3	3	4
7	European Starling	4	3	2	3	2	2	2	3	4	1	1	1	6	28	3	8
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	1	2	2	80	123	.	3	1	2	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	5	8	3	4	8	6	4	5	4	4	2	1	2	2	1	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	3	1	1	.	.	4	2	2

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	130	160	340	70	190	65	50	60	55	56	26	45	32	12	12	3
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	2	.	.	.	.	.	1	2	2	2	.	.
7	Prairie Warbler	2	1	1	3	2	2	2	4	2	1	1	.	2	1	1	.
7	Palm Warbler	155	430	235	110	160	150	120	70	85	130	135	105	85	70	90	77
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.
7	Northern Waterthrush	1	3	5	1	2	1	1	.	.	1	3	1	1	1	1	1
7	Louisiana Waterthrush	.	.	.	.	1	.	.	.	.	2	3	4	2	2	7	2
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	52	122	92	53	70	63	63	54	60	77	77	40	47	63	43	36
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
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	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
7	Eastern Towhee	21	38	32	26	36	48	23	45	30	20	43	65	24	29	28	28
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	3	2	.	2	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	5	2	2	5	3	.	.	.	3	.	2	.	.	.	.	2
7	Vesper Sparrow	1	9	4	.	.	.	1	1	.	.	2	1	2	2	2	2
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	312	214	89	103	104	116	155	66	83	41	28	24	42	22	40	42
7	Grasshopper Sparrow	1	1	2	2	1	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	1	4	3	2	5	2	2	1	1	1	5	2	.	2	1	.
7	Lincoln's Sparrow	1	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	Swamp Sparrow	57	204	76	24	89	44	45	39	17	72	50	70	31	43	37	26
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	1	4	3	4	4	2	1	5	1	4	3	.	1	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	54	101	76	70	117	57	57	82	69	111	108	63	65	83	99	81
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Blue Grosbeak	2	3	2	.	1	1	.	.	1	1	1	.	.	.	1	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	3	2	1	1	2	2	.	.	.	1	1	.	1	.	.
8	Painted Bunting	.	2	1	1	.	.	1	.	.	.	2	.	.	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	950	810	1,100	1,530	1,310	1,650	180	2,130	2,120	2,230	3,250	3,050	2,150	1,870	1,150	2,150
6	Eastern Meadowlark	2	7	5	3	14	5	3	3	6	10	10	12	5	12	11	5
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	33	10	10	8	23	5	8	6	32	12	7	7	27	6	45	7
7	Boat-tailed Grackle	65	33	400	345	30	48	545	65	60	300	67	81	77	90	90	85

Table A. Part 4

Ha	SPECIES	1/28	2/2	2/4	2/8	2/11	2/16	2/18	2/22	2/27	2/29	3/3	3/7	3/10	3/14	3/19	3/22
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	5	1	86	150	60	290	3	490	4	20	30	20	15	2	.	.
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	2	2	2	.	2	2	1	.	.	1	4	1	1	1	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	101	113	111	101	106	102	95	96	95	100	112	102	98	105	99	94
	TOTAL INDIVIDUALS	6,998	25,696	28,526	5,054	13,477	6,103	4,756	25,730	5,021	7,856	13,945	9,329	4,403	4,221	3,742	3,990

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	20	11	12	17	14	19	28	13	18	15	13	7	12	8	12	9
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	5	24	10	4	7	.	.	.	.	.	.	8	7	9	.	.
1	Brown Pelican	.	.	.	2	.	.	.	.	2	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	660	1,048	715	962	376	108	188	130	84	128	53	72	69	65	23	39
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	14	10	15	65	29	9	15	26	26	20	15	19	12	17	11	19
2	American Bittern	60	18	25	17	30	2	10	8	6	9	7	1	1	4	.	1
2	Least Bittern	1	.	1	.	.	1	.	.	.	.	2	2	1	2	1	5
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	27	12	19	22	12	15	22	18	25	18	25	21	14	20	19
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	5	3	2	5	32	1	61	2	3	129	1	1	6	9	83	54
2	Snowy Egret	6	11	7	3	4	14	5	1	4	1	1	7	6	18	57	32
2	Little Blue Heron	26	20	18	20	25	20	19	12	6	24	11	13	10	30	134	109
2	Tricolored Heron	4	3	4	4	8	3	7	2	4	13	5	.	5	9	12	5
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
6	Cattle Egret	345	275	150	170	1,400	735	740	415	440	305	545	420	665	355	615	475
2	Green Heron	7	24	7	12	26	15	20	20	25	23	22	36	19	21	14	17
2	Black-crowned Night-Heron	.	1	7	.	1	1	1	2	2	14	.	.	.	.	1	1
2	Yellow-crowned Night-Heron	.	.	1	.	1	.	1	1	1	6	.	2	.	3	.	.
2	White Ibis	68	451	700	520	4,310	40	1,510	40	170	1,800	8	113	236	240	1,480	965
2	Glossy Ibis	38	6	9	9	360	2	585	7	13	500	4	15	21	10	142	26
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Black Vulture	18	2	13	4	2	2	2	4	3	9	2	8	27	6	3	1
7	Turkey Vulture	11	11	4	7	11	5	3	2	4	1	6	3	21	7	6	7
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	57	.	2	2	21	16	2	2	.	8	2	2
3	Fulvous Whistling-Duck	4	9	4	5	41	4	8	12	26	26	4	2	3	6	2	5
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	2	1	.	4	.	.	.	.	.	.	9	2	1	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	2	2	2	2	2	1	2	1	2	1	1	.	2	1	1	1
3	Mottled Duck	9	7	5	6	8	7	7	4	4	7	6	1	2	2	5	3
3	Blue-winged Teal	4	2	4	.	8	2	6	.	.	2	2	.	.	4	1	.
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	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	100	850	.	.	.	.	.	.	.	.	.	1	.	.	.	.
5	Osprey	13	13	8	15	21	8	16	17	17	15	17	19	20	15	13	17
7	Swallow-tailed Kite	.	.	.	.	.	.	.	1	.	1	2	2	.	2	1	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	8	5	4	6	5	3	8	4	4	4	.	2	3	1	6	2
7	Northern Harrier	13	12	13	9	18	8	11	7	5	5	6	6	4	1	.	1
8	Sharp-shinned Hawk	2	1	1	.	2	1	.	1	.	.	.	.	.	.	.	.
8	Cooper's Hawk	3	2	1	.	1	1	2	1	1	.	.	2	.	.	2	.
8	Red-shouldered Hawk	2	4	3	2	5	1	5	3	4	4	3	1	2	4	3	3
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	7	6	9	7	5	4	6	5	7	6	5	3	6	3	3	2
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	26	18	32	34	5	2	.	.	.	.	.	1	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	1	1	.	1	.	.	1	1	1	2	.	1	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	9	8	10	7	5	12	22	25	23	42	21	42	35	32	42	45
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	4	4	4	9	9	3	10	10	11	11	10	8	2	3	1	8
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	6	15	8	17	20	8	5	6	8	5	4	2	1	.	.	.
2	Purple Gallinule	6	6	6	14	17	17	29	42	54	97	40	33	37	51	30	30
4	Common Moorhen	125	80	95	75	80	55	125	80	70	100	65	85	110	50	105	140
1	American Coot	17	13	13	19	8	11	4	5	4	6	1	1	.	1	.	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	2
2	Sandhill Crane	5	16	.	.	.	1	.	1	.	.	.	.	3	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	16	13	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	3	1	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	2	3	1	3	1	.	5	3	1	.	3	3	2	3	2	3
4	Black-necked Stilt	4	2	2	.	4	2	4	5	14	6	.	.	2	.	2	5
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	.	12	.	1	.	2	.	.	.	.	1	.	.	.	.
4	Lesser Yellowlegs	.	.	4	.	.	.	1	.	1	.	.	1	2	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	1	.	3	2	.	.	.	2	1	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Least Sandpiper	.	1	17	.	.	22	.	.	.	.	.	.	2	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	7	2	1	19	7	2	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	1	.	.	7	1	1	12	.	3	15	11	.	6
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	3	1	5	5	1	2	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	265	550	705	92	42	33	26	7	5	10	10	4	2	.	.	.
5	Herring Gull	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	2
5	Caspian Tern	2	.	4	7	5	3	.	3	1	1	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	1	.	.	.	.	.	6	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	36	3	514	18	7	1	30	125	11	12	7	16	6	10	4	.
5	Least Tern	.	.	1	.	.	.	1	.	.	.	1	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	1	.	.	1	.	3	.	1	.	.
8	Eurasian Collared-Dove	3	1	1	1	2	2	1	1	1	1	4	3	1	1	2	3

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	21	70	39	110	84	16	20	15	29	17	15	22	16	22	19	20
8	Common Ground-Dove	19	23	8	14	12	19	16	36	25	32	16	75	21	51	44	34
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo							1	6	7	4	5	11	8	6	7	9
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	1	1		1	1		3	1		1		8	1	1		
8	Eastern Screech-Owl																
8	Great Horned Owl	2	1	1	1	1		1	1	1	1	1		1			
8	Burrowing Owl																
8	Barred Owl		2	1		2	1	1	2		1			1			1
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk							1	3	9	10	7	3	4	7	5	4
8	Chuck-will's-widow		9	10	6	4		8	6	6	10	11	3	5	11	10	3
8	Eastern Whip-poor-will		2														
7	Chimney Swift				360	4	44	26	9	16	9	12	15	9	22	46	20
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	3	3	1	2	1	2			1	1	1					
8	Red-headed Woodpecker						1										
8	Red-bellied Woodpecker	7	22	10	8	15	10	17	23	28	33	22	35	25	27	13	13
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	1	1	1	1	1	1	3	1	2	4	4	4	1	3	3	3
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	1	1	2	1	1	1		1	1	2	3	3	4	3	4	1
8	Pileated Woodpecker	3	4	2	1	1	1	1	3	1	2	1	1	5	3	1	2

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	6	1	4	.	.	.	2	1	1	.	.	.	.	.	.	.
7	Eastern Phoebe	3	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	1	.	.	2	1	4	1	2	3	7	10	15	5	8	4
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	1	1	1	1	1	.	1	1	1	1	1	.	.	.	.	.
8	Cassin's Kingbird	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	1	2	.	1	4	.	.	1	1	.	.	1	.	.	.	.
8	Eastern Kingbird	.	.	1	.	4	.	16	9	.	1	2	3	3	1	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	3
8	White-eyed Vireo	6	10	11	7	10	8	7	7	7	11	12	11	8	14	7	7
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	1	.	2	1	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	12	16	13	10	13	16	19	20	19	14	11	11	21	20	20	20
8	Florida Scrub-Jay	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	3	1	.	1	.	1	.	1	.	1	.	.	.	.	2
7	Fish Crow	9	14	131	8	6	8	13	19	15	15	7	12	11	19	13	7
7	Purple Martin	8	2	1	7	3	23	2	2	1	.	2	.	1	1	14	6
7	Tree Swallow	54	225	1,400	135	6,200	144	26	20	11	5	.	.	.	8	15	.
7	Northern Rough-winged Swallow	.	.	.	8	.	.	.	.	1	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	1	2	.	.	.	.	3	5	1	1	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
7	Cliff Swallow	.	.	.	.	.	5	.	1	.	4	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	32	44	49	38	47	39	37	34	45	49	49	65	83	76	77	70
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	2	2	2	1	2	6	1	3	1	2	2	1	2	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	19	29	30	18	21	22	26	45	40	47	45	61	53	36	39	43
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	47	96	45	53	42	18	29	7	3	2	3	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	3	3	2	2	5	2	2	1	.	1	1	.	.	.	.	.
7	Marsh Wren	15	11	8	9	12	11	18	10	10	9	9	5	1	2	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	2	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	25	31	15	24	34	16	38	38	49	34	23	21	12	.	1	1
8	Northern Mockingbird	17	24	20	22	21	9	16	19	21	25	17	31	34	29	26	34
8	Brown Thrasher	3	4	3	3	3	2	3	2	1	3	3	6	3	1	6	10
7	European Starling	30	11	3	7	1	3	1	6	6	1	5	9	2	7	22	8
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	2	.	15	21	49	28	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	2	.	.	2	1	.	2	2	1	3	3	4	2	2	1

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	3	2	.	1	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	5	.	.	.	.	.
8	Yellow-rumped Warbler	3	2	3	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	2	.	.	.	.	1	1	.	.	.	.	.	.	.
7	Prairie Warbler	1	2	1	2	2	.	2	.	1	1	.	.	2	.	.	.
7	Palm Warbler	130	92	45	43	89	40	12	3	6	1	13	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	3	20	1	8	.	.	1
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	American Redstart	.	.	.	.	1	.	.	.	.	1	3	3	24	6	.	.
8	Prothonotary Warbler	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Northern Waterthrush	2	2	5	2	2	3	11	14	15	13	20	14	14	1	.	.
7	Louisiana Waterthrush	4	1	2	2	2	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	41	25	18	16	15	11	23	25	15	26	21	19	28	5	2	1
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	1	.	1	.	.	1	5	8	20	17	24	13	23	37	32
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16	
7	Eastern Towhee	29	36	27	22	40	19	21	59	40	37	42	81	44	48	51	57	
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	2	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	29	19	39	20	21	15	17	9	6	11	2	2	3	.	.	.	
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	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	46	115	53	61	67	10	47	18	8	7	12	1	2	1	1	.	
7	White-throated Sparrow
7	White-crowned Sparrow	.	.	.	.	1	.	5	.	.	1	1	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	112	152	67	48	99	58	150	121	120	125	131	168	142	130	126	137	
8	Rose-breasted Grosbeak
8	Blue Grosbeak	.	.	.	.	.	.	8	18	13	19	15	44	23	23	19	21
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	.	.	.	.	1	2	9	8	10	14	30	14	17	28	27
8	Painted Bunting	.	.	.	.	.	.	1	2	.	4	1	1	2	1	2	2
7	Dickcissel	.	.	.	.	.	.	1	3	3	5	5	5	5	5	4	1
7	Bobolink	.	.	.	.	.	.	.	16	205	1,955	2,590	620	450	309	10	.
7	Red-winged Blackbird	320	520	2,250	620	2,150	420	220	770	250	140	250	250	110	280	60	270	
6	Eastern Meadowlark	9	9	7	5	6	2	9	10	19	11	10	19	7	12	22	12	
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	38	33	6	4	14	5	14	10	11	16	17	14	10	16	7	8	
7	Boat-tailed Grackle	85	40	67	55	120	165	150	150	120	150	140	100	180	80	70	80	

Table A. Part 5

Hab	SPECIES	3/24	3/28	3/31	4/4	4/7	4/14	4/18	4/21	4/23	4/25	4/28	5/2	5/5	5/10	5/14	5/16
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	.	.	.	1	.	1	2	1	7	5	13	1	5	1	5
8	Orchard Oriole	.	.	.	.	.	.	1	3	2	12	4	6	5	6	8	6
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	96	105	104	85	101	88	102	105	100	102	96	94	101	92	79	78
	TOTAL INDIVIDUALS	3,207	5,332	7,632	3,976	16,246	2,385	4,624	2,690	2,350	6,351	4,573	2,874	2,881	2,447	3,726	3,058

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	13	7	4	19	5	4	3	1	1	2	1	3	5	2	1	.
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	25	19	13	38	25	38	12	24	26	16	28	26	27	28	16	27
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	16	16	15	52	27	50	27	29	31	32	42	45	61	61	41	58
2	American Bittern	1	1	.	1	1	2	1	1	2	3	.	3	1	1	3	2
2	Least Bittern	2	2	1	3	1	4	1	2	8	7	7	8	10	15	23	11
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	20	12	16	19	21	34	20	23	19	12	15	17	13	19	16	8
2	Great White Heron	.	.	.	1	1	.	.	.	.	.	.	.	1	.	.	.
2	Great Egret	17	11	6	53	42	69	25	18	15	12	16	17	19	21	16	20
2	Snowy Egret	41	14	20	44	37	240	40	35	8	9	30	5	14	28	20	18
2	Little Blue Heron	65	48	24	38	28	41	34	47	45	48	55	45	42	42	37	41
2	Tricolored Heron	4	6	4	7	4	16	11	8	9	10	12	13	11	15	16	17
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	420	250	275	485	205	345	1,510	900	1,650	1,045	1,440	1,150	1,415	1,810	1,370	1,825
2	Green Heron	20	26	18	66	51	35	78	67	82	68	83	77	79	66	31	41
2	Black-crowned Night-Heron	1	2	1	3	.	4	5	4	1	.	1	1	1	1	4	4
2	Yellow-crowned Night-Heron	.	2	1	12	2	21	7	6	7	7	2	4	2	1	1	2
2	White Ibis	320	137	104	71	113	430	460	233	540	100	320	130	141	93	132	100
2	Glossy Ibis	11	6	2	2	4	10	17	46	55	15	13	9	16	21	11	18
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.	.
7	Black Vulture	1	3	1	8	.	6	3	5	16	3	17	10	32	11	10	2
7	Turkey Vulture	5	4	2	6	1	2	6	5	10	3	9	5	10	9	5	24
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11	
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	2	2	3	.	2	25	10	.	2	13	2	1	.	2	2	.	
3	Fulvous Whistling-Duck	4	2	2	1	3	9	20	2	2	2	.	.	.	7	.	.	
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	.	4	.	3	.	.	1	1	.	1	.	6	
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	1	.	.	1	.	.	1	.	1	.	1	.	.	.	.	.	.
3	Mottled Duck	2	.	1	5	1	1	1	.	4	.	3	7	3	.	3	1	.
3	Blue-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
5	Osprey	23	8	8	15	16	10	15	13	19	8	14	20	14	16	18	24	
7	Swallow-tailed Kite	.	.	1	.	14	14	3	11	54	14	28	10	310	417	215	438	

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	2	3	2	1	.	1	1	1	1	1	1	1	1	1	1	1
7	Northern Harrier	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cooper's Hawk	1	1	.	1	.	1	.	1	1	1	1	.	1	3	4	3
8	Red-shouldered Hawk	2	1	5	1	1	1	3	2	4	5	5	6	6	9	15	20
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	6	2	4	4	.	3	6	5	6	5	3	7	6	5	6	3
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kirder's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	35	28	20	29	29	25	15	17	20	26	40	26	9	31	26	14
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	3	3	5	5	1	2	5	1	1	4	5	4	6	4	7	8
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	17	22	18	36	14	24	19	26	29	43	23	43	49	43	22	17
4	Common Moorhen	115	105	76	90	65	55	50	95	110	110	115	130	130	190	145	65
1	American Coot	.	.	.	.	3	.	.	.	3	5	5	7	5	5	5	1

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	1	1	.	1	2	1	2	1	3	3	2	2	3	1	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	3	.	1	4	2	2	2	2	1	1	.	1	.	1	.	.
4	Black-necked Stilt	5	5	4	4	10	7	14	2	1	4	7	8	.	5	1	2
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
4	Lesser Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
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	5	2	5	19	.	1	.	.	.	.	.	.	.	.	.	4
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	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	2	1	2	3	1	1	1	2	1	1	2	1	2	4	1

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	1	.	.	.	.	.	.	.	1	3	.	6	.	.	7	.
8	Mourning Dove	175	106	82	167	113	143	101	185	205	97	113	390	85	290	370	99
8	Common Ground-Dove	48	82	23	80	50	40	61	39	28	41	20	32	34	52	22	34
8	Cockatiel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	5	8	12	16	16	7	12	9	10	7	9	8	6	7	7	4
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	1	1	3	4	3	6	2	6	8	6	4	8	6	5	.	1
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	.	2	2	.	.	.	1	.	1	.	.	.	.	1	1	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	2	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	7	11	1	1	4	.	7	1	1	1	1	.	.	3	.	.
8	Chuck-will's-widow	13	16	1	1	3	1	.	.	.	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	7	12	20	17	1	2	3	2	4	6	5	4	3	3	6	16
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	24	20	36	27	12	16	20	20	16	13	13	22	22	19	14	14
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	1	3	9	6	3	6	7	4	7	5	5	9	5	2	2	3
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	4	3	1	1	1	1	1	1	1	2	1	2	2	1	3	5
8	Pileated Woodpecker	1	1	3	1	2	2	1	2	1	1	1	1	1	2	2	1

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
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	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	4	10	6	1	2	4	5	2	1	2	1	4	1	5	4	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	4	.	.	.	1	1	1	1	.	1	.	2	1	1	.	1
8	Gray Kingbird	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	5	10	2	5	1	2	3	4	2	2	3	3	3	3	7	3
8	White-eyed Vireo	3	8	1	2	2	2	1	2	4	2	6	5	2	6	6	3
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	17	11	16	9	8	11	19	4	14	12	19	27	16	24	25	21
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Fish Crow	8	3	7	6	4	6	6	12	24	16	9	46	6	14	48	5
7	Purple Martin	19	73	345	163	210	40	140	43	22	2,850	2,180	450	770	160	25	12
7	Tree Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	Bank Swallow	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	57	60	116	83	45	62	59	56	63	59	69	47	40	80	73	105
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	2	1	1	4	2	1	1	4	2	1	1	1	1	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	39	36	34	39	20	28	15	18	22	33	29	40	26	34	29	27
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	29	22	14	17	15	19	18	12	29	27	21	29	19	29	47	118
8	Brown Thrasher	11	10	5	3	5	7	3	3	10	5	6	5	10	4	9	4
7	European Starling	10	21	26	122	183	69	345	67	148	253	155	117	45	955	1,070	25
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	1	1	1	.	.	1	4	1	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Palm Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	1	.	.	1	.	.	.	1	.	.	.	1	.	.	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	9	41	24	21	32	7	16	23	12	11	12	12	8	13	6	6
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Ha	SPECIES	5/2	5/2	5/2	5/2	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
7	Eastern Towhee	60	67	31	53	56	63	49	47	38	84	56	58	63	75	66	63	
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	153	184	138	133	110	144	137	117	77	114	75	129	83	106	66	79	
8	Rose-breasted	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	29	24	22	23	18	19	25	33	15	16	13	24	14	13	14	9	
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	18	26	37	29	49	36	45	30	25	25	28	34	27	30	28	32	
8	Painted Bunting	1	1	12	1	4	2	4	6	3	1	2	1	1	.	1	1	
7	Dickcissel	.	2	2	1	3	2	2	3	1	1	.	.	.	1	.	.	
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	450	750	750	255	170	810	980	2,300	3,400	8,300	11,85	11,35	47,00	67,00	82,00	133,00	
6	Eastern Meadowlark	32	27	8	13	9	12	5	5	9	14	7	10	7	9	6	4	
7	Yellow-headed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	5	5	15	7	15	10	3	4	10	9	11	26	37	76	72	30	
7	Boat-tailed Grackle	150	490	490	1,66	2,80	6,04	8,43	12,10	20,40	32,40	40,75	44,50	51,00	58,00	63,00	81,000	

Table A. Part 6

Hab	SPECIES	5/20	5/23	5/26	5/30	6/2	6/6	6/9	6/13	6/16	6/20	6/23	6/28	7/2	7/4	7/7	7/11
7	Shiny Cowbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	3	4	3	2	2	2	1	1	3	4	5	9	11	14	5	4
8	Orchard Oriole	10	10	12	10	7	12	14	10	9	11	10	6	1	1	2	1
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	79	73	74	76	72	74	76	71	76	71	72	70	68	75	71	68
	TOTAL INDIVIDUALS	2,643	2,918	2,978	4,131	4,719	9,176	12,974	16,815	27,417	46,074	57,842	59,261	101,800	130,033	149,276	217,560

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
1	Pacific Loon	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	1	1	2	1	.	1	1
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	28	29	20	20	35	33	28	20
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.
1	Anhinga	47	82	56	68	56	98	138	98	84
2	American Bittern	.	3	2	.	1	3	.	.	.
2	Least Bittern	8	5	3	.	1	.	.	1	.
2	Gray Heron	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	12	15	16	14	13	20	15	19	13
2	Great White Heron	.	.	.	.	.	.	.	.	.
2	Great Egret	17	31	27	27	17	27	15	20	18
2	Snowy Egret	62	60	57	30	20	30	38	31	51
2	Little Blue Heron	46	36	53	59	100	75	80	47	79
2	Tricolored Heron	13	22	17	25	19	19	14	17	17
2	Reddish Egret	.	.	.	.	.	.	.	.	.
6	Cattle Egret	2,490	1,710	1,750	1,900	600	700	1,230	950	1,005
2	Green Heron	38	50	28	30	19	18	17	26	14
2	Black-crowned Night-Heron	4	.	7	6	2	6	1	3	.
2	Yellow-crowned Night-Heron	.	2	3	.	.	.	5	2	1
2	White Ibis	200	110	105	64	68	17	38	46	24
2	Glossy Ibis	17	18	17	16	21	36	17	32	39
2	White-faced Ibis	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.
2	Wood Stork	2	.	.	.	3	.	1	.	.
7	Black Vulture	15	3	1	2	9	5	31	4	15
7	Turkey Vulture	37	18	84	69	106	129	40	150	221
1	Black Swan	.	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	4	2	2	2	.	2	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	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	1	.	.	3	.	.	3
3	Gadwall	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.
3	Mallard	.	.	.	.	.	.	.	.	.
3	Mottled Duck	.	1	.	.	.	.	.	.	.
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	30	28	52	59	39	46	55	37	16
7	Swallow-tailed Kite	388	18	475	310	259	24	68	158	221

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
7	Mississippi Kite	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.
5	Bald Eagle	2	2	2	1	2	.	1	1	.
7	Northern Harrier	.	.	.	.	.	.	.	1	.
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.
8	Cooper's Hawk	8	9	4	7	18	23	18	15	9
8	Red-shouldered Hawk	13	31	42	44	54	51	58	59	40
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	6	6	6	7	10	9	9	6	10
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.
8	Krieger's Red-tailed Hawk	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	16	58	21	7	5	7	20	13	4
2	Yellow Rail	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.
2	King Rail	14	23	36	36	53	77	83	93	107
2	Virginia Rail	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	36	31	16	27	24	45	14	26	33
4	Common Moorhen	150	120	135	130	180	130	145	100	170
1	American Coot	.	.	.	5	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
1	Caribbean Coot	.	.	.	.	.	.	.	.	.
2	Limpkin	1	2	.	.	2	1	.	.	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.
6	Killdeer	.	2	2	.	.	.	.	.	.
4	Black-necked Stilt	2	1	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	.	.	.	1	1
4	Lesser Yellowlegs	2	.	.	.	.	.	1	2	.
4	Solitary Sandpiper	.	1	.	1	.	1	.	.	.
4	Willet	.	.	.	.	.	1	.	.	.
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	.	.	.	1	.	.	.	.	.
4	Western Sandpiper	.	.	.	1	.	.	.	.	.
4	Least Sandpiper	.	5	.	2	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	7

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	1
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	.	.	.	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	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	5	3	2	1	2	3	1	2	1

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
8	Diamond Dove									
8	African Collared-Dove	.	.	.	.	.	.	.	.	.
8	White-winged Dove	.	1	.	2	.	.	.	.	1
8	Mourning Dove	435	415	140	310	195	335	125	46	52
8	Common Ground-Dove	24	43	47	55	25	51	29	25	15
8	Cockatiel	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	3	2	4	4	4	1	6	3	3
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.
8	Barn Owl	2	3	2	4	3	5	1	4	2
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	.	.	.	.	.	.	.	.	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	.	.	.	.	1	.	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	.	1	.	3	1	1	1	.	.
8	Chuck-will's-widow	.	.	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.
7	Chimney Swift	16	37	30	3	20	23	22	6	45
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	.	.	2	1	.	.	3	1	1
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	18	13	16	9	9	13	17	11	14
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	5	5	5	10	9	3	5	3	8
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.
8	Northern Flicker	1	1	2	2	2	2	2	2	2
8	Pileated Woodpecker	1	1	2	2	3	1	1	2	2

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	2
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	1	.	5	5	4	3	1	1	1
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	.	1	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	8	6	4	4	5	6	7	5	1
8	White-eyed Vireo	6	3	2	6	2	.	.	8	3
8	Bell's Vireo	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	1	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.
8	Blue Jay	30	16	20	25	14	15	16	27	12
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	2	.	.	.
7	Fish Crow	3	22	6	32	15	171	140	13	32
7	Purple Martin	10	5	.	1	.	1	.	.	.
7	Tree Swallow	1	.	1	.	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	2	1	.	.	.	.	.
7	Bank Swallow	.	.	1	.	.	.	.	3	.

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
7	Cliff Swallow	.	1	.	.	.	2	1	2	3
7	Cave Swallow	.	.	.	.	.	.	.	.	.
7	Barn Swallow	56	65	141	290	105	48	118	120	53
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	.	1	1	4	8	5	2	4
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.
8	Carolina Wren	25	28	21	32	29	30	24	31	24
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	2	.	2	.	1	2	5	2	3
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	.	1	.
8	Northern Mockingbird	66	47	45	28	16	11	20	20	6
8	Brown Thrasher	10	8	6	11	3	4	5	8	4
7	European Starling	190	1,250	550	750	22	10	10	.	.
7	Common Myna	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	2	.	1	.	.	.

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
7	Yellow Warbler	.	1	.	1	3	6	34	49	27
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	.	.	.	.	.	1	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	1	.
7	Prairie Warbler	.	.	1	1	2	19	10	24	12
7	Palm Warbler	.	.	.	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	2	6	3
8	American Redstart	.	.	.	.	.	.	1	1	3
8	Prothonotary Warbler	.	.	.	.	.	1	.	2	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	1	1	3	4	5	12
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	.	1	.	.	.	3	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	5	2	1	3	.	2	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
7	Eastern Towhee	65	106	70	100	102	130	111	116	97
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	91	113	67	110	48	92	52	93	74
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	14	31	19	20	20	22	19	20	20
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	29	28	27	28	16	24	25	10	9
8	Painted Bunting	1	2	1	3	2	1	1	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	129,000	85,000	90,000	144,000	182,000	134,500	64,000	208,000	117,000
6	Eastern Meadowlark	3	3	2	1	2	1	1	1	1
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.
7	Common Grackle	65	130	8,200	17,200	19,100	23,000	3,000	750	185
7	Boat-tailed Grackle	90,400	97,000	n/c	80,400	78,500	27,100	9,000	1,000	250

Table A. Part 7

Hab	SPECIES	7/14	7/18	7/21	7/24	7/29	8/1	8/4	8/9	8/11
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	3	6	1	2	2	1	1	1	.
8	Orchard Oriole	2	.	1	.	3	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	2	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	66	70	70	74	66	73	69	73	68
	TOTAL INDIVIDUALS	224,305	186,938	102,500	246,437	282,017	187,295	79,016	212,418	120,213

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
20-Aug-03	25	1099	15	162	8	1047	42434	262
24-Aug-03	13	260	49	161	5	1360	60157	360
27-Aug-03	16	246	7	253	4	884	59645	357
1-Sep-03	8	573	28	153	3	854	77113	279
3-Sep-03	22	430	25	292	4	285	80469	278
7-Sep-03	26	395	100	368	34	340	77441	338
10-Sep-03	18	318	57	244	15	554	76582	358
14-Sep-03	22	229	26	246	11	272	103455	347
16-Sep-03	14	115	27	99	8	242	122717	339
19-Sep-03	22	120	13	102	10	393	103919	592
21-Sep-03	15	103	10	139	8	581	105886	353
24-Sep-03	25	117	19	155	12	196	82248	564
29-Sep-03	38	251	34	171	20	332	33864	684
2-Oct-03	120	146	72	181	18	588	12638	786
5-Oct-03	38	231	75	175	11	967	1303	786
9-Oct-03	21	327	192	211	11	311	798	1023
12-Oct-03	44	260	211	186	17	519	878	1377
15-Oct-03	22	246	670	135	19	513	1086	1087
19-Oct-03	60	260	750	183	24	315	1307	903
22-Oct-03	27	290	885	146	20	672	1955	817
26-Oct-03	103	250	35	136	17	1875	2583	1073
29-Oct-03	40	229	93	141	34	1055	1119	756
2-Nov-03	78	146	101	109	44	255	15623	717
5-Nov-03	37	212	22	99	19	106	11615	922
9-Nov-03	211	279	53	119	51	467	10483	378
12-Nov-03	345	269	60	167	101	446	15387	864
16-Nov-03	455	285	39	151	98	463	25150	798
20-Nov-03	68	371	225	212	67	1104	31638	643
23-Nov-03	315	308	93	330	86	766	43163	652
28-Nov-03	75	307	41	285	115	678	59155	342
1-Dec-03	111	250	65	271	6244	349	45870	447
3-Dec-03	183	304	136	365	141	448	36414	428
7-Dec-03	253	277	71	351	198	1053	41394	509
9-Dec-03	589	310	101	434	218	812	37498	570
15-Dec-03	165	181	48	357	166	668	64619	666
17-Dec-03	116	178	28	496	174	1273	60081	260
20-Dec-03	106	80	0	0	223	400	5	17
21-Dec-03	953	256	85	579	686	1625	35155	506
26-Dec-03	127	213	58	567	8159	1100	12453	536
28-Dec-03	2994	390	90	781	1991	2265	9258	710
31-Dec-03	5741	208	98	1430	11605	573	7312	694
4-Jan-04	10600	239	203	1549	12337	1144	4373	473
11-Jan-04	240	176	87	492	913	1062	4361	434
14-Jan-04	2592	255	94	398	748	1783	4115	597
16-Jan-04	123	251	67	349	1279	1269	2148	497

Habitat	1	2	3	4	5	6	7	8
19-Jan-04	213	269	108	427	1017	1318	2308	737
21-Jan-04	396	277	78	560	1174	1483	2115	618
25-Jan-04	194	520	111	351	2954	1472	1128	620
28-Jan-04	148	195	66	415	829	1231	1957	2157
2-Feb-04	11227	192	51	543	8814	1509	2118	1242
4-Feb-04	12153	151	79	666	715	1242	2379	11141
8-Feb-24	156	143	71	303	646	711	2574	450
11-Feb-04	4028	186	141	305	2152	1317	2575	2773
16-Feb-04	201	309	83	340	506	1183	3056	425
18-Feb-04	241	187	71	184	1684	632	1369	388
22-Feb-04	8103	292	27	176	1238	1397	4033	10464
27-Feb-04	163	736	33	275	399	323	2619	473
29-Feb-04	243	186	21	193	252	546	3150	3265
3-Mar-04	4307	302	43	210	4465	103	3987	528
7-Mar-04	4395	275	46	128	55	340	3692	398
10-Mar-04	239	261	34	174	318	257	2782	338
14-Mar-04	319	306	31	79	271	181	2645	389
19-Mar-04	480	397	15	163	271	185	1824	407
22-Mar-04	320	144	36	116	42	218	2810	304
24-Mar-04	816	257	19	137	331	356	958	333
28-Mar-04	1956	605	22	104	575	287	1253	530
31-Mar-04	765	811	16	147	1244	158	4182	309
4-Apr-04	1069	649	13	94	146	178	1484	343
7-Apr-04	436	4865	120	92	82	1407	8845	399
14-Apr-04	147	139	14	83	52	737	999	214
18-Apr-04	235	2279	25	132	89	754	692	418
21-Apr-04	174	177	19	89	158	428	1226	419
23-Apr-04	134	325	53	87	40	460	831	420
25-Apr-04	169	2657	52	106	55	316	2544	452
28-Apr-04	82	133	15	65	36	558	3260	424
2-May-04	108	258	14	87	45	442	1314	606
5-May-04	100	370	9	119	47	674	1063	499
10-May-04	100	415	22	51	44	370	957	488
14-May-04	46	1975	11	107	24	639	483	441
16-May-04	67	1274	11	151	27	490	621	417
20-May-04	54	522	9	124	42	455	820	617
23-May-04	42	293	4	110	13	277	1565	614
26-May-04	32	221	6	80	15	284	1854	486
30-May-04	109	361	8	94	35	502	2435	587
2-Jun-04	60	321	6	75	17	216	3566	458
6-Jun-04	92	934	39	62	12	359	7161	517
9-Jun-04	42	724	32	65	17	1517	10061	516
13-Jun-04	54	519	5	97	14	907	14696	523
16-Jun-04	61	822	9	111	20	1660	24226	508
20-Jun-04	55	341	15	114	9	1060	44039	441

Habitat	1	2	3	4	5	6	7	8
23-Jun-04	77	585	7	122	15	1447	55197	392
28-Jun-04	81	378	9	138	21	1161	56670	803
2-Jul-04	98	407	3	130	15	1422	99345	380
4-Jul-04	96	376	10	195	18	1820	126860	658
7-Jul-04	63	340	5	146	19	1376	146630	697
11-Jul-04	86	308	7	67	29	1829	214744	490
14-Jul-04	75	470	4	154	32	2493	220270	807
18-Jul-04	110	408	8	127	30	1715	183722	818
21-Jul-04	86	387	3	135	56	1754	99585	494
24-Jul-04	94	334	2	135	62	1901	243174	735
29-Jul-04	78	363	0	180	41	602	280251	502
1-Aug-04	134	374	5	132	46	701	185183	720
4-Aug-04	171	338	4	146	59	1231	76610	457
9-Aug-04	127	363	0	103	39	951	210418	417
11-Aug-04	105	397	3	178	17	1007	118177	329

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 ¼ 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.

Date	Field work hours	Total species	Number of birds
8.20.03	13.50	85	45,052
8.24.03	14.00	94	62,365
8.27.03	13.75	79	61,412
9.1.03	13.25	78	79,011
9.3.03	13.50	91	81,805
9.7.03	14.00	86	79,042
9.10.03	13.75	92	78,146
9.14.03	13.75	85	104,608
9.16.03	13.50	78	123,561
9.19.03	13.50	82	105,171
9.21.03	13.50	81	107,095
9.24.03	13.50	88	83,336
9.29.03	14.00	100	35,394
10.2.03	14.00	102	14,549
10.5.03	14.00	91	3,586
10.9.03	13.75	100	2,894
10.12.03	14.00	94	3,492
10.15.03	14.00	100	3,778
10.19.03	13.50	100	3,802

Date	Field work hours	Total species	Number of birds
10.22.03	13.75	102	4,812
10.26.03	13.00	88	6,072
10.29.03	12.50	85	3,467
11.2.03	12.25	88	17,073
11.5.03	12.50	92	13,032
11.9.03	12.50	95	12,041
11.12.03	12.50	96	17,638
11.16.03	12.50	106	27,439
11.20.03	12.50	95	34,328
11.23.03	12.50	102	45,713
11.28.03	12.50	102	60,998
12.1.03	12.50	102	53,607
12.3.03	12.50	100	38,419
12.7.03	12.50	118	44,106
12.9.03	12.50	101	40,532
12.15.03	12.50	105	66,870
12.17.03	12.00	104	62,606
12.20.03	5.00	26	831
12.21.03	12.50	116	39,845
12.26.03	12.50	117	23,213
12.28.03	12.50	129	18,479
12.31.03	12.75	128	27,661
1.4.04	12.75	121	30,918
1.11.04	12.75	104	7,765
1.14.04	13.00	116	10,582
1.16.04	13.00	109	5,983
1.19.04	13.00	111	6,397
1.21.04	13.00	117	6,701
1.25.04	13.00	111	7,350
1.28.04	13.00	101	6,998
2.2.04	13.25	113	25,696
2.4.04	13.00	111	28,526
2.8.04	12.75	101	5,054
2.11.04	13.00	106	13,477
2.16.04	13.25	102	6,103
2.18.04	13.00	95	4,756
2.22.04	13.25	96	25,730
2.27.04	12.50	95	5,021

Date	Field work hours	Total species	Number of birds
2.29.04	13.25	100	7,856
3.3.04	13.50	112	13,945
3.7.04	13.25	102	9,329
3.10.04	13.25	98	4,403
3.14.04	13.50	105	4,221
3.19.04	13.50	99	3,742
3.22.04	13.00	94	3,990
3.24.04	13.00	96	3,207
3.28.04	13.50	105	5,332
3.31.04	13.50	104	7,632
4.4.04	13.25	85	3,976
4.7.04	14.25	101	16,246
4.14.04	13.00	88	2,385
4.18.04	14.75	102	4,624
4.21.04	13.00	105	2,690
4.23.04	14.00	100	2,350
4.25.04	15.00	102	6,351
4.28.04	14.00	96	4,573
5.2.04	13.25	94	2,874
5.5.04	14.50	101	2,881
5.10.04	14.00	92	2,447
5.14.04	14.00	79	3,726
5.16.04	13.00	78	3,058
5.20.04	14.25	79	2,643
5.23.04	14.75	73	2,918
5.26.04	14.25	74	2,978
5.30.04	14.75	76	4,131
6.2.04	14.00	72	4,719
6.6.04	13.25	74	9,176
6.9.04	13.50	76	12,974
6.13.04	12.50	71	16,815
6.16.04	12.75	76	27,417
6.20.04	12.50	71	46,074
6.23.04	13.00	72	57,842
6.28.04	12.00	70	59,261
7.2.04	11.50	68	101,800
7.4.04	13.75	75	130,033
7.7.04	13.00	71	149,276

Date	Field work hours	Total species	Number of birds
7.11.04	10.50	68	217,560
7.14.04	13.25	66	224,305
7.18.04	13.50	70	186,938
7.21.04	13.00	70	102,500
7.24.04	13.75	74	246,437
7.29.04	14.00	66	282,017
8.1.04	14.00	73	187,295
8.4.04	14.00	69	79,016
8.9.04	13.00	73	212,418
8.11.04	11.00	68	120,213

Total days = 104 Total hours = 1380

Table D which follows deals with all the species seen during the first six years and again during the first 14 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 14 years.

Survey Year	No. visits	Total visits	No. hours	Total hours
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
8.15.05-8.14.06	131	834	1,629	10,517
8.15.06-8.14.07	147	981	1,803	12,320
8.15.07-8.14.08	152	1,133	1,801	14,121
8.15.08-8.14.09	157	1,290	1,829	15,950
8.15.09-8.14.10	155	1,445	1,806	17,756
8.15.10-8.14.11	155	1,600	1,822	19,578
8.15.11-8.14.12	153	1,753	1,558	21,136

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 together with the date on which the high count occurred to August 14, 2004 and August 14, 2012. When the same high count occurred on more than one date only the first is given. I will be including a similar double table in Reports 1 to 5.

Species	Highest count to 8.14.04	Date of high count to 8.14.04	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
American White Pelican	4,370	1.29.99	4,370	1.29.99
Brown Pelican	3	3.24.03	6	4.30.05
Neotropic Cormorant			1	6.3.09
Double-crested Cormorant	7,800	2.22.04	7,800	2.22.04
Anhinga	138	8.4.04	873	7.2.10
American Bittern	60	3.24.04	105	12.30.09
Least Bittern	23	7.7.04	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	1	6.1.03	3	6.22.08
Great Egret	1,950	11.6.98	2,390	12.5.04

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Snowy Egret	322	6.12.02	2,585	11.7.04
Little Blue Heron	163	10.24.01	735	12.1.04
Tricolored Heron	93	7.19.03	466	7.13.11
Reddish Egret	1	3.21.00	1	3.21.00
Cattle Egret	5,375	10.13.02	6,400	9.16.04
Green Heron	109	6.29.03	242	8.23.08
Black-crowned Night-Heron	89	1.27.99	241	3.20.11
Yellow-crowned Night-Heron	21	6.6.04	28	4.24.11
White Ibis	4,310	4.7.04	11,210	6.17.11
Glossy Ibis	1,380	7.19.03	3,825	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	511	10.29.99	2,800	2.11.09
White-faced Whistling-Duck	1	5.7.00	1	5.7.00
Black-bellied Whistling-Duck	57	4.7.04	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	53	9.10.99	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	40	11.19.99	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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Canvasback	5	12.7.98	5	12.7.98
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	3300	1.23.09
Black Scoter			2	11.22.06
Bufflehead	9	12.30.99	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	12,000	2.4.04	34,000	1.4.06
Osprey	59	7.24.04	201	7.11.12
Swallow-tailed Kite	556	7.25.03	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	20	4.3.02	109	11.13.05
Northern Harrier	223	1.14.00	305	12.12.04
Sharp-shinned Hawk	6	8.6.99	26	11.30.07
Cooper's Hawk	23	8.1.04	45	8.25.06
Red-shouldered Hawk	59	8.9.04	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	4	9.29.03	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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Black Rail	1	6.4.03	1	6.4.03
Clapper Rail	1	11.28.03	1	11.28.03
King Rail	107	8.11.04	523	8.23.06
Virginia Rail	5	1.19.04	9	2.16.05
Sora	156	12.9.03	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	5.20.02	1	5.20.02
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	8	4.26.01	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	4.20.99
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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Sharp-tailed Sandpiper	1	9.26.02	1	9.26.02
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	1	9.23.99	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	12,250	1.4.04	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	1	7.1.01	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			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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Eurasian Collared-Dove	36	6.7.99	36	6.7.99
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	3	11.12.03	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	7	1.14.04	10	1.30.05
Burrowing Owl	1	6.18.03	1	6.18.03
Barred Owl	4	12.14.02	11	10.8.06
Long-eared Owl	1	1.11.04	1	1.11.04
Short-eared Owl	3	12.7.99	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	1,840	9.10.03	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	19	11.9.02	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	4	10.23.99	10	12.13.06
Downy Woodpecker	22	9.29.03	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	8	1.14.01	12	11.4.07
Olive-sided Flycatcher			1	4.20.05
Eastern Wood-Pewee	6	9.24.00	7	9.27.06
Yellow-bellied Flycatcher			1	10.11.04

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Acadian Flycatcher	4	9.10.03	4	9.10.03
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
Great Crested 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	6	2.11.04	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	7,120	3.9.03	71,000	3.10.06
Northern Rough-winged Swallow	8	4.4.04	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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Carolina Wren	103	4.24.03	103	4.24.03
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	126	11.5.00	211	11.9.05
Golden-crowned Kinglet	1	12.7.99	3	11.17.06
Ruby-crowned Kinglet	23	11.24.02	67	11.17.06
Blue-gray Gnatcatcher	111	2.4.04	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	2	11.17.02	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
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	8	10.2.03	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	15	3.5.03	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	2	10.5.00	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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Yellow-throated Warbler	3	9.10.03	8	9.26.07
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	6	4.17.99	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	1	4.17.99	2	9.22.04
Swainson's Warbler	1	8.16.00	1	8.16.00
Ovenbird	22	10.2.02	92	9.27.06
Northern Waterthrush	102	9.26.02	188	9.28.04
Louisiana Waterthrush	41	9.3.03	98	8.27.10
Kentucky Warbler	1	4.14.99	1	4.14.99
Common Yellowthroat	706	10.5.03	856	9.22.04
Hooded Warbler	2	4.17.99	2	4.17.99
Wilson's Warbler	1	2.8.00	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
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

Species	Highest count to 8.14.04	Date of high count to 8.14.04	Highest Count to 8.14.12	Date of high count to 8.14.12
Lincoln's Sparrow	5	11.17.02	5	11.17.02
Swamp Sparrow	725	12.2.02	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	273	5.4.03	344	4.9.08
Rose-breasted Grosbeak	1	4.30.00	3	10.21.09
Blue Grosbeak	44	5.2.04	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	11	6.29.99	143	5.22.05
Bobolink	7,060	5.1.02	16,550	4.30.08
Red-winged Blackbird	208,000	8.9.04	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	23,000	8.1.04	117,000	7.17.05
Boat-tailed Grackle	97,000	7.18.04	167,000	7.14.05
Shiny Cowbird	2	7.15.01	13	7.3.05
Bronzed Cowbird	1	11.23.98	2	12.13.09
Brown-headed Cowbird	3,150	2.5.99	3,600	2.27.09
Orchard Oriole	14	6.26.03	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			27	7.11.12
Pine Siskin	1	4.30.03	2	12.26.08
American Goldfinch	62	11.24.02	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 330 species to August 14, 2004 and 357 species 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, 2004	330
Additional species pre-survey	7
Grand Total	337
Less exotics	9
Acceptable Total	328
Total species August 15, 1998 to August 14, 2012	357
Additional species pre-survey	6
Grand Total	363
Less exotics	15
Acceptable Total	348

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

Gray Partridge (*Perdix perdix*)

I was walking eastward along the southern edge of the Nursery on September 14 when I disturbed these two birds. They were clearly small game birds and equally clearly they were not Bobwhite Quail. Overall plumage a gray/brown with orange face; tail was reddish. Because of angle I did not see the black belly patch. They flew with very rapid, shallow wing beats, keeping low until they dropped into cover. I did not try to relocate it would have been a waste of time.

Thayer's Gull (*Larus thayeri*)

There was a flock of Double-crested Cormorants having what is best described as a feeding frenzy; in association there was a flock of some 160 Ring-billed Gulls. With them at first glance there was what appeared to be a first winter Iceland Gull. This was not a white bird but a creamy brown with a number of features that separated it from an Iceland Gull. (It did not have the size, bulk or beak of a Glaucous). The most striking features were the secondaries which formed a darker panel on the wings and the primaries. These were darker, perhaps similar to the secondaries. Unlike the Herring Gull there was no pale panel rather each feather was two toned. Outer half of tail was darker. The bill was black, straight and quite thin for a gull of that size. I have seen a lot of Glaucous, and many Iceland Gulls in U.K. and this bird was a member of that group.

Long-eared Owl (*Asio otus*)

On January 11 I was walking south down the road that runs between the Sod Farm and the Lake Level Canal when I heard two Gray Catbirds making a racket. I stopped to try and see what had upset them and there on a branch close to the main trunk of a pine tree stood a Long-eared Owl. The ear tufts were erect and the bird looked long, quite dark and streaked. The face was orangish. I think the Catbirds and I were much too close for it so it took off and flew across the canal towards the Nursery. In flight I only had time to note the orange patches by the wing tips and the overall impression of rather dull narrow bands on the wings.

Cliff Swallow (*Petrochelidon pyrrhonota melanogaster*)

On August 20 I set up the telescope to check the rows of hirundines on the utility wires by Interceptor Road. I soon located an adult Cliff Swallow which was different. It did not have the white patch on the forehead rather this area was the same red as the side of the face. The throat and chin were blackish changing to the red of the side of the face. There was the usual pale collar. Excepting the forehead this was a classic adult in breeding plumage Cliff Swallow.

Canada Warbler (*Wilsonia canadensis*)

On August 24 I was within 100 yards of where I saw the owl when I spotted this warbler working its way through quite low cover. This was a very active warbler working its way north. Upperparts were a dark gray with no streaking or wing bars. Underparts were a bright yellow with white under-tail coverts. This bird had a strong white eye ring. There was a rather diffuse necklace of streaks around the neck. Tail was long. I did not hear it call.

Dark-eyed Junco (*Junco hyemalis*)

On December 17 in driving rain I was driving north along the eastern side of the Sand Farm Cattail Marsh when I spotted this Slate-colored Junco (*J.h.hyemalis*) at the edge of the track. There were just three colors. The head, the breast, the flanks and the back were all a dark gray. The belly was a clear white creating a sharp contrast. There was a seed eating beak that in these conditions looked whitish in sharp contrast to the dark gray. The tail was also long, dark gray with prominent white outer tail feathers.

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.

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

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, with one pair in 2003 and seven pairs in 2004.

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.

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 there pairs started nesting in the survey area in 2004. There were five pairs that year each pair raised at least one young.

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.

Cattle Egret

Nesting depended on the depth of water in Lake Apopka, when the water level in the lake 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.

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.

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 next 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 were two pairs in 2002. Perhaps only one to two young survive. 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.

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. There were five pairs in 1999 with two pairs in 2004.

Limpkin

It is likely that this species nests in the Sand Farm/Duda area and at the southern border.

Killdeer

Habitat is the deciding factor for this species. Initially there was the Sod Farm with its very short grass but this farm 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 or 2004.

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.

Eurasian Collared-Dove

This immigrant 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 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. 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 there were only two pairs 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 ten to 12 pairs from 2001 to 2003 (step 2). In 2004 there were 18 pairs which indicated 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

Breeding was not proved during these years.

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 44/52 pairs down to 34/36 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.

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 2582 pairs. Some, if not many, of the nests may be destroyed by mowing. It is likely that in 2003 some 1200 of the 2582 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 pairs in 2001, four pairs in 2002, five pairs 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.

SPECIES	1999	2000	2001	2002	2003	2004
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				

SPECIES	1999	2000	2001	2002	2003	2004
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 Moorhen	104	129	126	146	214	305
American Coot	5					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
Loggerhead Shrike	6	5	5	6	6	5
White-eyed Vireo		5	3	13	14	16
Blue Jay	26	25	42	49	62	70
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

SPECIES	1999	2000	2001	2002	2003	2004
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
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	2,117	2,428	2,665	2,770	5,193	4,477
Less Painted Bunting males	8	9	19	20	19	22
Total breeding population	2,109	2,419	2,646	2,750	5,174	4,455
Less the Red-winged Blackbirds	545	1,109	932	826	2,582	1,537
Trend totals	1,564	1,310	1,714	1,924	2,592	2,918
Less the Cattle Egrets	413	103				
Totals that are comparable	1,151	1,207	1,714	1,924	2,592	2,918

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, 2004. I am however only detailing the records for the years 2000 to 2004.

Species	2000	2001	2002	2003	2004
Pipevine Swallowtail		5.27.01			8.4.04
Polydamus Swallowtail	3.7.00	2.18.01	3.14.02	2.23.03	
Zebra Swallowtail		6.10.01	4.24.02	3.24.03	
Black Swallowtail	2.8.00	2.14.01	2.3.02	2.2.03	2.2.04
Giant Swallowtail	3.3.00	2.21.01	2.20.02	3.2.03	2.4.04
Eastern Tiger Swallowtail	2.16.00	2.21.01	2.20.02	1.2.03	2.22.04
Spicebush Swallowtail	3.7.00	2.28.01	3.6.02	3.24.03	3.28.04
Palamedes Swallowtail	9.10.00	3.11.01	3.27.02	6.16.03	3.7.04
Checkered White	1.1.00	1.14.01	2.3.02	3.19.03	4.18.04
Cabbage White	1.1.00	4.8.01	3.10.02	3.5.03	5.26.04
Great Southern White	1.11.00	2.28.01	2.6.02	2.15.03	1.4.04
Orange Sulphur	9.21.00	2.21.01	5.30.02	6.16.03	2.4.04
Southern Dogface		8.22.01	8.14.02	6.11.03	4.21.04
Cloudless Sulphur	1.1.00	2.7.01	1.16.02	2.15.03	1.4.04
Orange-barred Sulphur	4.6.00				
Large Orange Sulphur				5.29.03	
Barred Yellow	1.4.00	2.25.01	1.20.02	1.22.03	1.4.04

Species	2000	2001	2002	2003	2004
Little Yellow	1.11.00	5.4.01	1.24.02	2.23.03	3.3.04
Sleepy Orange	1.1.00	2.14.01	2.3.02	1.30.03	1.4.04
Dainty Sulphur	1.1.00	4.6.01	2.24.02	3.5.03	3.3.04
Great Purple Hairstreak			5.6.02	5.15.03	
Banded Hairstreak			5.30.02		
White M Hairstreak	1.18.00	12.21.01	5.1.02		
Gray Hairstreak	4.19.00	5.20.01	1.27.02	5.15.03	1.11.04
Red-banded Hairstreak	8.30.00	3.27.01			
Cassius Blue	3.25.00				7.24.04
Ceraunus Blue		5.8.01	4.17.02		
American Snout	3.30.00	2.18.01	3.6.02	2.19.03	4.7.04
Gulf Fritillary	1.1.00	1.14.01	1.7.02	1.2.03	1.4.04
Zebra	1.1.00	9.23.01	1.16.02	1.5.03	1.11.04
Variegated Fritillary	4.6.00	5.27.01	5.9.02	4.27.03	5.5.04
Phaon Crescent	3.30.00	7.29.01	6.2.02	5.7.03	5.10.04
Pearl Crescent	1.14.00	2.21.01	1.24.02		3.3.04
Question Mark	3.14.00	5.6.01	3.17.02	4.21.03	4.18.04
American Lady	1.11.00	2.25.01	2.6.02	3.5.03	1.19.04
Painted Lady	1.1.00	1.24.01	1.7.02	1.11.03	3.22.04
Red Admiral	1.1.00	1.1.01	1.7.02	1.11.03	1.4.04
Common Buckeye	1.1.00	2.7.01	2.3.02	1.5.03	1.4.04
White Peacock	1.1.00	6.10.01	3.17.02	4.21.03	1.14.04
Viceroy	1.7.00	2.28.01	1.24.02	1.9.03	1.4.04
Hackberry Emperor	5.30.00	4.4.01	4.10.02	6.11.03	4.28.04
Tawny Emperor	3.27.00	4.6.01	4.7.02	4.13.03	4.28.04
Carolina Satyr	1.4.00	2.28.01	7.25.02	4.24.03	3.3.04
Monarch	1.1.00	3.11.01	1.16.02	1.2.03	1.4.04
Queen	1.1.00	2.28.01	2.3.02	1.5.03	1.4.04
Silver-spotted Skipper	3.7.00	3.11.01	3.24.02	8.20.03	
Long-tailed Skipper	1.4.00	3.22.01	4.7.02	4.24.03	1.14.04
Dorantes Skipper		8.22.01	2.3.02	5.26.03	8.29.04
Southern Cloudywing	5.13.00				
Confused Cloudywing		2.28.01			
Juvenal's Duskywing	5.4.00				
Horace's Duskywing	4.30.00	5.4.01	4.10.02	4.24.03	4.25.04
Zarucco Duskywing		4.22.01			7.4.04
Common Checkered-	2.11.00	2.21.01	2.17.02	2.23.03	2.11.04
Tropical Checkered-Skipper	1.1.00	2.7.01	2.3.02	1.30.03	1.4.04
Swarthy Skipper		7.11.01			

Species	2000	2001	2002	2003	2004
Clouded Skipper	1.11.00	2.28.01	6.16.02	4.27.03	1.25.04
Least Skipper					
Southern Skipperling	2.23.00	5.2.01	2.3.02	4.24.03	3.14.04
Fiery Skipper	1.1.00	3.22.01	1.24.02	3.26.03	1.14.04
Dotted Skipper					
Whirlabout	1.1.00	7.4.01	6.10.02		8.11.04
Southern Broken-Dash				5.21.03	
Northern Broken-Dash	6.30.00				
Sachem	5.2.00		5.30.02	3.24.03	7.21.04
Dun Skipper			7.3.02		5.10.04
Eufalia Skipper	4.26.00		7.31.02		
Twin-spot Skipper	1.7.00	4.29.01	5.12.02		5.14.04
Brazilian Skipper				8.27.03	

There were 68 species recorded from August 15, 1998 to December 31, 2004

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, 2004. Here I detail the first dates for the years 2000 to 2004.

Species	2000	2001	2002	2003	2004
Ebony Jewelwing					
Common Spreadwing	4.30.00				3.31.04
Variable Dancer	5.30.00	5.8.01	6.10.02	6.1.03	
Familiar Bluet	3.18.00		5.20.02		5.23.04
Purple Bluet					
Atlantic Bluet	1.4.00			5.18.03	5.23.04
Florida Bluet	3.21.00	2.25.01		5.29.03	5.14.04
Orange Bluet					
Vesper Bluet		3.25.01			
Citrine Forktail	2.16.00	4.16.01	2.3.02	2.23.03	4.7.04
Fragile Forktail	1.1.00	2.11.01	1.24.02	2.19.03	1.14.04
Rambur's Forktail	1.11.00	2.21.01	1.24.02	3.5.03	2.4.04
Southern Sprite	5.2.00		4.21.02	5.29.03	2.29.04

Species	2000	2001	2002	2003	2004
Duckweed Firetail	4.19.00	4.8.01	5.1.02	5.7.03	
Comet Darner				9.10.03	
Common Green Darner	1.1.00	1.17.01	1.3.02	1.2.03	1.4.04
Blue-faced Darner	3.7.00	5.4.01			5.16.04
Regal Darner	4.15.00	3.27.01	3.19.02	4.13.03	3.14.04
Swamp Darner	3.7.00	3.22.01	3.24.02	3.24.03	3.7.04
Twilight Darner	1.21.00	6.10.01	1.20.02	5.4.03	6.6.04
Cyrano Darner	8.6.00	7.29.01		3.29.03	8.22.04
Phantom Darner	1.1.00	8.29.01	8.11.02		9.16.04
Two-striped Forceptail	5.16.00	4.16.01	5.15.02	5.15.03	5.16.04
Gray-green Clubtail	5.2.00	3.22.01		5.12.03	4.14.04
Cypress Clubtail			3.10.02		
Dragonhunter		7.27.01			5.26.04
Prince Baskettail	3.18.00	3.22.01	3.19.02	3.24.03	3.28.04
Common Baskettail					2.16.04
Sepia Baskettail	3.18.00	7.29.01		5.4.03	
Florida Baskettail	1.18.00		1.27.02	1.11.03	
Four-spotted Pennant	3.18.00	4.16.01	3.31.02	4.13.03	4.18.04
Amanda's Pennant	7.4.00				
Halloween Pennant	3.21.00	5.6.01	7.3.02	3.24.03	4.14.04
Banded Pennant	6.3.00	5.8.01		6.26.03	5.10.04
Faded Pennant	3.10.00		7.3.02	6.1.03	3.19.04
Scarlet Skimmer	1.1.00	7.18.01	3.24.02	4.24.03	3.31.04
Pin-tailed Pondhawk	3.25.00	4.19.01	5.6.02	3.12.03	3.28.04
Eastern Pondhawk	2.29.00	1.17.01	1.24.02	3.2.03	1.4.04
Little Blue Dragonlet	3.18.00	5.4.01	4.28.02	4.6.03	4.28.04
Blue Corporal	3.3.00				
Golden-winged Skimmer	4.6.00	4.8.01	4.10.02	4.27.03	5.14.04
Bar-winged Skimmer				4.24.03	6.13.04
Slaty Skimmer	4.19.00	4.6.01	4.14.02	4.24.03	6.2.04
Needham's Skimmer		5.20.01	4.17.02		5.10.04
Great Blue Skimmer	8.27.00	6.7.01	6.10.02	6.11.03	6.13.04
Marl Pennant		5.20.01			
Hyacinth Glider	3.14.00	3.11.01	3.22.02	3.12.03	3.14.04
Roseate Skimmer	1.1.00				4.14.04
Blue Dasher	2.29.00	2.25.01	2.3.02	3.5.03	3.7.04
Wandering Glider	1.1.00	4.2.01	3.22.02	3.9.03	5.5.04
Spot-winged Glider	8.27.00	5.24.01	9.29.02	5.26.03	4.28.04

Species	2000	2001	2002	2003	2004
Eastern Amberwing	1.18.00	2.21.01	3.19.02	3.12.03	3.7.04
Carolina Saddlebags	2.23.00	2.11.01	2.10.02	1.2.03	2.29.04
Black Saddlebags	3.27.00	4.2.01	3.6.02	2.26.03	2.22.04
Red Saddlebags		5.20.01	7.17.02	4.16.03	3.14.04

So far during the survey a total 53 species have been identified, of these 13 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, 2004. I have only detailed those seen in the years 2000 to 2004.

Species	2000	2001	2002	2003	2004
Southern Toad			3.17.02	1.30.03	1.4.04
Greenhouse Frog			3.24.02	2.15.03	3.3.04
Southern Cricket Frog		8.5.01	8.11.02	5.29.03	3.19.04
Spring Peeper				1.2.03	1.14.04
Green Treefrog			3.14.02	2.23.03	1.4.04
Barking Treefrog	7.23.00	4.6.01	4.24.02	3.9.03	3.10.04
Pinewoods Treefrog					9.28.04
Squirrel Treefrog		2.28.01	4.28.02	2.26.03	5.10.04
Cope's Gray Treefrog			3.14.02	1.2.03	1.4.04
Southern Chorus Frog		6.20.01		2.15.03	5.10.04
Ornate Chorus Frog		2.11.01		2.26.03	3.19.04
Little Grass Frog	6.30.00	2.14.01	2.3.02	2.9.03	5.16.04
Eastern Narrow-mouthed Frog	5.2.00	5.27.01	4.28.02	4.27.03	5.2.04
Bull Frog	4.6.00	4.11.01	3.24.02	3.5.03	3.7.04
Pig Frog	3.21.00	2.25.01	3.10.02	1.5.03	3.3.04
Bronze Frog					4.23.04
Southern Leopard Frog	1.1.00	1.17.01	1.7.02	1.2.03	1.4.04
American Alligator	1.1.00	1.4.01	1.3.02	1.2.03	1.4.04
Common Snapping Turtle	4.15.00	2.18.01	2.17.02	2.15.03	2.16.04

Species	2000	2001	2002	2003	2004
Stinkpot		5.8.01			
Loggerhead Musk Turtle					
Striped Mud Turtle	3.10.00	1.24.01	3.10.02		2.16.04
Box Turtle	5.2.00				11.7.04
Florida Cooter	1.1.00	1.17.01	2.17.02	2.19.03	1.4.04
Florida Redbelly Turtle	1.1.00	1.7.01	1.10.02	1.7.03	1.4.04
Chicken Turtle	2.25.00	1.14.01	3.22.02	3.19.03	2.16.04
Gopher Tortoise	7.30.00	7.4.01		7.4.03	1.16.04
Florida Softshell	1.4.00	1.14.01	1.20.02	1.2.03	1.4.04
Green Anole	2.11.00	2.11.01	1.24.02	1.2.03	3.14.04
Brown Anole	2.11.00	2.14.01	2.3.02	1.19.03	3.19.04
Six-lined Racerunner	3.3.00	4.6.01	3.17.02		3.24.04
Ground Skink	4.15.00				
Broad-headed Skink		2.25.01			3.31.04
South-eastern Five-lined Skink	6.6.00		3.17.02	4.24.03	8.11.04
Mole Skink	7.23.00				
Eastern Glass Lizard		8.2.01		3.19.03	
Island Glass Lizard					
Florida Green Water Snake		2.7.01	3.24.02		
Brown Water Snake				5.4.03	
Banded Water Snake	1.1.00	2.11.01	2.17.02	3.12.03	4.25.04
Brown Snake				4.2.03	6.6.04
Striped Crawfish Snake	7.19.00				
Garter Snake	6.14.00	8.29.01	4.28.02	5.4.03	1.11.04
Ribbon Snake	1.14.00	8.16.01	3.24.02	4.30.03	
Racer	3.30.00	3.25.01	3.17.02	2.12.03	2.16.04
Rough Green Snake	10.9.00	5.6.01			11.14.04
Corn Snake	5.7.00	4.11.01	3.17.02	5.7.03	9.16.04
Rat Snake	3.27.00	4.11.01	3.17.02	3.12.03	1.11.04
Cottonmouth	3.25.00		6.2.02	9.10.03	
Eastern Diamondback				3.9.03	

There were 17 Amphibians and 33 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, 2004. I have only detailed those seen in the years 2000 to 2004.

Species	2000	2001	2002	2003	2004
Virginia Opossum	2.21.00	1.1.01	1.24.02	1.2.03	1.16.04
Southern Short-tailed Shrew	2.29.00	7.15.01		1.2.03	
Nine-banded Armadillo	12.6.00		5.30.02	4.30.03	5.16.04
Eastern Cottontail	1.14.00	1.1.01	1.24.02	1.2.03	1.4.04
Marsh Rabbit	2.29.00	1.1.01	1.7.02	1.2.03	1.4.04
Gray Squirrel	1.11.00	3.11.01	2.6.02	1.5.03	2.4.04
Southern Flying Squirrel	3.14.00	1.14.01	9.22.02	1.9.03	2.29.04
Marsh Rice Rat	4.11.00				10.3.04
Eastern Harvest Mouse			7.3.02		
Cotton Mouse	5.16.00				
Hispid Cotton Rat	1.1.00	2.7.01	1.20.02	1.2.03	3.31.04
Round-tailed Muskrat			9.22.02	4.27.03	
Norway Rat	5.21.00	8.22.01			11.14.04
House Mouse	10.20.00				
Coyote	1.21.00	3.11.01		1.19.03	1.14.04
Red Fox	1.7.00	1.21.01	1.13.02	2.26.03	1.16.04
Gray Fox	2.11.00	3.18.01		4.27.03	4.7.04
Black Bear					2.22.04

Species	2000	2001	2002	2003	2004
Raccoon	1.1.00	1.4.01	1.7.02	1.5.03	1.4.04
Long-tailed Weasel			5.23.02		
Spotted Skunk					7.4.04
River Otter	1.7.00	1.1.01	1.10.02	1.2.03	1.4.04
Bobcat	5.21.00	1.1.01	1.3.02	1.11.03	1.21.04
Florida Panther				5.15.03	

A total of 24 species have been seen since August 15, 1998.