



The 2nd Zellwood Bird Report

August 15, 1999 to August 14, 2000

By

Harry Robinson

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REVISED EDITION

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Bird Usage of Lake Apopka North Shore Restoration Area

Specifically

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

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INTRODUCTION

This is the second report on the birds that visited the former Zellwood Drainage and Water Control District's Units One and Two together with the Zellwin Sand Farm Property. All are located in Orange County, Florida.

This detailed summary covers the period August 15, 1999 to August 14, 2000. The survey is ongoing. At the end of this survey year a total of 192 surveys had been completed involving at least 2,207 hours of field work. I have now completed an analysis of the first five years together with an analysis of the second set of five years. For information about these analyses please contact the author at sirharrydeland@gmail.com.

Table C gives 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 1,207 hours were spent on fieldwork over 104 visits. This year there were no breaks in the coverage. Surveys were normally conducted on Wednesdays and Sundays.

There were no flooded fields this year and as there was no mowing or roller-chopping the vegetation in many of the fields gradually matured into woody vegetation such as elderberry, saltbush and ludwigia. Willow began growing along many of the field ditches. In some fields, dog fennel, Johnson grass, and various herbaceous plants were the dominant species. There was the 250 acre lake in the south-east corner of the Sand Farm (it had been 300 acres but plants were encroaching). At times during the year there were areas of mud and at other times it was full to the banks. Potter's Farm was still in operation to the north of Interceptor Road. The Sod Farm was also operating normally. The best habitats this year were the Sand Farm Cattail Marsh, the Sod Farm, the shore of Lake Apopka and the wood that lay between Lust and Hooper Farms Road. I say cattail marsh but during this period there were very few cattails. There was a now unused road that ran north to south through the middle of the Lust/Hooper Farms wood and this gave great access in the search for woodland species.

In all I surveyed some 10,000 acres, this total included 2,800 acres of Unit One, 6,000 acres of Unit Two and 1,200 acres of the Sand Farm. 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 area I am using the old ornithological name of "Zellwood" in an attempt to avoid later confusion.

The aim of this report is to record what I saw during the twelve months. I concentrate on the basic unit an influx (this is defined in both of the five year analyses) and I try to show you

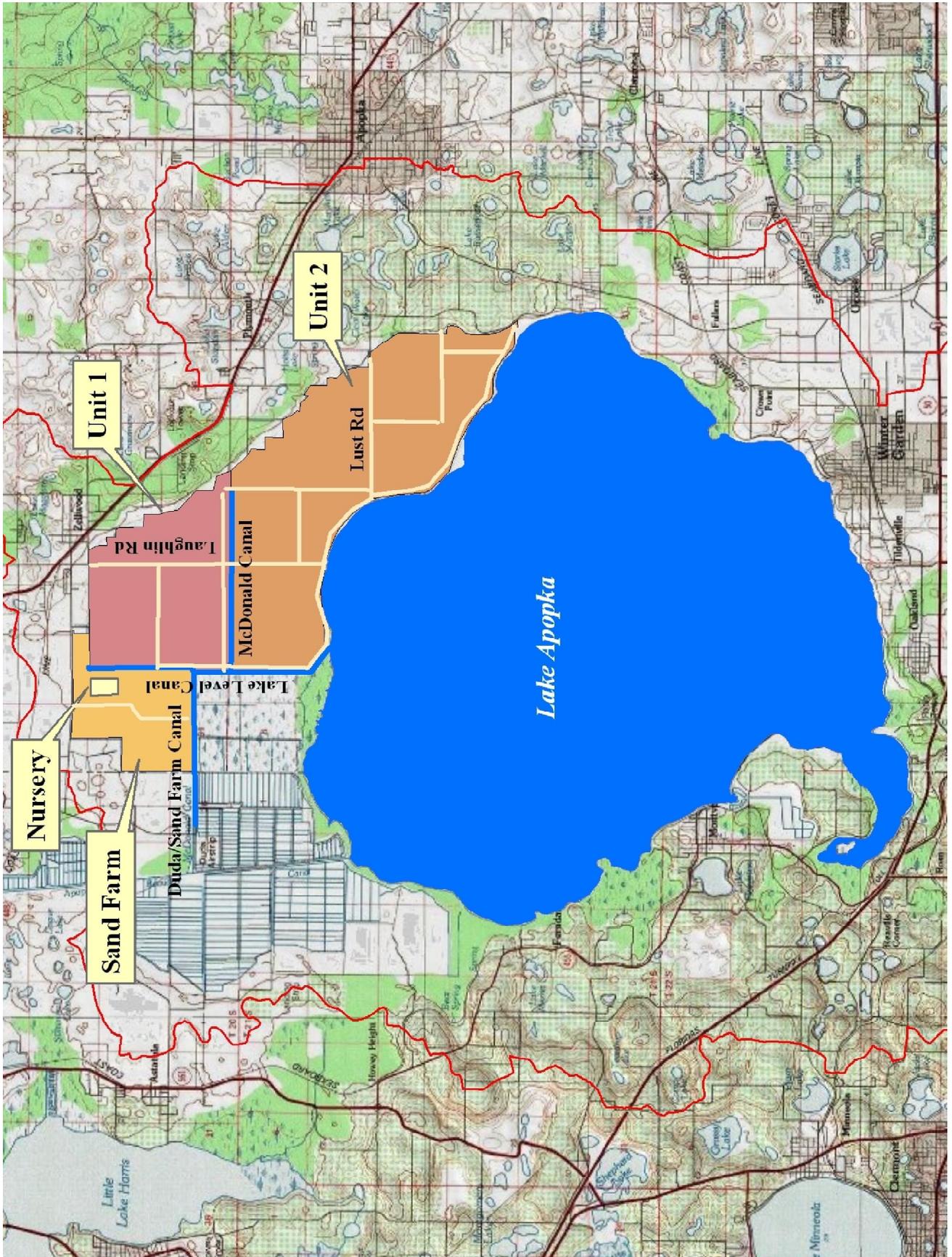
its shape and duration. The actual pattern of migration at Zellwood is very different from the generalized ideas that are out there. Hopefully I will show you that winter visitors for instance are in fact passage migrants. One thing is very clear bird migration follows a very strict timetable.

There was a Breeding Bird Survey this year; this was the second of six such surveys. Rather than just show the results for this year I am including all six surveys so that that this one year can be put into perspective. The counts for all the years are detailed in Appendix C.

I have also tried to identify all butterflies, dragonflies, damselflies, amphibians, reptiles and mammals that I came across. I have listed all the species seen during the first set of five years and have provided details of the first date on which I observed each species in each calendar year. I have decided that all the reports 1 to 5 will carry the data for the first five years.

There is also a bird list of all the bird species seen during the first five years together with the highest daily count for each species. For comparison purposes I am including a second list detailing the highest daily counts as at August 14, 2012.

The spreadsheet for the year is included together with a simple analysis which aims to give an idea of how many birds were using the different habitats on a daily basis.



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

ACKNOWLEDGEMENTS

On August 15, 1998 I was persuaded by Wes Biggs to attend a meeting between a group of birders and staff of St Johns River Water Management District; the birders were led by John Basili of Audubon of Florida. One outcome of this meeting was that there was a clear need for additional information on the birds occurring at Zellwood. I had the time so I started the survey which is still going strong in 2014. Without that initial push from Wes you would not be looking at this report.

Now we come to the second year of the survey and Jim Peterson, Harold Weatherman, Roxanne Conrow and John Basili made the continuing survey possible I think Jim Peterson had to come to my rescue twice when the Previa minivan that I was driving at that time got stuck.

From the beginning Bill Pranty assisted by putting all the data into what became a massive spreadsheet. Table A contains that part of the spreadsheet that relates to the second year of the survey. Bill your help was much appreciated; I say was as he has now transferred this task to me.

Coming more up to date Pam Bowen of the District has kindly provided a map of Lake Apopka that shows most of the watershed; thanks Pam.

Kacy Ray has again somehow found the time to work on this book. Without her adding the spreadsheet for the year and its related pivot table there would be no report. Her assistance is critical to this project; thank you Kacy.

Rachel Gerker has come to my aid in getting this book ready to be placed on Orange County Audubon Society's web site, thanks Rachel.

Harry Robinson

Front cover: The photograph of a Sora Rail was provided by Chuck Tague.

THE SURVEY ROUTE

For the first two years of the survey I concentrated on the northern fields and the eastern border. I would start each morning at Canal Road near Jones Avenue in the dark and at first light I would walk around the corner. In the winter this was the spot for American Woodcock. I then walked a four mile route around Potter's Farm. Next I checked the Sod Farm and the Sand Farm Cattail Marsh. As the latter was the only piece of water I spent some time there.

I would then drive to the Workshop area where I walked to the south along the edge of the wood to the eastern end of Interceptor Road. After the Workshops I would drive to the eastern end of the McDonald Canal. I then either drove south down Pole Road extension or returned to Laughlin Road and worked my way south by Roach Road. At Lust Road I would check Lake Apopka. The "tracks" to the north and south of the pump house were exceedingly rutted so I did not drive them very often.

After the lake I would work my way down Lust Road to the buildings that later became Plant Express. I then walked south through the wood to Hooper Farms Road. My return north would either be back through the wood or I would work my way north along the outside of the wood.

If there was time I would return to the Sand Farm Cattail Marsh.

AN ANNOTATED CHECKLIST OF THE BIRDS OF

ZELLWOOD

AUGUST 15, 1999 TO AUGUST 14, 2000

This checklist covers the 2nd year of the survey. I hope in the future to make a printed report for the first year. 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 1,207 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, 1999 to August 14, 2000 but the fall passage and any post-breeding gatherings do not recognize such dates. I am therefore providing records from earlier in 1999 where this helps to provide a better picture. The same situation could arise in August, 2000 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.**

Pied-billed Grebe (*Podilymbus podiceps*)

A common early fall passage migrant with decreasing numbers through to the spring. Whilst there were birds present all summer there was no evidence of breeding. Early fall records: *there were six on June 22 with seven on June 25, 12 on July 4 and 13 on July 6, then 11 seen on July 9 with ten to July 14. There were 14 on July 16 with 15 on July 23, 26 on July 27, 29 on August 3, 46 on August 6, 48 on August 13, 51 on August 18, 54 on August 20 and 58 on August 25, then 53 seen on August 27 with 43 on August 31. There were 66 on September 3 with 71 on September 6 and 95 on September 8, then 88 seen on September 17 with 66 on September 23. There were 91 on September 25 with 47 on September 30. That was the early fall passage. For the late fall passage there were 57 on October 2 with 80 on October 6, then 30 seen on October 8. There were 35 on October 12 with 39 on October 14 and 59 on October 19, then 40 seen on October 23 with 33 on October 26. There were 37 on October 29 with 38 on November 3, then 36 seen on November 5 with 34 to November 12, 24 on November 14 and 22 on November 16. There were 38 on November 19 with 26 on November 22. That closed the late fall passage. For the winter passage there were 33 on November 26 with 37 on November 30, then 22 seen on December 4 with 18 on December 7. There were 27 on December 11 and December 14 with 21 on December 19 and 17 on December 22. There were 27 on December 27 with 19 on December 30 and 11 on January 1. There were 30 on January 4 with 42 on January 11, then 24 seen on January 14. That completed the winter passage. For the early spring passage there were 26 on January 18 with 27 on January 21, then 20 seen on January 25 with 19 on January 28. There were 21 on February 2 with 24 to February 8, then 26 seen on February 11 and February 16 with 21 on February 23 and 14 on February 25. That ended the early spring passage. For the late spring passage there were 32 on February 29 with 22 on March 3, 15 on March 7 and 13 on March 10. There were 14 on March 14 with 15 on March 18, then 12 seen to March 27 with seven on March 30 and four to April 6. There were five on April 11 with four to April 19 and two on April 26. That concluded the late spring passage. For the summer passage there were four from April 30 to May 13 with two to May 23. There were four on May 27 and June 3 with two on June 6. There were four on June 14 with one on June 19. There were three on June 26 with four on June 28 and July 4, then three seen to July 12. There were four on July 16 with three on July 19 and two to August 2. There were four on August 6 with three to August 13. A fall passage did not start until mid-September.*

American White Pelican (*Pelecanus erythrorhynchos*)

Seen in small numbers throughout the year; it was however a more frequent visitor during the summer months. There were no early fall records from the previous survey year. For this year there was one on September 8 with six on September 10, then one seen on September 17. That was the extent of the early fall passage. For the late fall passage there were four on October 26. Later there was one on November 22 with seven on November 26. That

closed the late fall passage. For the winter passage there were eight on December 7. Later there were five on December 27 with eight on December 30, 167 on January 1 and 326 on January 4, then 51 seen on January 11. That completed the winter passage. For the early spring passage there were 24 on January 25. Later there was one on February 11 with two on February 16, then one seen on February 25. That was the early spring passage. For the main spring passage there was one on March 7 with two on March 10, 11 on March 14 and 25 on March 18, then seven seen on March 21. There were 11 on March 25 with 23 on March 27, 49 on March 30, 63 on April 3, 100 on April 11, 187 on April 19 and 197 on April 26, then 82 seen on May 2 with 59 on May 4, 27 on May 7 and 25 on May 13. That was the end of the main spring passage. For the summer passage there were 40 on May 16 with 65 on May 21, then 38 seen on May 23 with 18 on May 27 and 15 on May 30. There was now a break of a month in the sightings. There were 17 on June 28 with 16 on June 30, nine on July 4 and three to July 16. That closed the summer passage. For the early fall passage there were seven on July 19 with 81 on July 23 and 135 on July 26, then 110 seen on July 30 with seven on August 2 and two on August 9.

Brown Pelican (*Pelecanus occidentalis*)

This was a vagrant. For the late spring passage there was an adult on May 2 and an immature on May 13.

Double-crested Cormorant (*Phalacrocorax auritus*)

A late fall passage migrant with a stronger winter passage; numbers were significantly higher during the spring passages. Numbers were then very low from June to mid-October. Early fall records: *there were three on June 25 with five on June 29, then four seen on July 4 with singles to July 9. There were three on July 12 with five on July 16, then two seen to July 23 with one on July 27. There were five on August 3 with three on August 6 and singles to August 13.* For this year there were six on August 18 and August 20 with four on August 25 and one on August 27. There were six on August 31 with two on September 3 and one on September 6. There were two on September 8 with six on September 10 and September 23, then five seen to October 2 with four on October 6 and two on October 8. That ended the early fall passage. For the main fall passage there were five on October 12 with 43 on October 14, then 18 seen on October 19. There were 20 on October 23 with 53 on October 26, then 51 seen on October 29 with 15 on November 3 and six on November 5. There were 39 on November 6 with 86 on November 9, then 55 seen on November 12 with 49 on November 16 and 42 on November 19. There were 66 on November 22 with 42 on November 26. That closed the main fall passage. For the winter passage there were 45 on November 30 with 53 on December 4, 58 on December 7, 67 on December 14, 74 on December 22, 87 on December 30 and 93 on January 4, then 64 seen on January 7. A single influx covered the whole of the winter passage. For the early spring passage

there were 81 on January 11 with 86 to January 18 and 111 on January 25, then 105 seen on January 28 with 95 on February 2 and 71 on February 6. There were 113 on February 8 with 176 on February 11 and 184 on February 21, then 179 seen on February 25 with 158 on March 3 and 157 on March 7. That concluded the early spring passage. For the main spring passage there were 182 on March 10 with 224 on March 14, then 170 seen on March 18 with 160 on March 21. There were 196 on March 25 with 321 on March 27, then 191 seen on April 3 with 158 on April 6 and 78 on April 11. There were 129 on April 15 with 73 on April 19, 56 on April 26 and 29 on April 30. There were 66 on May 2 with 52 on May 7, 43 on May 13, 40 on May 16 and eight to May 23. That was the main spring passage so for the summer passage there were 26 on May 27 with 18 on June 3 and six on June 6. There were 12 on June 9 with 26 on June 14, then ten seen on June 19. There were 11 on June 26 with 13 on June 28 and 19 on June 30, then 18 seen on July 8 with eight on July 12. There were 12 on July 16 with 16 to July 23, 23 on July 26 and 25 on July 30, then 19 seen to August 6 with 15 on August 9. There were 21 on August 13 *with 30 on August 16, 35 on August 20 and 36 on August 27, then 35 seen on September 3.*

Anhinga (*Anhinga anhinga*)

Present all year; numbers were highest during the summer and the early fall passages. During the Breeding Bird Survey a total of five pairs located; they nested on islands near the end of Lust Road. Two of the pairs were known to have raised two young each. Early fall records: *there were nine on July 6 with 11 on July 9, 13 on July 12 and 19 on July 16, then 11 seen on July 20 with ten on July 23. There were 12 on July 27 with 26 on August 3, then 16 seen on August 6. There were 22 on August 10 with 23 on August 13 and August 20, then 16 seen on August 25. There were 20 on August 27 with 27 on August 31, then 23 seen on September 3. There were 26 on September 6 with 42 on September 8 and September 17, then 36 seen on September 25 with 25 on September 30. That was the early fall passage. For the late fall passage there were 46 on October 2 with 38 on October 6 and 12 on October 8. There were 42 on October 12 with 40 on October 14, 25 on October 19 and 20 on October 23. There were 30 on October 26 with 23 on October 29, 18 on November 6, 17 on November 12, 13 on November 16 and seven on November 19. There were 19 on November 22 with ten on November 26 and seven on November 30. That closed the late fall passage. For the winter passage there were 12 on December 4 with 17 on December 7 and December 11, then 14 seen on December 14 with 13 on December 19. There were 23 on December 22 with 17 on December 30 and 13 to January 4. That completed the winter passage. For the early spring passage there were 21 on January 7 with 13 on January 11 and eight on January 14. There were 24 on January 18 with 17 on January 21 and 12 on January 25. There were 24 on January 28 with 21 on February 2 and 17 on February 6. There were 22 on February 8 with 25 on February 16, then 14 seen on February 23 with eight on February 25. That concluded the early spring passage. For the late spring passage there were 11 on February 29 and March 3 with ten on March 7 and five to March 18. There were six on March 21 and March 25 with seven on March*

27, then eight seen on March 30 and April 3 with six on April 6. There were seven on April 11 with ten on April 15 and 12 on April 19, then seven seen on April 26. That closed the late spring passage. For the summer passage there were nine on April 30 with 21 on May 2, then 11 seen on May 4 with nine on May 7. There were 16 on May 13 with 21 on May 21, then 14 seen on May 23. There were 16 on May 27 with 24 on May 30, then 14 seen on June 3. There were 17 on June 6 with 26 on June 9, 33 on June 14 and 41 on June 19, then 34 seen on June 26. That ended the summer passage. For the early fall passage there were 36 on June 28 with 46 on June 30, then 38 seen on July 8 with 34 on July 12. There were 47 on July 16 with 49 on July 23, 51 on July 26 and 57 on July 30, then 50 seen on August 2 with 36 on August 6 and 17 on August 9. There were 42 on August 13 with 44 on August 16, 49 on August 23, 53 on August 27 and 68 on September 3, then 43 seen on September 10 with 40 on September 13.

American Bittern (*Botaurus lentiginosus*)

Present in small numbers from late August to early April; there were a few later records. For the early fall passage there was one on August 31. For the main fall passage there were two on September 25 with singles on September 30 and October 2. There were six on October 12 with one on October 14. There were two on October 19 and October 23 with four on October 26, then three seen to November 3 with two on November 6 and one on November 9. There were seven on November 12 with four to November 16 and three to November 22. That closed the main fall passage. For the winter passage there were five on November 26 with three on December 7, two to December 19 and singles to January 4. That means that there were no arrivals during the month of December. That completed the winter passage. For the early spring passage there were three on January 7 with two on January 11 and singles to January 18. There were two on January 21 with three on January 25, then two seen on January 28 with one on February 8. There were three on February 11 with one on February 16. That was the extent of the early spring passage. For the main spring passage there were two on March 3 with three on March 7 and March 10, then two seen to March 18 with singles to March 25. There were three on March 27 with two to April 6 and one on April 11. Later there were singles on April 26 and May 2. That ended the main spring passage. There was also one on June 28; this is perhaps best treated as an early fall record.

Least Bittern (*Ixobrychus exilis*)

A summer visitor, there were four pairs this year. Three of the pairs were along the shore of Lake Apopka and the other was at the Sand Farm Cattail Marsh. The first young were seen on July 9, 1999. Early fall records: *there were three from July 9 to July 23 with two to August 6. There were singles on August 18, August 25 and September 6.* That was the extent of the early fall passage. For the late fall passage there were singles on October 19 and November

12. There were no winter sightings. For the late spring passage there was one on March 27. For the summer passage there were singles on May 4 and May 27 with two on May 30, then one seen on June 3. There was also one on June 19. That completed the summer passage so for the early fall passage there were singles from July 4 to July 16 with two on July 19, three on July 23 and four on July 26, then two seen on July 30. There were three on August 2 with four on August 6 and August 13, *then three seen on August 16 with two to August 27 and singles to September 3.*

Great Blue Heron (*Ardea herodias*)

Present all year in small numbers there was nothing to suggest passage; there was no evidence that they bred in the survey area. Early fall records: *there were 25 on June 29 with 32 on July 4 and 42 on July 6, then 24 seen on July 9 with 22 on July 14 and 20 on July 16. There were 21 on July 20 with 26 on July 23, then 12 seen on July 27. There were 23 on August 3 and August 6 with 25 on August 10, 27 on August 18, 33 on August 20 and 35 on August 27, then 16 seen on August 31. There were 23 on September 3 with 36 on September 6, then 20 seen on September 8 with 16 on September 10. There were 33 on September 17 with 30 on September 23, 25 on September 25 and 17 on September 30. That was the early fall passage. For the late fall passage there were 29 on October 2 with 22 to October 14 and 12 on October 19. There were 17 on October 23 with 21 to October 29, 25 on November 3 and 35 on November 6, then 30 seen on November 9 with 26 on November 12 and 11 on November 14. There were 33 on November 16 with 31 on November 19 and 25 on November 22. There were 37 on November 26 with 34 on December 4 and 24 on December 7. That closed the late fall passage. For the winter passage there were 37 on December 11 with 40 on December 14, then 27 seen on December 22 with 18 on December 27. There were 27 on December 30 with 45 on January 1, then 33 seen to January 7 with 25 on January 11 and 23 on January 14. That completed the winter passage. For the early spring passage there were 34 on January 18 with 27 on January 21 and 21 to January 28. There were 52 on February 2 with 43 on February 6 and 39 on February 8. There were 40 on February 11 with 42 on February 16, then 21 seen on February 21. There were 22 on February 23 with 24 on February 25 and 35 on February 29, then 23 seen on March 3. That concluded the early spring passage. For the late spring passage there were 26 on March 7 with 40 on March 10, then 27 seen to March 18. There were 32 on March 21 with 51 on March 25, then 40 seen on March 30 with 28 on April 3, 26 on April 11 and 21 on April 15. There were 32 on April 19 with 52 on April 26, then 45 seen on April 30 with 24 on May 2. That was the late spring passage. For the summer passage there were 31 on May 4 with 42 on May 7, then 41 seen on May 13 with 33 on May 16 and 14 on May 21. There were 18 on May 23 with 29 on May 27 and 40 on May 30, then 30 seen on June 6 with 25 on June 9. There were 32 on June 14 with 21 on June 19, 18 on June 26 and 13 on June 28. That closed the summer passage. For the early fall passage there were 36 on June 30 with 41 on July 4, then 38 seen on*

July 8 with 30 to July 19 and 17 to July 26. There were 33 on July 30 with 30 on August 2 and 29 to August 13.

Great Egret (*Ardea alba*)

Seen all year in low numbers; numbers were a little higher during the winter passage. This species did not breed in the survey area. Early fall records: *there were three on June 14 with five on June 19, six on June 22, eight to June 29 and 16 on July 4, then 14 seen on July 6 with ten on July 9. There were 25 on July 12 with 30 on July 16 and 32 on July 23, then 15 seen on July 27. There were 22 on August 3 with 25 on August 6, then 14 seen on August 10 with nine on August 13.* For this year there were 21 on August 18 with 23 on August 20, then 22 seen on August 25 with 11 on August 27. There were 32 on August 31 with 26 to September 6 and 11 on September 8. There were 19 on September 10 with 26 on September 17, then 24 seen on September 23 with 14 on September 25. That was the early fall passage. For the late fall passage there were 17 on September 30 with 33 on October 2 and 41 on October 6, then 40 seen on October 8 with ten on October 12 and eight on October 14. There were 15 on October 19 with 18 on October 26, then 17 seen on October 29. There were 18 on November 3 and November 5 with 48 on November 6, then 15 seen on November 12 with nine on November 14. There were 19 on November 16 with 12 on November 19. There were 15 on November 22 with 31 on November 26, then 19 seen on November 30. That closed the late fall passage. For the winter passage there were 53 on December 4 with 51 on December 11, 41 on December 14, 27 on December 19, 19 on December 22 and 14 on December 27. There were 21 on December 30 and January 1 with 25 on January 4 and 39 on January 7, then 23 seen on January 11. That completed the winter passage. For the early spring passage there were 31 on January 14 with 14 on January 21, ten to January 28 and seven on February 2. There were 33 on February 6 with 19 on February 8 and 14 on February 11. There were 16 on February 16 with 19 on February 21, then 18 seen on February 23 with 16 on February 25 and eight on February 29. That concluded the early spring passage. For the late spring passage there were 14 on March 3 and March 7 with ten on March 10, six on March 18, two on March 21 and one on March 25. There were eight on March 27 with one on March 30. There were four on April 3 with five to April 15, 15 on April 19 and 19 on April 26, then 12 seen on April 30 with 11 on May 4 and eight on May 7. That ended the late spring passage. For the summer passage there were 15 on May 13 with six on May 16. There were 12 on May 21 with 18 from May 23 to June 6 and 21 on June 14, then 18 seen on June 19. There were 47 on June 26 with 86 on June 30, then 40 seen on July 8 with 28 on July 12. That was the summer passage. For the post-breeding gathering there were 41 on July 16 with 47 on July 19, then 40 seen on July 23 with 39 on July 26. There were 50 on July 30 with 59 on August 6, then 49 seen on August 9 with 46 on August 13.

Snowy Egret (*Egretta thula*)

Present all year but they were only seen in very low numbers. Early fall records: *there were five on July 12 with 13 on July 14, then 11 seen on July 16 with five on July 20, four on July 27 and one on August 3. There were ten on August 6 with four to August 13.* For this year there were 18 on August 18 with 25 on August 20, then 11 seen on August 25 with singles to August 31. There were three on September 3 with 11 on September 6, then ten seen on September 10 with two on September 17 and one on September 23. There were three on September 25 with nine on September 30, then two seen on October 2 with one on October 6. That was the early fall passage. For the late fall passage there were three on October 8 with nine on October 14, then five seen on October 19 with two to October 26. There were five on October 29 with six on November 5 and 16 on November 6, then nine seen on November 12 with eight on November 16 and four on November 19. There were 24 on November 22 with 18 on November 26 and six on November 30. That closed the late fall passage. For the winter passage there were ten on December 4 and December 7 with 14 on December 14, then three seen on December 19. There were five on December 22 with eight on December 27, ten on December 30 and 20 on January 1, then seven seen on January 4. That completed the winter passage. For the early spring passage there were 11 on January 7 and January 11 with ten to January 18, five to January 28, four on February 6 and two on February 8. There were three on February 11 with four on February 16, then three seen on February 25 with two on February 29 and one on March 3. That concluded the early spring passage. For the late spring passage there were three from March 7 to March 18 with singles to April 11. There were two on April 15 with one on April 19. There were two on April 26 with one on April 30. That ended the late spring passage. For the summer passage there were two on May 2 with four to May 7, six on May 13 and seven on May 21, then five seen to June 3 with two on June 6. There were seven on June 9 with three on June 14. There were four on June 19 with eight on June 26 and 48 on June 28, then 24 seen on June 30 with 17 on July 12, 15 on July 19 and eight on July 23. That was the end of the summer passage. For the post-breeding gathering there were 17 on July 26 with 20 on July 30, then 14 seen on August 2 with ten on August 9 and one on August 13.

Little Blue Heron (*Egretta caerulea*)

Present all year but surprisingly for this year it was commoner than the Snowy Egret. During the Breeding Bird Survey two pairs located on an island near the end of Lust Road. The vegetation grew too thick to see any young in the nests; but fledged young were seen nearby later. Early fall records: *there were 15 on July 4 with ten on July 6, nine on July 9 and seven on July 12. There were 13 on July 14 with ten on July 16. There were 11 on July 20 and July 23 with 14 on July 27, 15 on August 6 and 27 on August 10, then 16 seen on August 13 with 13 to August 20.* There were 20 on August 25 with 18 on August 27, 16 on August 31, 14 on September 6 and five on September 8. There were seven on September 10 with nine to September 25 and 17 on

September 30, then eight seen on October 2 with six on October 6. That was the early fall passage. For the late fall passage there were 18 on October 8 with ten to October 14. There were 14 on October 19 with 21 on October 23, then 20 seen on October 29 with seven on November 3. There were 24 on November 6 with 11 on November 9, ten on November 12 and six on November 14. There were 13 on November 16 with 15 on November 19 and 26 on November 22, then 24 seen on November 26 with 14 on November 30 and 12 on December 4. That closed the late fall passage. For the winter passage there were 13 on December 7 with 22 on December 11 and 24 on December 14, then 17 seen on December 22 with 15 on December 27. There were 18 on December 30 with 21 on January 1 and 26 on January 7, then 17 seen to January 14. That completed the winter passage. For the early spring passage there were 24 on January 18 with 19 on January 25, 16 on January 28 and 15 on February 2. There were 16 on February 6 with 20 on February 8, then 14 seen on February 16 with nine on February 21. There were 19 on February 23 with 15 on February 25, ten on February 29, nine on March 3 and six to March 10. That concluded the early spring passage. For the late spring passage there were 11 on March 14 with nine on March 18 and six on March 21. There were 11 on March 25 and March 27 with five on March 30 and three on April 3. There were six on April 6 with nine on April 11, 13 on April 15, 20 on April 26 and 22 on April 30, then 20 seen to May 4 with 12 on May 7. That closed the late spring passage. For the summer passage there were 29 on May 13 with 18 on May 21 and 12 on May 23. There were 20 on May 27 with 36 on May 30 and 40 on June 3, then 24 seen on June 6. There were 36 on June 9 with 40 on June 14, then 39 seen on June 26 with 36 on June 28, 30 on June 30 and 27 on July 4. That closed the summer passage. For the post-breeding gathering there were 31 on July 8 with 28 on July 16, 22 on July 23, 20 on July 26, 19 to August 9, 16 on August 20 and 15 on August 23.

Tricolored Heron (*Egretta tricolor*)

This is normally the rarest of these herons but this year the numbers were on par with the Snowy Egret; there was a minor post-breeding gathering. Early fall records: *there were two from June 22 to June 29 with five on July 4, 11 to July 12 and 17 on July 16, then 12 seen to July 23. There were 18 on July 27 with 12 on August 3, ten on August 6 and eight on August 10. There were nine on August 13 with 25 on August 18 and 28 on August 20, then 22 seen on August 25 with 17 on August 27 and nine on August 31. There were 18 on September 3 with 17 on September 6 and 15 on September 8. There were 18 on September 10 with 19 on September 17, then six seen on September 23 with three on September 25. That was the early fall passage. For the late fall passage there were eight on September 30 and October 2 with six on October 6, four to October 12, two on October 14 and one on October 19. There were six on October 23 and October 26 with seven on October 29, then five seen to November 6 with three on November 9 and two on November 12. There were three on November 14 with four on November 16, six on November 19 and nine on November 26 then five seen on November 30.*

That closed the late fall passage. For the winter passage there were nine on December 4 with seven to December 14 and four on December 19. There were five on December 22 and December 27 with eight on December 30, then six seen to January 4 with five on January 7. That completed the winter passage. For the early spring passage there were seven on January 11 with five on January 14 and four to January 21. There were eight on January 25 with five to February 2, three on February 6 and two on February 8. There were three on February 11 with eight on February 16, then four seen on February 21 with three to February 25. That concluded the early spring passage. For the late spring passage there were four on February 29 with six on March 3 and 15 on March 10, then three seen to March 18 with two to March 30. There were four on April 3 with singles to April 11. There were two on April 15 with three on April 19 and six on April 26, then five seen to May 4 with four on May 7. That ended the late spring passage. For the summer passage there were seven on May 13 with ten on May 21, then six seen on May 23. There were seven on May 27 with eight to June 6, nine on June 9, ten to June 19, 17 to June 28 and 22 on July 4, then 21 seen on July 12 with nine on July 16. That was the summer passage. For the post-breeding gathering there were 15 on July 19 with 19 to July 26 and 28 on July 30, then 16 seen on August 2. There were 18 on August 6 with 26 on August 9, then 13 seen on August 13 *with seven on August 16.*

Reddish Egret (*Egretta rufescens*)

This was a vagrant. There was an adult white morph at the Sand Farm Cattail Marsh on March 21. White morphs are exceptionally rare in eastern Florida. This was the first record for Zellwood.

Cattle Egret (*Bubulcus ibis*)

There was a colony of 413 pairs in 1999 with 103 pairs in 2000 on a series of small islands at the end of Lust Road. This in turn led to a major post-breeding gathering in 1999 but there was only a minor event in 2000; numbers were then much lower from November, 1999. In 2001 with low water levels in Lake Apopka the islands ceased to be islands so the egrets went elsewhere to breed. Early fall records: *for the post-breeding gathering there were 550 on June 7 with 1,070 on June 12, 2,140 on June 14 and 2,450 on June 22, then 2,410 seen on June 25 with 650 on June 29. There were 1,250 on July 4 with 1,790 on July 6 and 2,260 on July 9, then 2,150 seen on July 12 with 1,360 on July 14. There were 2,010 on July 16 with 2,030 on July 20, 2,345 on July 23, 2,490 on July 27, 2,500 on August 3, 2,570 on August 6 and 3,120 on August 10, then 2,580 seen on August 13 with 1,700 on August 20, 1,060 on August 25 and 575 on August 27. That influx lasted 1 ½ months and the count of 3,120 was the highest count for Zellwood but the highest count is now (2014) that of 6,400 on September 16, 2004. There were 1,360 on August 31 with 895 on September 3 and 790 on September 6. That was the post-*

breeding gathering. For the fall passage there were 840 on September 8 with 900 on September 10, then 610 seen on September 17 with 373 on September 23. There were 825 on September 25 with 425 on September 30, 230 on October 2 and 135 on October 6. There were 650 on October 8 with 315 on October 12 and 230 on October 14. There were 520 on October 19 with 560 on October 26, then 470 seen on October 29 with 172 on November 3, 160 on November 9, 120 to November 19 and 71 on November 22. There were 242 on November 26 with 48 on December 4 and one on December 7. That closed the fall passage. For the winter passage there were 25 on December 11 with 42 on December 14, 86 on December 19, 91 on December 22, 164 on December 27 and 200 on January 1, then 39 seen on January 4 with 25 on January 7. That completed the winter passage. For the early spring passage there were 108 on January 11 with 78 on January 14 and 60 on January 18. There were 132 on January 21 with 42 on January 25 and 11 on January 28. There were 138 on February 2 with 118 on February 6, 65 on February 8 and 33 on February 11. There were 145 on February 16 with 39 on February 21. There were 62 on February 23 with 64 on February 25, then 55 seen on March 3 with 35 on March 7. That ended the early spring passage. For the late spring passage there were 39 on March 10 with 50 on March 14 and 73 on March 18, then 41 seen on March 21. There were 56 on March 25 with 145 on March 27, then 135 seen on March 30 with 45 on April 3. That appeared to have been a very short late spring passage. For the summer passage there were 57 on April 6 with 167 on April 11, 410 on April 19, 610 on April 30 and 800 on May 2, then 410 seen on May 4 with 188 on May 7. There were 305 on May 13 with 475 on May 16 and 550 on May 21, then 450 seen on May 23 with 360 on May 27. There were 650 on May 30 with 401 on June 3 and 252 on June 6. That concluded the summer passage. For the minimal post-breeding gathering there were 505 on June 9 with 550 on June 19, 565 on June 26, 660 on June 28, 685 on June 30, 915 on July 4 and 1,055 on July 12, then 625 seen on July 16. There were 645 on July 19 with 700 on July 23 and 1,210 on July 30, then 535 seen on August 6 with 430 on August 13, *190 on August 16, 100 on August 20, 83 on August 27 and 35 on August 30. That was the end of the post-breeding gathering.*

Green Heron (*Butorides virescens*)

Present all year but in small numbers, there were somewhat higher numbers during the summer. During the Breeding Bird Survey a total of 20 pairs located. Early fall records: *for the post-breeding gathering there were nine on June 5 with 12 to June 19, 13 on June 25, 16 on July 4 and 18 on July 6, then 12 seen on July 9 with six on July 12. There were 11 on July 14 with 19 on July 16, then ten seen on July 20 with seven on July 23. There were 13 on July 27 and August 3 with nine on August 6. There were ten on August 10 with 11 on August 13, then nine seen to August 25 with two on August 27. That was the post-breeding gathering. For the balance of the early fall passage there were three on August 31 and September 3 with six on September 6, then three seen to September 23. There were five on September 25 with four on September 30 and one on October 2. That closed the early fall passage; there was no late fall passage rather*

up to two a day seen to November 22. For the winter passage there were four on November 26 with five on December 4, then three seen on December 11 with two on December 14. There were five on December 19 with four on December 22 and one on December 27. There were five on December 30 with three to January 4, two to January 11 and one on January 14. That completed the winter passage. Unlike the winter passage there was only a minimal passage in the early spring. There were three on January 18 with singles to January 25. There were three on January 28 with four on February 6, then two seen to February 16 with singles to February 23. That concluded the early spring passage. This species nests very early so there was no late spring passage. For the summer passage there were two on February 29 and March 7 with four on March 10, then three seen on March 14 with one on March 18. There were three on March 21 with four on March 25, then two seen to March 30. There were four on April 3 with six on April 6, then four seen to April 19. There were six from April 26 to May 7. That closed the summer passage. For the minor post-breeding gathering there were with seven on May 13, 11 on May 16 and 16 on May 21, then 15 seen to May 27. There were 16 on May 30 with 22 on June 3, then 15 seen on June 6. There were 21 on June 9 with 22 to June 19 and 24 on June 26, then 21 seen on June 30 with 15 on July 4, 11 to July 12 and ten on July 16. There were 15 on July 19 with 13 on July 23 and six on July 26. There were eight on July 30 with ten to August 9 and 12 on August 13, *then 11 seen on August 20 with four on August 23. There were 15 on August 27 with 11 on September 3, six on September 7 and two on September 10. That was the post-breeding gathering.*

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

There was a minimal presence through the year; again there was no evidence of breeding. Early fall record: *there was one on August 10*. For this year there were singles on five dates from August 27 to September 23. That was the extent of the early fall passage. For the main fall passage there were two on September 30 with three on October 6, then singles seen to October 19. There were six on October 23 with singles to November 30. That closed the main fall passage. For the winter passage there were singles on December 4 and December 22 that was it. For the early spring passage there were singles on January 14 and January 21 with later six on February 11, then two seen on February 16 with singles to March 3. That concluded the early spring passage. For the late spring passage there were singles on March 7 and March 10 with five on March 14 and six on March 25, then two seen on April 3 with singles to April 26. That ended the late spring passage. For the summer passage there was one on May 16 with four on May 23 and five on May 27, then two seen on May 30. There was one on June 19 with three on June 26 and four on June 30, then three seen on July 12 with two on July 16. That was the summer passage so for the early fall passage there were four on July 19, July 23 and July 30 with three on August 6.

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

A rare visitor during the summer of 1999 but a much commoner visitor in 2000; again there was no proof of breeding. Early fall records: *there were three on June 25 and July 4 with two on July 12 and one on July 14. There were three on July 16 with singles to July 27. There were two on August 3 with one on August 10.* There were no sightings this year for the early fall passage. For the late fall passage there were singles on October 6 and October 23. There were no winter or early spring sightings. For the late spring passage there was one on April 3 that was it. For the summer passage there were four on May 13. Later there was one on May 23 with eight on May 27, May 30 and June 6, ten on June 14 and 11 on June 26, then eight seen on June 28 with seven on June 30, five on July 8, three on July 12, two on July 16 and singles to August 9.

White Ibis (*Eudocimus albus*)

Present all year although numbers minimal during the winter and early spring passages. There was no evidence of breeding. Early fall records: *there were 70 on June 22 with 165 on June 25, then 78 seen on June 29 with 77 on July 4, 62 on July 9, 51 on July 12 and ten on July 14. There were 56 on July 16 with 150 on July 20 and 231 on July 27, then 189 seen on August 3 with 106 on August 10, 32 on August 13, 23 on August 18, 17 on August 20 and three on August 25.* There were five on August 27 with 20 on August 31, 21 on September 6 and 33 on September 17, then 24 seen on October 2 with five on October 6 and one on October 8. That was the early fall passage. For the late fall passage there were seven on October 12 with eight on October 14, 23 on October 19 and 36 on October 26, then 18 seen on October 29 with three on November 3. There were 42 on November 6 with 19 on November 9 and one on November 12. There were 48 on November 14 with 19 on November 16, two to November 22 and one on November 26. That closed the late fall passage. For the winter passage there were four on December 4 with singles to December 11. There were 17 on December 19 with three on December 22 and two on December 27. There were six on December 30 with three on January 1, two on January 4 and one on January 7. That completed the winter passage. For the early spring passage there were four on January 11 with singles to February 16. There were 20 on February 21 with singles to February 29. That was the extent of the early spring passage. For the main spring passage there were 19 on March 3 with 21 on March 7, 31 on March 10 and 45 on March 14, then 14 seen on March 21 with six on March 25. There were 97 on March 27 with 139 on March 30, then 57 seen on April 6 with 25 on April 11 and four on April 15. There were 28 on April 19 with 31 on April 26 and 78 on May 2, the 28 seen on May 4 with nine on May 7. That ended the main spring passage. For the summer passage there were 29 on May 13 with 23 on May 21 and nine on May 23. There were 13 on May 27 with 43 on May 30, 47 on June 6, 57 on June 14, 81 on June 26 and 89 on June 28, then 41 seen on June 30 with 23 on July 4 and ten to July 12. That was the end of the summer passage so for the early fall passage there were 13 on July 16 with

nine on July 19. There were 12 on July 23 with 18 on July 26, then 14 seen on August 2 with nine to August 9. There were 22 on August 13 *with seven on August 16 and four on August 20.*

Glossy Ibis (*Plegadis falcinellus*)

Seen in low numbers for most of the year; there did appear to be a minor fall passage. Early fall records: *there were 50 on July 6 and July 9 with 24 on July 12 and six on July 14. There were 66 on July 16 with 124 on July 20, 127 on July 23, 171 on July 27, 181 on August 3, 188 on August 6 and 278 on August 10,* then 111 seen on August 18 with 85 on August 20, 51 on August 25, 50 on August 27, ten to September 3, eight on September 6 and six on September 8. There were 14 on September 10 with 12 on September 17, five on September 23 and two on September 25. That was the early fall passage. For the main fall passage there were 12 on September 30 with four on October 12 and two on October 19. Now the short-lived passage started there were 550 on October 26 with 200 on November 3 and ten on November 5. There were 51 on November 6 with 65 on November 9, then ten seen on November 12. That ended the passage. There were 16 on November 14 with 31 on November 16, then six seen on November 19. There were 13 on November 22 with 18 on November 26, then ten seen to December 4. That closed the main fall passage. For the winter passage there were 17 on December 7 with five on December 11 and two on December 14. There were three on December 19 and December 22 with four on December 27 and five on January 1, then singles seen to January 7. That completed the winter passage. For the early spring passage there were two on January 11 with three on January 14, four on January 18, nine on January 28, ten on February 2 and 17 on February 6, then two seen on February 8. There were three on February 11 with four on February 16 and 12 on February 21, then ten seen to February 29 with six on March 3. That ended the early spring passage. For the late spring passage there were 12 on March 7 with eight to March 27, seven on March 30, two on April 6 and one on April 11. There were 12 on April 15 with five on April 19 and one on April 26. That was the late spring passage. For the summer passage there were two on April 30 with four on May 2 and eight on May 4, then three seen on May 13. There were four on May 16 with 12 on May 21, then 11 seen on May 23 with eight on May 30 and three on June 3. There were 19 on June 6 with 30 on June 9, then 12 seen on June 14. There were 20 on June 19 with 40 on June 26 and 44 on June 28, then 29 seen to July 4 with 17 on July 8 and 11 on July 12. That concluded the summer passage. For the early fall passage there were 30 on July 16 with 19 on July 19 and 12 on July 23. There were 16 on July 26 with 30 on July 30, then 21 seen on August 6 with ten on August 9 and six on August 13.

Roseate Spoonbill (*Platalea ajaja*)

An early fall passage migrant in both 1999 and 2000; there were no other sightings. There were no early fall sightings from the previous year. For this year there were singles on August 20, August 25 and August 31. For the early fall passage in 2000 there were singles on June 28 and June 30 with two from July 4 to July 12, then eight seen on July 16 and July 23 with one on July 30.

Wood Stork (*Mycteria americana*)

This was a passage migrant in the fall and especially the summer; for the other seasons it was absent or nearly so. Early fall records: *there were singles on June 22 and June 25 with four on July 4 and 14 on July 12, then one seen on July 27. There were 19 on August 3 with 22 on August 6, then singles seen to August 18. There were six on August 25 with 26 on August 27, 49 on August 31 and 106 on September 6, then 76 seen on September 8 with 74 on September 10, 47 on September 17, two on September 23 and one on September 30. That was the early fall passage. For the late fall passage there were 21 on October 2 with 29 on October 6, then 13 seen on October 23 with four on October 26 and one on October 29. There were three on November 5 with eight on November 6, then 33 seen on November 9 and November 14 with 13 on November 16 and one on November 26. That closed the late fall passage. For the winter passage there were two on December 4 and December 11. Later there was one on January 7. That was the extent of the winter passage. There was no early spring passage. For the late spring passage there were singles on April 19 and April 26 with 15 on April 30, then one seen on May 2 that was it. For the summer passage there were ten on May 13 with three on May 21. There were four on June 6 with 28 on June 14 and 85 on June 19, then 66 seen on June 28 with 54 on June 30, 20 on July 4, 14 on July 8 and 13 on July 12. That closed the summer passage. For the early fall passage there were 58 on July 16 with 59 on July 23, then 38 seen on July 26 with 19 on July 30, 17 on August 6, 12 on August 13, *five on August 16 and one on August 20.**

Black Vulture (*Coragyps atratus*)

Present all year in low numbers; there was no evidence that it bred. Early fall records: *there were four on July 4 with 23 on July 6, then nine seen on July 9 with singles to July 14. There were 13 on July 16 with five on July 20 and three on July 23. There were five on July 27 with six on August 3, then three seen on August 6. There were four on August 10 with ten on August 13 and 16 on August 18, then two seen on August 20. There were three on August 25 with nine on August 27, then three seen to September 3. There were 14 on September 6 with 12 on September 10, seven on September 17 and one on September 23. There were six on September 25 with 26 on September 30, then four seen on October 2 with three on October 6. That was*

the early fall passage. For the late fall passage there were 12 on October 8 with 13 on October 12, then six seen on October 14 with two on October 19. There were three on October 23 with eight on October 26 and 12 on October 29, then five seen on November 6 with three on November 9 and one on November 12. There were 12 on November 14 with three on November 16. There were nine on November 19 with 12 on November 22, then ten seen on November 30 with three on December 4. That closed the late fall passage. For the winter passage there were four on December 7 with nine to December 19, 11 on December 30, 23 on January 1 and 25 on January 7, then four seen on January 11. That completed the winter passage. For the early spring passage there were 17 on January 18 with four on January 21 and three on February 2. There were 17 on February 6 with 19 on February 8, then seven seen on February 11 with four on February 21 and three on February 25. That concluded the early spring passage. For the late spring passage there were two on March 7 with seven on March 21, then five seen to March 30 with two on April 3 and one on April 6. There were two on April 19 with one on April 26. There were two on April 30 with five on May 2, then singles seen to May 7. That ended the late spring passage. For the summer passage there was one on May 13 with 12 on May 16 and 21 on May 23, then one seen on May 30. There were five on June 3 with six from June 6 to June 14, then four seen on June 19 with one on June 26. There were four on June 28 with three to July 8 and one on July 12. That was the summer passage so for the early fall passage there were 18 on July 16 with four on July 19 and two on July 23. There were three on July 26 with 11 on July 30, then nine seen to August 13.

Turkey Vulture (*Cathartes aura*)

Seen all year although not known to breed in the survey area; the highest numbers were from late August to early February. Early fall records: *there were 43 on July 4 with 48 on July 6, then 40 seen on July 9 with 27 on July 12 and 17 on July 14. There were 64 on July 16 with 29 to July 23. There were 36 on July 27 and August 3 with 49 on August 10, then 27 seen on August 13 with 13 on August 18.* Now the heavier passage started. There were 46 on August 20 with 86 on August 25 and 125 on August 27, then 70 seen on August 31. There were 103 on September 3 with 153 to September 10, 174 on September 17 and 214 on September 25, then 126 seen on September 30 with 89 on October 2. That was the early fall passage. For the main fall passage there were 170 on October 6 with 227 to October 12, 371 on October 14, 387 on October 23 and 511 on October 29, then 353 seen on November 3 with 99 on November 6. The count of 511 was the highest count for Zellwood but the highest count is now (2014) that of 2,800 on February 11, 2009. There were 239 on November 9 with 338 on November 12, then 215 seen on November 19 with 174 on February 26 and 106 on November 30. That closed the main fall passage. For the winter passage there were 247 on December 4 with 274 on December 7 and 336 on December 11, then 191 seen on December 14 with 182 on December 19 and 58 on December 22. There were 65 on December 27 with 152 on December 30, then 147 seen on

January 1 with 89 on January 4. That completed the winter passage. For the early spring passage there were 204 on January 7 with 84 on January 11, 62 on January 14 and 36 on January 18. There were 102 on January 21 with 55 on January 25 and 15 on January 28. There were 320 on February 2 with 464 on February 6, then 340 seen on February 8 with 104 on February 11, 73 on February 16, 62 on February 21, 41 on February 25, 40 on February 29, 30 on March 7, 23 on March 10, 11 on March 14 and seven on March 18. The heavier passage really finished on February 11. Note how the counts dwindled away i.e. there was no incoming late spring event to cover them up. So for the late spring passage there were 13 on March 21 with five to April 3, two on April 6 and one to April 15. There were seven on April 19 with three on April 26. There were five on April 30 with six on May 2, then three seen on May 4. That concluded the late spring passage. For the summer passage there were four on May 13 and May 16 with eight from May 21 to June 6, then seven seen on June 9. There were 26 on June 14 with 36 on June 19, then seven seen on June 26. That was a short summer passage. For the early fall passage there were nine on June 28 with 19 on June 30, 47 on July 4, 61 on July 8 and 172 on July 16, then 122 seen on July 19 with 62 on July 23. There were 81 on July 26 with 97 on July 30, 167 on August 2, 266 on August 9 and 400 on August 13, *then 200 seen on August 20 with 152 on August 23.*

White-faced Whistling-Duck (*Dendrocygna viduata*)

There was an adult at the Sand Farm on May 7, 2000. It was with three Fulvous Whistling-Ducks. This could be a naturally occurring vagrant from South America although the possibility of it being an escapee from a collection cannot be excluded. This species is a resident in South America from Costa Rica southward, including Trinidad. Vagrants have been recorded from several West Indian islands. There are at least three previous Florida records, all I believe in the spring. The Fulvous Whistling-Duck occurs in the same area so they could have travelled together. At the time of this bird's arrival two Fork-tailed Flycatchers *Tyrannus savana* turned up in south Florida. The whistling-duck was not banded so vagrancy is a real possibility. It was not seen again here or elsewhere. There is a description in Appendix B.

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

Only seen in 1999; there were four early fall records. *For the previous year there was one on July 12.* For this year there were two on August 25 and August 27 with three on August 31. There were no later records.

Fulvous Whistling-Duck (*Dendrocygna bicolor*)

In 1999 there was a strong post-breeding gathering with a limited late fall passage; there were no winter or spring passages. In 2000 it was present all summer in low numbers. During the Breeding Bird Survey a total of 25 pairs located in 1999 with just one pair in 2000. In 1999 there were broods of young that were first seen from June 25 to August 3 with in 2000 a brood that was first seen on July 16. Early fall records: *for the post-breeding gathering there were 15 on June 12 with 52 on June 19, then 44 seen on June 25 with 19 on July 4 and 17 on July 6. There were 73 on July 9 with 18 on July 12. There were 22 on July 14 with 48 on July 16 and 85 on July 20, then 40 seen on July 23. There were 82 on July 27 with 119 on August 3, 302 on August 6 and 366 on August 10, then 294 seen on August 18 with 252 on August 20, 125 on August 25, 89 on August 27 and 26 on August 31. The count of 366 was the highest count for Zellwood but the highest count is now (2014) that of 840 on October 22, 2003. There were 61 on September 3 with 73 on September 6 and 109 on September 10, then 76 seen on September 17 with 61 on September 23, 55 on September 25 and two to October 6. That closed the post-breeding gathering; there was no early fall passage. For the late fall passage there were 18 on October 12 with ten on October 14 and two on October 19. There were five on October 23 with six on October 26, then eight seen on October 29 and November 5 with singles to November 9. There were also 16 on November 14 with later one on November 26. That ended the late fall passage. There were no winter or early spring passages. For the late spring passage there was one on April 15 that was it. For the summer passage there were three on May 7 with two to May 27 and one on June 3. There were four on June 6 and June 19 with two to June 28. There were 12 on June 30 with two to July 8. There were seven on July 12 with nine on July 16, then two seen to July 23. That was the summer passage. For the early fall passage there were 11 on July 26 with four on July 30 and two on August 2. There were eight on August 6 with nine on August 13 and 46 on August 16, then six seen on August 20 with two on August 23. Whilst there was a post-breeding gathering in 1999 for this year it looks more like an early fall passage.*

Snow Goose (*Chen caerulescens*)

This was a rare passage migrant and winter visitor. For the fall passage there was one on November 16. For the winter passage there were 12 on November 26 and November 30 with 13 on December 7. For the early spring passage there were three on January 21.

Wood Duck (*Aix sponsa*)

Present all year; there was a significant post-breeding gathering. A pair bred in 1999 but not in 2000. Early fall records: *there were six on July 9 and July 12 with four to July 20 and two to July 27. That was the extent of the early fall passage. For the post-breeding gathering there*

were eight on August 3 and August 10 with 16 on August 13, 22 on August 18 and 31 on August 20, then 13 seen on August 25. There were 24 on August 27 with 25 on August 31, 34 on September 6, 51 on September 8 and 53 on September 10, then two seen on September 17 with one on September 23. That was the post-breeding gathering it took up all of the early fall passage from August 3. The count of 53 was the highest count for Zellwood but the highest count is now (2014) that of 316 on September 9, 2011. For the late fall passage there were two on September 30 and October 8 with three on October 12 and four on October 14, then singles seen to November 6. There were five on November 16 with singles to December 4. That closed the late fall passage. For the winter passage there were two on December 22 and December 27 that was it. For the early spring passage there were two on January 21 with four on January 28, February 2 and February 6, then three seen on February 11 with two on February 16. There were four on February 25 with two on February 29. That concluded the early spring passage. For the late spring passage there was one on March 10 with two on March 18 that was also it. For the summer passage there were two on May 7 and May 16 with one on May 21. That appears to be the extent of the summer passage. For the post-breeding gathering there were two on June 6 and June 9 with five on June 14, 15 on June 26 and 39 on June 30, then 34 seen on July 8 with 29 on July 16, 16 on July 19, ten on July 23, eight on July 26, seven to August 6 and six on August 9. There were 11 on August 13 with ten on August 16 and two on August 20.

Gadwall (*Anas strepera*)

A common late fall passage migrant; numbers were very low from mid-December. For the fall passage there were two on October 23 with 24 on October 26, then 21 seen to November 3. There were 37 on November 5 with 25 on November 6. There were 31 on November 9 with 93 on November 12, 98 on November 14, 104 on November 16, 173 on November 19 and 222 on November 22, then 143 seen on November 26 with 117 on November 30, 92 on December 7, 38 on December 12, 26 on December 14, 17 on December 19, four to December 30 and two on January 1. That was a very strong fall passage it covered up all of the winter passage as there was no influx during that period. The count of 222 was the highest count for Zellwood but the highest count is now (2014) that of 812 on December 16, 2011. So for the early spring passage there were five on January 4. Later there were three on January 25. Finally for the early spring passage there were three on February 21. For the late spring passage there were 18 on March 7 with nine on March 10 and two on March 14.

American Wigeon (*Anas americana*)

A fall passage migrant in quite low numbers; for the winter and spring passages it was a rare visitor. For the fall passage there were nine on October 23 with five on October 26. There were eight on October 29 with 15 on November 3, 31 on November 5 and 35 on November 6,

then 29 seen on November 9 with 23 on November 12, 19 on November 14, 18 on November 16 and 11 on November 19. There were 15 on November 22 with 19 on November 26, then five seen on November 30. That closed the fall passage. For the winter passage there were six on December 4 and December 7 with four to December 14 and two on December 19. For the early spring passage there was one on February 11 with five on February 23 that was it. For the late spring passage there were four on March 10 with later one on April 19.

American Black Duck (*Anas rubripes*)

This should be a vagrant but this year two arrived and one remained to pair with a Mottled Duck. This may be the first instance of an attempt to breed in Florida. For the fall passage there were two on November 6, November 9 and November 12 with singles to November 30. That closed the fall passage. For the winter passage there were two on December 4 and December 7 with singles to December 22. There were two on December 27 with one on December 30. There were also two on January 1 and January 4. That completed the winter passage. From January 7 through the spring passages and the summer passage there was one present it was paired with a Mottled Duck. They were last seen on June 19.

Mallard (*Anas platyrhynchos*)

Seen all year in low numbers; in 1999 there was a post-breeding gathering with later a short-lived late fall passage. These events did not occur in 2000. During the Breeding Bird Survey a total of three pairs located in 1999 with a single pair in 2000; broods were first seen on May 22 in 1999 and May 21 in 2000. Please note any hybrids with Mottled Ducks that I find are here treated as Mallards. Early fall records: *there were five on July 9 with four on July 14, two on July 20 and one on July 23. There were four on July 27 and August 3* with eight to August 18 and 12 on August 20, then 17 seen on August 25 and August 31 with nine on September 6, five to September 17, four on September 23 and two to September 30. That closed the early fall passage/post-breeding gathering. There was now a month long gap until the main fall passage started. There was one on October 26 with two to November 6, 11 on November 12, 14 on November 14 and 40 on November 19, then two seen on November 22. The count of 40 was the highest count for Zellwood but the highest count is now (2014) that of 103 on October 24, 2004. This count of 40 will have involved wild birds from the north rather than local feral birds. There were 14 on November 26 with 16 on November 30, then eight seen on December 4. That closed the main fall passage so for the winter passage there were ten on December 7 with four on December 11. There were five on December 14 with six on December 22, then two seen on December 27 with one on December 30. There were five on January 1, January 4 and January 11. That completed the winter passage. For the early spring passage there were four on January 28. Again there was a month without sightings until two seen on February 25. Those were the

only early spring records. For the main spring passage there were two on March 7 and March 10 with singles to March 21. There were two from March 25 to April 3 with four on April 6, then three seen April 19 with two to April 30 and one on May 2. That concluded the main spring passage. For the summer passage there were three from May 4 to May 16 with six on May 21, then two seen on May 23. There were four from May 27 to June 3 with six on June 6, then four seen on June 9 with three to June 19. There were four from June 26 to July 8 with one on July 12. That was the summer passage. For the early fall passage there were two on July 16 with seven on July 19, then six seen on July 23 with singles to July 30. There were two on August 2 with three on August 9 *and August 16, then two seen on August 20 with one on August 23.*

Mottled Duck (*Anas fulvigula*)

A resident with a significant post-breeding gathering; there was also a passage in the late fall. In contrast numbers were minimal during the spring passages. During the Breeding Bird Survey a total of 12 pairs located in 1999 with 13 pairs in 2000. The first broods were seen on May 22 in 1999 and May 21 in 2000. Early fall records: *for the post-breeding gathering there were 26 on July 4 with 12 on July 6. There were 22 on July 9 with 35 on July 14, then 30 seen on July 16 with 27 on July 20 and nine on July 23. There were 24 on July 27 with 85 on August 3, 99 on August 6, 151 on August 10, 177 on August 13 and 197 on August 20, then 148 seen on August 25 with 109 on August 27, 69 on August 31 and 61 on September 3. The count of 197 was the highest count for Zellwood but the highest count is now (2014) that of 397 on September 2, 2011. There were 77 on September 6 with 62 on September 8, 51 on September 10, 38 on September 17, 16 on September 25 and four on September 30. That ended the post-breeding gathering; there was no early fall passage. For the late fall passage there were seven on October 12 with four on October 23 and one on October 26. There were two on October 29 with 38 on November 12 and 75 on November 14, then 50 seen on November 19 with 18 on November 26, 12 on November 30 and seven on December 4. That closed the late fall passage. For the winter passage there were 11 on December 7 with 16 to December 14 and 22 on December 22, then eight seen on December 30 with six on January 1. That completed the winter passage. For the early spring passage there were 14 on January 4 and January 11 with three to January 18 and one on January 21. There were two on January 25 with four on January 28, then three seen on February 8 with one on February 11. There were eight on February 16 with 15 on February 25, then three seen on February 29. That concluded the early spring passage. For the late spring passage there were four on March 3 with eight on March 10, then three seen to March 21 with two on March 25. There were seven on March 27 with six on March 30, five on April 6 and four on April 11. There were five on April 15 and April 19 with eight on April 26, then seven seen to May 2. That ended the late spring passage. For the summer passage there were eight on May 4 with 16 on May 13, 17 on May 21, 20 on May 23 and 31 on May 27, then 30 seen on May 30 with 23 on June 3. There were 76 on June 6 with 54*

on June 9. There were 73 on June 16 with 98 on June 19, then 83 seen to June 28 with 81 on June 30 and 35 on July 4. That closed the summer passage. For the post-breeding gathering there were 79 on July 8 with 80 on July 12, then 67 seen on July 16 with 43 on July 23 and 17 on July 30. There were 22 on August 2 with 37 on August 6, then 31 seen on August 9 with 15 on August 13. *There were 39 on August 16 with 38 on August 23, 35 on August 27 and 26 on August 30. There were 44 on September 3 with 25 on September 7, 16 on September 10 and 12 on September 13. There were 31 on September 19 with 27 on September 24, 19 on September 27 and 13 on October 1. That finished the post-breeding gathering.*

Blue-winged Teal (*Anas discors*)

A passage migrant and winter visitor; exceptionally there were separate but strong early fall and late fall passages, otherwise only seen in low numbers. Early fall records: *there were three on June 25 with later singles on July 16 and July 27. There were two on August 6 and August 10 with 31 on August 13, 37 on August 18, 186 on August 20, 273 on August 25 and 908 on August 27, then 810 seen on August 31 with 440 on September 3 and 425 on September 6. There were 1,178 on September 8 with 1,515 on September 10 and 2,220 on September 17, then 155 seen on September 23 with 145 to September 30. That was the early fall passage. For the main fall passage there were 175 on October 2 with 78 on October 6, 63 on October 12, 45 on October 19 and 30 on October 26. Note the month long gap between the two events as the main fall passage really starts here. There were 4,600 on October 29 with 7,300 on November 5 and November 6, then 6,250 seen on November 9 with 3,850 on November 12, 1,950 on November 14, 1,010 on November 16, 54 on November 22, 30 on November 26 and one on November 30. That closed the main fall passage. For the winter passage there were two on December 7 with four to December 14 and 63 on December 19, then 47 seen on December 22 with two to December 30. There were three on January 1 with five on January 4, then one seen on January 7. That completed the winter passage. For the early spring passage there were three on January 11 with two on January 14 and one on January 18. There were three on January 21 with two to January 28. There were four from February 2 to February 8 with seven on February 16, eight on February 23 and nine on February 25, then five seen on February 29. That concluded the early spring passage. For the main spring passage there were six on March 3 with 18 on March 7, then 15 seen to March 14 with two on March 21. There were six on March 25 with 51 on March 27, then 16 seen on March 30 with 11 on April 6 and four on April 11. There were 11 on April 15 with 45 on April 19, then 26 seen on April 26 with nine on April 30, seven on May 2, four to May 13, two on May 16 and one on May 21. There were three on May 23 with two to June 3. That ended the main spring passage. There were no summer records. For the early fall passage there was one on July 8 with seven from August 9 to August 20, 29 on August 27 and 89 on September 3, then ten seen on September 7.*

Cinnamon Teal (*Anas cyanoptera*)

This was a vagrant. For the fall passage there was an adult male on October 29, November 3, November 9 and November 12.

Northern Shoveler (*Anas clypeata*)

Whilst there was only a minor early fall passage there were significant late fall and winter passages; numbers were lower but not insignificant during the spring passages. For the early fall passage there was one on September 8 with six on September 10 and ten on September 17, then six seen to September 30 with four on October 2. That was the early fall passage. For the main fall passage there were 12 on October 6 with 11 on October 8 and two on October 12. There were three on October 14 and October 19 with 62 on October 23, 126 on October 29, 128 on November 5 and 134 on November 6, then 121 seen on November 12 with 91 on November 14. There were 215 on November 16 with 220 on November 19, then 192 seen on November 22 with 159 on November 26 and 120 on November 30. That closed the main fall passage. For the winter passage there were 218 on December 4 with 253 on December 11, 334 on December 14 and 378 on December 22, then 273 seen on December 27 with 270 on December 30. There were 324 on January 1 with 123 on January 4, 23 on January 7 and 11 on January 11. That completed the winter passage and this was also the end of the heaviest passage. For the early spring passage there were 34 on January 14 with 112 on January 18, then 76 seen on January 25 with 17 on January 28 and 14 on February 2. There were 30 on February 6 with 19 on February 8. There were 22 on February 11 with 26 on February 16 and 30 on February 21, then 23 seen on February 23 with 22 on February 25 and 18 on February 29. That ended the early spring passage. For the late spring passage there were 30 on March 3 with 47 on March 7 and 65 on March 14, then 47 seen on March 21 with 29 on March 25, 24 on March 30, 19 on April 6 and five to April 15. There were 11 on April 19 with eight on April 30, six on May 2, three on May 4 and singles on six dates to May 30.

Northern Pintail (*Anas acuta*)

This was a passage migrant and winter visitor; the greatest numbers were seen from mid-November to the end of December. For the fall passage there was one on October 12 with 26 on October 29, 41 on November 5, 57 on November 6 and 62 on November 9, then 52 seen on November 12 with 42 on November 14. There were 44 on November 16 with 84 on November 19, 101 on November 22 and 108 on November 26, then 101 seen to December 4 with 90 on December 7. That closed the fall passage. For the winter passage there were 127 on December 11 with 194 on December 19, then 102 seen on December 27 with 65 to January 4, 20 on January 7 and one on January 11. That completed the winter passage. For the early spring

passage there were 45 on January 14 with 57 on January 18 and 67 on January 21, then 35 seen on January 28 with 21 on February 2, 17 to February 8, 16 on February 11 and two on February 16. There were no later records.

Green-winged Teal (*Anas crecca*)

There was a minimal early fall passage with a heavy passage during the late fall and winter passages. Numbers remained quite high during the spring passages. There were no early fall records from the previous survey year. For this year there was one on August 20. Later there were three on September 17 with 11 on September 23, then three seen on September 25 with one on September 30. That was the extent of the early fall passage. For the main fall passage there were two on October 8 and October 12 with ten on October 14, then two seen on October 19. There were eight on October 23 with 52 on October 26, 205 on October 29, 2,300 on November 3, 3,100 to November 6 and 4,500 on November 9, then 2,450 seen on November 14 with 2,300 on November 19, 1,770 on November 26, 1,010 on November 30 and 590 on December 4. That closed the main fall passage. For the winter passage there were 890 on December 7 with 1,220 on December 14 and 2,870 on December 19, then 1,240 seen on December 22 with 730 on December 30, 640 on January 4, 90 on January 7 and 86 on January 11. That completed the winter passage. For the early spring passage there were 385 on January 14 with 690 on January 18 and 790 on January 21, then 520 seen on January 25 with 430 on January 28. There were 1,010 on February 2 with 350 on February 6 and 285 on February 8. There were 325 on February 11 with 534 on February 16 and 730 on February 23, then 560 seen on February 25 with 550 on February 29. That ended the early spring passage. For the late spring passage there were 676 on March 3 with 480 on March 7, 430 on March 10, 353 on March 14, 214 on March 18, 196 on March 21, 182 on March 25, 104 on March 27, 41 on March 30, 33 on April 3, 18 on April 6, eight on April 15, four on April 26, three to May 4 and singles to May 13.

Canvasback (*Aythya valisineria*)

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

Redhead (*Aythya americana*)

An uncommon fall passage migrant; there were no winter or spring sightings. For the fall passage there was a male on October 23 with a female on October 26 and a male again on October 29. The sex of the birds not noted after that. There were two on November 3 and November 6 with singles on six dates to November 22.

Ring-necked Duck (*Aythya collaris*)

A quite common late fall and winter passage migrant; numbers for the early spring passage were lower. For the late fall passage there were five on October 12 with two on October 14. There were four on October 19 with 112 on October 23, then 83 seen on October 26 with 63 on October 29. There were 100 on November 3 with 50 on November 5. There were 62 on November 6 with 172 on November 9, then 33 seen on November 12 with 20 on November 14. There were 26 on November 16 with 28 on November 19, then five seen on November 22. That closed the late fall passage. For the winter passage there were eight on November 26 with 16 on November 30 and 31 on December 7, then eight seen on December 11 with six on December 14. There were 171 on December 19 with 47 on December 27, 39 on December 30, 15 on January 1, 14 on January 4 and five on January 11. That completed the winter passage. It seems strange but there are certain dates each year on which the various passages tend to end; for the winter passage it is January 11 (in the 3rd report it was January 10). For the early spring passage there were ten on January 14 and January 18 with nine to January 25 and eight on January 28. There were 11 on February 2 with 13 on February 6 and 17 on February 8, then 13 seen on February 11 with seven on February 16. There were 12 on February 21 with 20 on February 23 and February 29, then four seen on March 3. That ended the early spring passage. For the late spring passage there were 11 on March 7 with four on March 10 and two on March 14 that was it.

Greater Scaup (*Aythya marila*)

An uncommon passage migrant and winter visitor; this is really a coastal species. For the late fall passage there was one on November 12 with two from November 14 to November 19, then one seen November 22. There were three on November 26 with one on November 30. That closed the late fall passage. For the winter passage there were two from December 4 to December 14 with singles on December 19 and January 4. That was the extent of the winter passage. For the early spring passage there were singles on January 14, January 21, January 25 and February 2. Later there was one on March 3. That completed the early spring passage. There were no later records.

Lesser Scaup (*Aythya affinis*)

A passage migrant and winter visitor; they were only seen in low numbers this year. For the late fall passage there were two on October 26. Later there was one on November 6 with three from November 9 to November 14, six to November 22 and 11 on November 26, then five seen on November 30 with three on December 4. That closed the late fall passage. For the winter passage there were three on December 7 with singles to December 19. There were four

on December 22 with two to January 1. There were three on January 4 with two on January 7. That completed the winter passage. For the early spring passage there were three on January 11 with six on January 14 and January 18, then four seen on January 21 with three to January 28. There were five on February 2 with six on February 8, then two seen on February 11. There were five on February 16 with six on February 21 and seven on February 23, then six seen on February 25 with singles on March 7, March 10 and March 14.

Bufflehead (*Bucephala albeola*)

This is normally a vagrant or nearly so but for this year it was a quite common passage migrant and winter visitor. For the late fall passage well that is what I started out to say but the late fall passage and the winter passage were a seamless whole. So for a very long winter passage there were singles on November 9 and November 12 with two to November 19, three to November 26, four to December 4, seven to December 11 and eight on December 19, then seven seen on December 22 with four on December 27. There were nine on December 30 and January 1 with five on January 4, three on January 7 and two on January 11. The counts of nine were the highest counts for Zellwood but the highest count is now (2014) that of 34 on December 31, 2010. That completed a much extended winter passage. For the early spring passage there were five on January 14 and January 18 with six on January 21, then five seen to February 6 with two to February 16 and singles to March 3. That ended the early spring passage; there were no later records. It seems strange that 250 acres should hold more of these birds than the 5000 acres of the previous year.

Hooded Merganser (*Lophodytes cucullatus*)

A common winter visitor; there were smaller numbers for both the fall and the spring passages. For the late fall passage there was one on October 26 with two on November 6, then singles seen to November 14. There were eight on November 16 with 12 on November 19, then three seen on November 22. That was the late fall passage. For the winter passage there were four on November 26 with nine on November 30 and 23 on December 4, then 12 seen on December 7 with four on December 11. There were 19 on December 14 with 40 on December 22, then 31 seen on December 27. There were 33 on December 30 with 36 on January 1 and 37 on January 4, then 20 seen on January 7 with five on January 11. That completed the winter passage. For the early spring passage there were nine on January 14 with 12 on January 21 and January 28, then three seen on February 2 with two on February 6. There were eight on February 8 with six to February 25, five to March 7 and one on March 14.

Red-breasted Merganser (*Mergus serrator*)

This was a vagrant. For the late fall passage there was one on November 16.

Ruddy Duck (*Oxyura jamaicensis*)

As only the very inshore waters of Lake Apopka checked this species was only seen in very small numbers. This was a passage migrant and winter visitor, although very exceptionally one summered in 1999. Early fall records: *there was one present through the summer to at least August 3. For the early fall passage there were two from August 6 to August 13* with singles to August 31. That was the extent of the early fall passage; there were no sightings in September excepting the last day. For the main fall passage there were singles from September 30 to October 14 with eight on October 19 and October 23, 20 on October 26 and 62 on October 29, then 12 seen on November 5 with 11 on November 6. There were 23 on November 9 with 25 on November 12, 40 on November 16 and 60 on November 19, then 16 seen on November 22 with eight on November 26 and four on November 30. That closed the main fall passage. For the winter passage there were 21 on December 4 with seven on December 7 and five on December 11. There were 12 on December 14 with 13 to December 27 and 24 on December 30, then five seen on January 1 with four on January 4. There were 20 on January 7 with eight on January 11 and seven on January 14. That completed the winter passage. For the early spring passage there were 19 on January 18 with 28 on January 21, then 11 seen on January 28 with nine on February 2. There were 13 on February 6 with 22 on February 11, then four seen on February 16 with singles to February 25. That concluded the early spring passage. For the late spring passage there were singles on March 21 and April 6. Unexpectedly there was a record for the summer passage; there was one on June 14.

Osprey (*Pandion haliaetus*)

A non-breeding resident; seen in very low numbers but there was the suggestion of passage in the early spring and again in the late spring. Early fall records: *there were 12 on July 9 with nine to July 16, six on July 20, five on July 27 and three on August 3. There were seven on August 6 and August 10 with five on August 13, two on August 18 and one on August 20.* There were three on August 25 with nine on August 31, then six seen on September 3 with four on September 6, three on September 10 and one on September 17. That was the early fall passage. For the late fall passage there were three on September 23 and September 25 with four to October 6 and five on October 8, then four seen on October 12 with two to October 19. There were five on October 23 with two to October 29. There were five on November 3 with two on November 6. There were four on November 9 with five on November 12 and six on November 16, then five seen to November 26 with three on November 30. That closed the late

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

Swallow-tailed Kite (*Elanoides forficatus*)

Unlike later years when very large numbers gathered over the fields to feed in the early fall only small numbers were seen in the early years. Early fall records: *for the post-breeding gathering there were 15 on June 22 with 21 on June 25, 23 on July 4, 43 on July 6 and 44 on July 9, then 39 seen on July 12 with 16 on July 14. There were 64 on July 16 with 102 on July 20, then 75 seen on July 27 with 44 on August 3, 28 on August 6, 20 on August 10, five on August 13 and two on August 20.* The count of 102 was the highest count for Zellwood but the highest count is now (2014) that of 1,642 on August 3, 2012. Finally for the post-breeding gathering there were three on August 25. For the spring passage there was one on April 3 with two on April 6, two on April 19 and two on April 26. For the summer passage there were singles on May 13 and May 21 with ten on June 3, then three seen on June 9. For the post-breeding gathering there were seven on June 14 and June 19 with 29 on June 28 and 36 on July 4, then 25 seen on July 8 with 23 on July 12 and four on July 16. There were 31 on July 19 with 46 on July 23, then 45 seen on July 26 with 22 on July 30 and 11 on August 2. There were 29 on August 6 with eight on August 9, seven on August 13 *and five on August 16.*

White-tailed Kite (*Elanus leucurus*)

This was a vagrant. During the early fall passage there was a juvenile at the eastern end of the McDonald Canal on June 30. It perched on the utility wires and hunted hovering over the nearby fields.

Snail Kite (*Rostrhamus sociabilis*)

This was a vagrant. Early fall record: *for 1999 there was an immature flying to the north on July 16.* There were no records for this year.

Bald Eagle (*Haliaeetus leucocephalus*)

Seen in low numbers to the end of April after which there were during the summer more limited sightings; during the Breeding Bird Survey a pair nested at the Sand Farm. Early fall records: *there were three on July 6 and July 12 with singles to July 27. There were two on August 3 and August 6 with three on August 10,* then two seen on August 20 with singles to September 3. There were two on September 6 with three on September 8, then one seen on September 10. With the next influx numbers returned to more normal levels. There were two on September 17 with three on September 23 and four on September 25, then one seen on September 30. That was the early fall passage. For the main fall passage there were four on October 2 with three on October 8 and two to October 14. There were three on October 19 with four on October 23 and October 26, then three seen on October 29. There were four on November 3 with two to November 9. There were four on November 12 with three to November 19 and two to November 26. That closed the main fall passage. For the winter passage there were four on December 4 with five on December 7, then two seen to December 19. There were five on December 22 with three on December 30 and two to January 4. That completed the winter passage. For the early spring passage there were five on January 7 with two to January 18. There were three on January 21 with six on January 25 and eight on February 2, then ten seen on February 6 and February 8 with eight on February 11, six on February 21, three on February 23 and two on February 25. That was the only suggestion of passage during the year. That was also the end of the early spring passage. For the late spring passage there were five on February 29 with three on March 3 and two on March 7. There were four on March 10 with three to March 18. There were four on March 21 with six on March 25, then three seen on March 30 with two on April 3. There were four on April 6 and April 11 with one on April 15. There were four on April 19 and April 26 with five on April 30, then singles seen to May 4. That ended the late spring passage so for the summer passage there was one on May 13 with two on May 21 and May 23, then singles seen to May 30. There were two on June 3, June 14 and June 19 with one on June 26. There were two on June 28 with singles to July 19.

That concluded the summer passage. For the early fall passage there were two on July 23 and July 26 with one on July 30. There were two on August 2 with four on August 6 and August 13, *then one seen on August 16.*

Northern Harrier (*Circus cyaneus*)

During the fall/winter of 1998/1999 no more than 27 a day seen now in 1999/2000 the population exploded and this became the most important wintering site in the United States for this species! As far as I can tell there are only two other roosts in the United States that have once held 100 plus birds, read on. Very unexpectedly one to two females stayed for the summer. Early fall record: *there was one on August 10.* For this year there was one on August 18 with three on August 31, six on September 3, 11 on September 6, 12 on September 10, 14 on September 17, 17 on September 23, 26 on September 25 and 29 on September 30, then 21 seen on October 2 with 12 on October 6. That was the early fall passage. For the main fall passage there were 13 on October 8 with 72 on October 12, 84 on October 19 and 173 on October 26, then 156 seen on October 29 with 91 on November 3 and 66 on November 5. There were 97 on November 6 with 129 on November 12 and 157 on November 14, then 133 seen on November 19 with 123 on November 22. There were 168 on November 26 with 129 on November 30, 116 on December 4 and 89 on December 7. That closed the main fall passage. For the winter passage there were 121 on December 11 with 107 on December 14, 75 on December 19 and 74 on December 22. There were 181 on December 22 with 142 on December 30. There were 166 on January 1 with 171 on January 4 and 174 on January 7, then 73 seen on January 11. That completed the winter passage. For the early spring passage there were 223 on January 14 with 181 on January 18 and 84 on January 21. The count of 223 was the highest count for Zellwood but the highest count is now (2014) that of 305 on December 12, 2004. There were 127 on January 25 with 162 on January 28, then 71 seen on February 2 with 61 on February 6 and 49 on February 8. There were 63 on February 11 with 76 on February 21 and 103 on February 23, then 76 seen on February 25. That concluded the early spring passage. For the late spring passage there were 78 on February 29 with 118 on March 3, then 92 seen on March 7 with 39 on March 10. There were 104 on March 14 with 121 on March 18, then 56 seen on March 21 with 44 on March 25. There were 119 on March 27 with 124 on March 30, then 69 seen on April 3 with 53 on April 11, 28 on April 19, 23 on April 26, 18 on April 30, 15 on May 2, ten on May 4, six to May 16, four to June 3, three on June 6, two to June 19 and singles to June 30. There were two on July 4 with singles to July 16. There were also two on July 19 with singles to August 2. The late spring passage drifted into the summer passage at some point I also find it hard to know when the summer passage ended and the early fall passage commenced. In any case for the early fall passage there were two on August 6 with three on August 9, *then two seen to August 20.*

Sharp-shinned Hawk (*Accipiter striatus*)

This was a passage migrant and winter visitor; whilst numbers were low they were higher than last year. For this year it stayed through the summer of 1999 and that was a very exceptional event. Early fall records: *there were two on June 22 with singles to July 12. There were two on July 16 with singles to July 23. There were two on July 27 and August 3 with six on August 6, then three seen on August 10 with two to August 20 and singles to August 27.* The count of six was the highest count for Zellwood but the highest count is now (2014) that of 26 on November 30, 2007. There were two on August 31 with three on September 3, then singles seen to September 8. There were two on September 10 with singles to October 6. I tend to believe that a pair stayed for the summer and bred leading to a mini post-breeding gathering in early August. I therefore treat all these sightings to this date as part of the summer passage. For the fall passage therefore there were three on October 8 with five on October 14, then two seen on October 19 with one on October 23. There were five on October 26 with six on October 29, then four seen on November 3 with three on November 6 and two on November 9. There were four on November 12 with five on November 16, then four seen to November 22 with three to November 30. That closed the fall passage. For the winter passage there were five on December 4 with three on December 11 and one on December 14. There were three on December 19 with four to December 30 and five on January 1, then four seen on January 4 with three on January 7 and two on January 11. That completed the winter passage. For the early spring passage there were six on January 14 with three to January 21. There were six on January 25 and January 28 with four on February 6 and two to February 11. There were four on February 16 with three on February 21 and two on February 23. That concluded the early spring passage. For the late spring passage there were four on February 25 with three to March 7, two on March 10 and one on March 14. There were three on March 18 with two on March 25 and singles to April 15. There were later records as singles seen on May 2 and May 4. That ended the late spring passage. There were summer sightings as there were singles on May 27, June 9 and June 19. There were also records for the early fall passage; this again was unusual as this species does not normally arrive until October. There were singles on July 12, July 23, August 6, August 9 and August 13.

Cooper's Hawk (*Accipiter cooperii*)

Present all year but normally only one to two a day seen; there was a post-breeding gathering. During the Breeding Bird Survey a total of four pairs located. Early fall records: *for the minimal post-breeding gathering there was one on July 23 with two to August 3, three on August 6 and four on August 13, then one seen on August 18.* There were three from August 20 to August 27 with five on August 31, then two seen on September 3 with one on September 6. That closed the post-breeding gathering. For the early fall passage there were two on September 10 with three on September 23, then two seen to September 30 with one on

October 2. There were three on October 6 and October 14 with one on October 19. That was the end of what I am calling the early fall passage. From October 19 to May 23 there was no passage; just one to two in the area. I am not sure when to treat the post-breeding gathering as starting but there were two on June 3 with three on June 14 and June 26, then singles seen to July 8. There were three on July 12 and July 19 with four on July 23 and six on July 26, then five seen to August 2. There were six on August 6 with ten on August 9 *and August 16, then eight seen to August 27 with three on August 30. There were six on September 3 with eight on September 7, then five seen to September 19 with one on September 21. That completed the post-breeding gathering.*

Red-shouldered Hawk (*Buteo lineatus*)

A resident in the wooded borders although they could be seen throughout the area; there was a much larger presence from late September to mid-February. During the Breeding Bird Survey a total of six pairs located. Early fall records: *there were eight on July 9 with four to July 14. There were eight on July 16 with six on July 20 and four on July 23. There were eight on July 27 with 11 on August 3, then five seen on August 6. There were seven on August 10 with 12 on August 13, then four seen on August 18. There were six on August 20 with 12 to August 27, 13 on August 31 and 16 on September 3, then 14 seen on September 6 with ten to September 10. There were 17 on September 17 with 20 on September 25 and 26 on September 30, then 20 seen on October 6 with 16 on October 8. That was the early fall passage. For the main fall passage there were 23 on October 12 and October 14 with 16 on October 19 and 15 on October 23. There were 20 on October 26 with 23 on October 29, then 21 seen on November 6 with 13 on November 9. There were 20 on November 12 with 23 on November 16, then 19 seen on November 19 with 18 on November 22. That closed the main fall passage. For the winter passage there were 22 on November 26 with 21 on December 4, 19 to December 14 and 14 to December 22. There were 16 on December 27 with 22 to January 1 and 28 on January 7, then 21 seen on January 11 with five on January 14. The count of 28 was the highest count for Zellwood but the highest count is now (2014) that of 133 on September 29, 2006. That completed the winter passage. For the early spring passage there were 13 on January 18 with 22 on January 21, then 15 seen on January 28 with 11 on February 2. There were 23 on February 6 with 20 on February 8 and 18 on February 11. There were 24 on February 16 with 15 to February 23 and seven on February 25. That concluded the early spring passage. For the late spring passage there were 11 on February 29 with ten on March 3, nine on March 7, eight on March 10, five on March 14 and four on March 18. There were six on March 21 with seven on March 25, then four seen to April 6 with three on April 11. There were four on April 15 with five on April 26 and April 30, then three seen to May 4 with two on May 7. That ended the late spring passage. For the summer passage there were five on May 13 with three to May 21. There were seven on May 23 with eight on May 27, then five seen on May 30 with four on June 3 and*

two on June 6. There were three from June 9 to June 19 with five to June 28, six on July 4 and eight on July 8, then three seen on July 12. That closed the summer passage. For the early fall passage there were four on July 16 and July 19 with seven on July 23, ten on July 26 and 15 on July 30, then nine seen on August 2. There were 12 on August 6 with 17 on August 9, then 16 seen to August 16.

Broad-winged Hawk (*Buteo platypterus*)

This was a vagrant. For the late fall passage there was one on October 14. For the early spring passage there was an adult on January 18; it flew south over the Sand Farm.

Short-tailed Hawk (*Buteo brachyurus*)

This was a vagrant. For the early fall passage there was a light morph on September 30. I did not note age.

Swainson's Hawk (*Buteo swainsoni*)

This was another vagrant. For the winter passage there were singles on December 27 and January 4. For the early spring passage there were singles on January 18 and January 21. These sightings all probably relate to just one individual as it was a dark morph.

Red-tailed Hawk (*Buteo jamaicensis*)

Resident in the wooded borders; there was also a very strong spring passage with somewhat lesser numbers in the fall and the winter. During the Breeding Bird Survey a total of 11 pairs located; the first fledged young was seen on July 9. Early fall records: *there were four on June 7 with five on June 12, six on June 14, seven on June 19, eight to July 4 and 11 on July 9, then nine seen on July 12 with eight to July 16 and seven on July 20. There were eight on July 23 and July 27 with 11 on August 3, 16 on August 9 and 24 on August 10, then 20 seen on August 13 with 18 on August 20 and 15 to August 27. There were 18 on August 31 with 23 on September 6, then 12 seen on September 8. There were 16 on September 10 with 18 on September 17, then ten seen on September 23. There were 17 on September 25 and September 30 with 21 on October 2, then ten seen on October 6. That was the early fall passage. For the main fall passage there were 12 on October 8 with 23 on October 12, then 22 seen on October 14 with 17 on October 19. There were 18 on October 23 with 43 on October 26, then 26 seen on October 29 with 21 on November 3. There were 34 on November 6 with 31*

on November 12 and 30 on November 16. There were 39 on November 19 with 36 on November 26, 29 on November 30, 25 on December 4 and 20 on December 7. That closed the main fall passage. For the winter passage there were 30 on December 11 with 41 on December 19, then 15 seen on December 22. There were 38 on December 27 with 43 on December 30 and 53 on January 1, then 32 seen on January 4. That completed the winter passage. For the early spring passage there were 34 on January 7 with 38 on January 11 and 48 on January 14, then 33 seen on January 18 with 26 on January 21 and 22 on January 25. There were 28 on January 28 with 51 on February 6 and 55 on February 11, then 29 seen on February 16. There were 51 on February 21 with 53 on February 23, 61 on February 25 and 71 on March 3, then 55 seen on March 7. That concluded the early spring passage. For the main spring passage there were 56 on March 10 with 94 on March 14, then 73 seen on March 18 with 54 on March 21. The count of 94 was the highest count for Zellwood but the highest count is now (2014) that of 175 on November 30, 2007. There were 66 on March 25 with 67 on March 27, then 49 seen to April 3 with 34 on April 6, 32 on April 15, 31 on April 19, 24 on April 30, 18 on May 2, 14 on May 4 and nine on May 7. That decline went on for over a month signifying the end of a major event. The event actually ran from late October to late April. So for the summer passage there were 14 on May 13 with 15 on May 16 and 19 on May 21, then 14 seen on May 27 with 13 to June 3. There were 16 on June 6 with 17 on June 14, then 12 seen to June 26. There were 14 on June 28 with 20 on June 30, then 16 seen to July 8 with 14 on July 12. That was the summer passage. For the early fall passage there were 20 on July 16 with 16 on July 23 and 15 on July 26. There were 25 on July 30 with 21 on August 6 and 19 on August 9. There were 31 on August 13 *with 23 on August 16*. Finally there was a dark morph of one of the western races on February 21.

Rough-legged Hawk (*Buteo lagopus*)

This was a vagrant. For the spring passage a juvenile dark morph was seen near Hooper Farms Road on February 16 and February 21. On February 21 a juvenile light morph was also seen in that area. On February 23 there were two juvenile dark morphs and the single juvenile light morph. From February 25 to April 11 all three birds seen on each visit. On April 15 only the two juvenile dark morphs seen whilst on April 19 there was a single dark morph and the juvenile light morph present. In all probability all three birds stayed to this date. There were no later records. These are the first verified sightings of this species in Florida.

Crested Caracara (*Caracara cheriway*)

This was a vagrant. Early fall record: *there was an adult at the Sod Farm on July 27, 1999.*

American Kestrel (*Falco sparverius*)

A common passage migrant and winter visitor; there were no summer sightings. There were also no early fall sightings from the previous survey year. For this year there were singles on August 31 and September 3 with three on September 6, then two seen on September 8 with one on September 10. There were eight on September 17 with 11 on September 23, then nine seen on September 25 with six on September 30. That was the end of the early fall passage. For the main fall passage there were 16 on October 2 with 23 on October 8, then 14 seen on October 12. There were 18 on October 14 with 25 on October 19 and 28 on October 26, then 23 seen on October 29 with 21 to November 6 and 16 on November 9. The count of 28 was the highest count for Zellwood but the highest count is now (2014) that of 38 on November 5, 2003. There were 22 on November 12 with 23 on November 16, then 17 seen to November 22 with 16 on November 26. That closed the main fall passage. For the winter passage there were 22 on November 30 with 16 on December 4 and 12 on December 7. There were 24 on December 11 with 15 on December 14. There were 16 on December 19 with 20 on December 22, then 18 seen on December 30 with 15 on January 1 and 13 on January 4. That completed the winter passage. For the early spring passage there were 16 on January 7 with 17 on January 11, then 14 seen on January 14 with 13 on January 18. There were 15 on January 21 with 12 on January 25 and nine on January 28. There were 13 on February 2 with 20 on February 6, then 14 seen on February 8. There were 18 on February 11 with 19 on February 16, then 17 seen on February 21 with 15 on February 23 and 11 on February 25. That concluded the early spring passage. For the late spring passage there were 15 on February 29 with 17 to March 7 and 18 on March 10, then 13 seen to March 18 with 11 on March 21, nine on March 25, six to March 30 and singles to April 6. There were four on April 15 with singles on April 19 and April 26.

Merlin (*Falco columbarius*)

An uncommon passage migrant and winter visitor; the spring and fall passages were similar. For the fall passage there were singles on September 25, September 30, October 2 and October 6 with three on October 8 and October 12, then two seen on October 14 with one on October 23. There were two on October 26 with singles on November 16 and November 30. That closed the fall passage. For the winter passage there were singles on December 11, December 14, December 27 and December 30. For the early spring passage there was one on January 14 with two on January 18 and January 28, then singles seen on February 8 and February 16. For the main spring passage there were singles on March 10, March 18 and March 25 with three on March 27, then singles seen on April 3, April 19 and April 26. Very exceptionally one flew to the north on May 23. The counts of three were the highest counts for Zellwood but the highest count is now (2014) that of eight on September 30, 2007.

Peregrine Falcon (*Falco peregrinus*)

An uncommon fall passage migrant; there was a single record for the early spring passage. For the fall passage there were singles on September 30, October 2 and October 6 with two on October 8 and four on October 12, then singles seen on November 6, November 9, November 14 and November 30. The count of four is still (2014) the highest count for Zellwood. For the early spring passage there was one on February 2.

Wild Turkey (*Meleagris gallopavo*)

An irregular visitor; there were two by the Hooper Farms Road gate from March 7 to April 15; one of them was a gray morph. There was also one by the Lake Level Canal on June 6; it flew across the canal and up into the trees.

Northern Bobwhite (*Colinus virginianus*)

A common resident; the greatest numbers were at the Sand Farm. During the Breeding Bird Survey a total of 38 pairs located, the first brood was seen on July 4 (1999). Early fall records: *there were 24 on July 4 with 30 on July 6, then six seen to July 12 with four on July 14. There were nine on July 16 with five on July 20 and two to July 27. There were six on August 3 with one on August 6. There were three on August 10 with four on August 13, then two seen to August 27.* There was also one later on September 23. That ended the early fall “passage”. For the late fall “passage” there were 12 on November 9. For the winter “passage” there were singles on December 4 and December 22. For the early spring “passage” there was one on January 21 with ten on February 8 and February 11, then 12 seen on February 23 with one on February 25. That closed the early spring “passage”. For the main spring “passage” there were 17 on March 7 with 12 on March 10 and singles to March 21. There were eight on April 3 with four on April 6 and two on April 11. There were five on April 15 with six on April 26 and 12 on April 30, then nine seen on May 2 with eight on May 4 and five to May 16. That completed the main spring “passage”. For the summer “passage” there were ten on May 21 with 16 on May 27, then 11 seen on May 30 with nine on June 3. There were 14 on June 6 with ten to June 14, nine on June 19 and four on June 26. There were seven on June 28 with 15 on June 30, then ten seen on July 8 with five to July 23 and four on July 26. That ended the summer “passage”. For the early fall “passage” there were seven on July 30 with three on August 2 and one on August 6. There were two on August 9 with three on August 13, *then one seen on August 16.*

King Rail (*Rallus elegans*)

An uncommon passage migrant, there were no summer or winter records. Early fall record: *there was one on July 4*. That was the early fall passage. For the main fall passage there was one on October 12 with two on October 19 and October 23, then singles seen on October 26 and November 26. There were no winter or early spring records. For the main spring passage there were singles on April 30 and May 4. There were no summer sightings. For the early fall passage there were singles on July 16, July 19, July 23, July 30 and August 2.

Virginia Rail (*Rallus limicola*)

This was a rare passage migrant. For the late fall passage there were singles on October 23, November 3, November 6 and November 19 with two on November 26. For the winter passage there was one on December 22. For the early spring passage there were singles on January 11, January 18 and February 8. Finally for the late spring passage there was one on March 7.

Sora (*Porzana carolina*)

An uncommon passage migrant and winter visitor; it all awaited the formation of the cattail marsh at the Sand Farm. For the fall passage there were singles on September 25, September 30, October 2, October 12 and October 19 with eight on October 23 and 13 on October 26, then 11 seen to November 3 with ten on November 6, eight on November 9 and four to November 14. There were five on November 16 with eight on November 19 and 11 on November 26, then one seen on November 30. That closed the fall passage. For the winter passage there were six on December 4 and December 7 with ten on December 11, then seven seen to December 22 with six on December 27. There were 11 on December 30 and January 1 with eight on January 7, four on January 11 and one on January 14. That completed the winter passage. For the early spring passage there were six on January 18 with nine on January 21, then six seen on January 25 with five on January 28. There were six on February 2 with ten on February 6 and February 8, then eight seen on February 11 with four on February 16 and two on February 21. There were three on February 23 with five on February 25, then three seen on February 29 with two to March 7. That ended the early spring passage. For the late spring passage there were three on March 10 and March 14 with four on March 18, then singles seen to March 27. There were two on March 30 with four on April 3 and five on April 6, then two seen to April 19 with one on April 26.

Purple Gallinule (*Porphyrio martinica*)

A quite common summer visitor and passage migrant; there were no winter records. During the Breeding Bird Survey a total of 23 pairs located; the first broods were seen on June 7 (1999) and June 19 (2000). Early fall records: *there were six on July 9 with eight on July 12, then four seen to July 16. There were seven on July 20 with six to July 27. There were 15 on August 3 with two on August 6. There were six on August 10 with 14 on August 13, then 12 seen to August 27 with eight on August 31, seven to September 17, five to September 30 and singles to October 19. They just drifted away at the end of the breeding season. There were no winter or early spring records. For the main spring passage there was one on April 3 with two on April 15 and ten on April 26, then six seen to May 4. That was the extent of the main spring passage. For the summer passage there were ten on May 7 with 12 on May 13, then ten seen on May 16 with six on May 21. There were 12 on May 23 with 13 on May 30, then 12 seen on June 6 with nine on June 9. There were 14 on June 14 and June 19 with 19 on June 28, then 16 seen on June 30 with 15 to July 16 and five on July 19. That ended the summer passage. For the early fall passage there were seven on July 23 with 12 on July 26, then four seen on July 30. There were 11 on August 2 with 14 on August 6, then seven seen on August 9 with six on August 13 and two on August 16.*

Common Gallinule (*Gallinula galeata*)

A common resident; there was a major post-breeding gathering in 1999 but not in 2000. During the Breeding Bird Survey a total of 129 pairs located; the first brood was seen on May 31 (1999). Early fall records: *for the post-breeding gathering there were 90 on July 9 with 75 on July 12 and 55 to July 16. There were 75 on July 20 with 145 on July 27, 225 on August 3, 645 on August 10, 787 on August 13, 925 on August 20 and 1,003 on August 25, then 816 seen on August 27 with 758 on August 31. There were 943 on September 3 with 1,102 on September 6, 1,245 on September 10 and 1,310 on September 17, then 686 seen on September 25 with 515 on September 30, 435 on October 6, 300 on October 8, 260 on October 12, 223 on October 14, 210 on October 19 and 115 on October 23. That closed the post-breeding gathering. As there was no incoming fall influx this event kept on going. For the fall passage there was a single significant influx there were 125 on October 26 with 195 on October 29, then 106 seen on November 3 with 25 to November 9. By comparison only low numbers were now seen through to late May and the summer passage. To continue with the fall passage there were 26 on November 12 with 21 on November 16 and 17 on November 19. There were 20 on November 22 with 28 on November 26, then 21 seen on November 30. That closed the fall passage. For the winter passage there were 31 on December 4 with 26 on December 7, 22 on December 14 and 15 on December 19. There were 32 on December 22 and December 30 with 29 on January 1. That completed the winter passage. For the early spring passage there were 34 on January 4 with 39 on January 7 and 49 on January 11, then 25 seen on January 18 with 19 on January 21.*

There were 25 on January 25 with 29 to February 6 and 30 on February 11, then 27 seen on February 16 with 21 on February 21. There were 34 on February 23 with 48 on February 29, then 38 seen on March 3 with 30 on March 7. That ended the early spring passage. For the main spring passage there were 40 on March 10 with 32 on March 14 and 16 on March 18. There were 42 on March 21 with 33 on March 25. There were 35 on March 27 with 36 on March 30, 39 on April 3, 42 on April 6, 44 on April 11, and 52 on April 15, then 56 seen on April 19 and April 26, with 55 on April 30. That was the end of the main spring passage. For the summer passage there were 60 on May 2 with 66 on May 4, 67 on May 7, 90 on May 13, 108 on May 21, and 125 on May 23, then 108 seen on May 27 with 100 on May 30. There were 107 on June 3 with 126 on June 6, 134 on June 9, 143 to June 26, 149 on June 28 and 163 on July 4, then 128 seen on July 12 with 105 on July 16 and 79 on July 19. That closed the summer passage. As there was no post-breeding gathering for the early fall passage there were 106 on July 23 with 91 on July 30 and 56 on August 2. There were 119 on August 6 with 72 on August 9, 70 on August 16 and 62 on August 20.

American Coot (*Fulica americana*)

There was a strong main fall passage with decreasing numbers through the spring; during the summer there was a non-breeding population at the Sand Farm Cattail Marsh. Early fall records: *there were 24 on July 9 with 20 on July 12, ten on July 14 and nine on July 16. There were 13 on July 20 with 46 on July 23, 108 on August 3 and 143 on August 6, then 116 seen on August 13 with 109 on August 18, 74 on August 20, 70 to August 31 and 53 on September 3.* There were 103 on September 6 with 97 on September 8 and 92 on September 10. There were 134 on September 17 with 56 on September 23. That was the early fall passage. For the main fall passage there were 76 on September 25 with 96 on September 30, 150 on October 6, 192 on October 8, 223 on October 12, 382 on October 14, 1,440 on October 19, 2,820 on October 26 and 2,830 on November 3, then 1,700 seen on November 6 with 1,655 on November 9, 1355 on November 12, 1,080 on November 16, 820 on November 19 and 816 on November 22. That closed the main fall passage. For the winter passage there were 865 on November 26 with 960 on December 4, then 734 seen on December 7 with 635 on December 14, 280 on December 19 and 233 on December 22. There were 310 on December 27 with 515 on December 30, then 480 seen on January 1 with 430 on January 4. There were 631 on January 7 with 568 on January 11. That completed the winter passage. For the early spring passage there were 605 on January 14 with 660 on January 18, 670 on January 21 and 692 on January 25, then 640 seen on February 2 with 565 on February 8, 560 on February 11, 517 on February 16, 475 on February 21, 430 on February 23, 420 on February 25, 274 on March 3 and 187 on March 7. That long decline marked the end of the early spring passage. For the late spring passage there were 212 on March 10 with 237 on March 14, then 189 seen on March 18 with 175 on March 21, 153 on March 25, 129 on March 27, 97 on March 30, 89 on April 6 and 81 on April 11. There were 102

on April 15 with 89 on April 26, 85 on April 30, 61 on May 2, 57 on May 4 and 52 to May 13. That closed the late spring passage. For the summer passage there were 59 from May 16 to May 30 with 58 on June 3, 55 on June 6, 52 on June 9, 44 on June 19, 30 on June 26, 23 on June 30, 21 on July 4 and 11 on July 8. That closed the summer passage. For the early fall passage there were 26 on July 12 with seven on July 16. There were 14 on July 19 with 23 on July 23, then three seen on July 26. There were eight on July 30 with nine on August 2 and 14 on August 6, then 11 seen to August 13.

Limpkin (*Aramus guarauna*)

There were just nine sightings for the year; all but two were during the early fall passage. Early fall record: *there was one on July 23*. For the late fall passage there was one on October 8. There were no winter or early spring records. For the late spring passage there was one on May 2. For the early fall passage there were singles on July 23, July 26 and July 30 with two on August 6, then one seen on August 9. Finally there were three on August 13.

Sandhill Crane (*Grus canadensis*)

An uncommon passage migrant and winter visitor; there were no large flocks of migrating birds this year. For the fall passage there was one on November 5 with six on November 6 and November 16, then four seen on November 22 with one on November 26. For the winter passage there were seven on November 30 with eight on December 4 and 15 on December 7, then eight seen to December 14. That closed the winter passage so for the early spring passage there were four on January 18 with two on February 6. On February 11 a total of 38 flew to the north. Finally for the early spring passage there was one on February 25. For the late spring passage there were two on March 30.

Whooping Crane (*Grus americana*)

This was a vagrant. Early fall record: *there were three on July 6*. For this year on March 21 a flock of eight flew to the east. This is still (2014) the highest count for Zellwood.

Black-bellied Plover (*Pluvialis squatarola*)

A common fall passage migrant with lesser numbers during the winter and early spring passages; there was again a noticeable main spring passage. Early fall records: *there was one on July 27 with three on August 3, five to August 10 and 14 on August 13*, then two seen on August

18 with singles to August 31. There were two on September 6 with singles to September 10. That was the early end of the early fall passage. For the main fall passage there were three on October 2 with 12 on October 6, 32 on October 12, 108 on October 14 and 116 on October 19, then 68 seen on October 23 with 56 on October 26. There were 75 on October 29 with 135 on November 3, then 111 seen on November 5 with 93 on November 6. There were 115 on November 9 and November 12 with 72 on November 16 and 39 on November 19. There were 40 on November 22 with 55 on November 26, then 32 seen on November 30. That closed the main fall passage. For the winter passage there were 35 on December 4 with 38 on December 7, then 19 seen on December 11 with 12 on December 14 and five on December 19. There were 31 on December 22 with ten on December 27 and five to January 1. That completed the winter passage. For the early spring passage there were seven on January 4 with 15 on January 11, then four seen on January 18 with three to January 25 and two on January 28. There were five on February 2 and February 6 with singles to February 11. There were four on February 16 with singles to February 23. That ended the early spring passage. For the main spring passage there were ten on February 25 with 15 on February 29 and 23 on March 3, then 11 seen on March 7 with ten on March 10. There were 15 on March 14 with 19 on March 18 and 25 on March 21, then 13 seen on March 25 with eight on March 27, five on March 30 and two on April 3. There were ten on April 6 with three on April 11. There were six on April 15 with 67 on April 19 and 75 on April 30, then three seen on May 2 with two on May 7. Finally for the main spring passage there were eight on May 13.

American Golden-Plover (*Pluvialis dominica*)

An uncommon fall passage migrant; for the early fall passage there was one on September 8. For the main fall passage there were two on October 14 with one on October 19. Finally there were six on October 26 with five on October 29 and singles on November 6, November 16, November 19 and November 26.

Semipalmated Plover (*Charadrius semipalmatus*)

A passage migrant; the greatest numbers were seen during the spring passage. Early fall records: *there was one on July 23 with three on August 6, then two seen on August 10* with one on August 20. Finally for the early fall passage there were two on August 25. For the late fall passage there were singles on November 12, November 16 and November 19. For the spring passage there were singles on April 11 and April 15 with 21 on April 26, then one seen on April 30. There were two on May 2 with 12 on May 4 and 19 on May 13, then 12 seen on May 16. That completed the spring passage. For the early fall passage there were three on July 23 with two on August 6 and August 9.

Killdeer (*Charadrius vociferus*)

Present all year, there was a fall passage with a stronger passage in the spring; rather surprisingly there was a very short-lived passage presumably a post-breeding gathering in the early fall of both years. During the Breeding Bird Survey a single pair located. Early fall records: *for the post-breeding gathering there were 27 on June 14 with 36 on June 22 and 142 on June 25, then 103 seen on July 4 with 46 on July 6. There were 215 on July 9 with 107 on July 12, 78 on July 14, 40 on July 16 and 39 on July 20. There were 57 on July 23 with 28 to August 3, 23 on August 6, 19 on August 10, 11 on August 18 and one on August 31.* That was the post-breeding gathering. For the remainder of the early fall passage there were five on September 3 with ten on September 6, then five seen on September 8 with three on September 17, two to September 25 and one on September 30. That ended the early fall passage. For the main fall passage there were two on October 6 with nine on October 12, 12 on October 14 and 16 on October 19, then 14 seen on October 23 with 11 on October 26. There were 16 on October 29 with 73 on November 5 and 238 on November 6, then 235 seen on November 9 with 178 on November 12, 169 on November 16, 119 on November 22 and 74 on November 26. That closed the main fall passage. For the winter passage there were 132 on November 30 with 31 on December 4. There were 82 on December 7 with 98 on December 11, then 96 seen on December 14 with 76 on December 19, 62 on December 22 and 61 on December 27. There were 98 on December 30 with 194 on January 1, then 162 seen on January 4 with 134 on January 7. That completed the winter passage. For the early spring passage there were 195 on January 11 with 256 on January 18, then 137 seen on January 25 with 105 on January 28. There were 133 on February 2 with 252 on February 6 and 258 on February 8, then 134 seen on February 11. There were 193 on February 16 with 212 on February 21, then 185 seen on February 23 with 86 on February 25 and 54 on February 29. That concluded the early spring passage. For the late spring passage there were 76 on March 3 with 88 on March 7, then 53 seen on March 10 with 34 on March 14, nine on March 18 and two on March 21. There were 12 on March 25 with four on March 27 and three on March 30. There were six on April 3 and April 6 with nine on April 11, then six seen on April 19. That closed the late spring passage. For the summer passage there was one on April 30 with three on May 2, then two seen to May 7. There were five on May 13 with six on May 16, then two seen to May 30. That was the summer passage. For the post-breeding gathering there were nine on June 3 with 11 on June 6, 14 on June 9, 37 to June 28, 46 on July 4, 119 on July 12 and 264 on July 19, then 19 seen on July 26 with three on July 30. That ended the post-breeding gathering. For the early fall passage there were eight on August 2 with ten on August 6 and 12 on August 9, *then one seen on August 20.*

Black-necked Stilt (*Himantopus mexicanus*)

A summer visitor with a short-lived post-breeding gathering; there were no records for the late fall, the winter or the early spring passages. During the Breeding Bird Survey a total of

seven pairs located; broods were first seen from June 22 (1999) and June 3 (2000). Early fall records: *for the post-breeding gathering there were six on July 6 with five to July 20 and three on July 23. There were seven on August 3 and August 6 with 13 on August 10, 40 on August 18, 51 on August 20 and 65 on August 25, then 52 seen on August 27 with 12 on September 3 and eight to September 8. That was the post-breeding gathering. For the remainder of the early fall passage there were nine on September 10 and September 17 that was it. There were no further sightings until the main spring passage. For this passage there were four on March 21 with eight on March 25, nine on March 30, 32 on April 3, 36 on April 6 and 49 on April 11, then 45 seen on April 15 with 40 on April 19. That was the spring passage so for the summer passage there were 53 on April 26 with 40 to May 2. There were 44 on May 4 with 42 on May 7. There were 43 on May 13 with 44 on May 16, then 30 seen on May 21 with 15 on May 23 and six on May 27. There were 17 on May 30 with 25 on June 3, 38 on June 6 and 42 on June 9, then 21 seen on June 19 with 18 on June 26 and 15 on June 28. That closed the summer passage. For the post-breeding gathering there were 22 on June 30 with 32 on July 4, 48 on July 8 and 65 on July 12, then 52 seen on July 16. There were 61 on July 19 with 94 on July 23, then 53 seen on July 26 with 27 on July 30, 24 on August 2, 16 on August 6, 12 on August 9, eight to August 16 and three on August 20. That ended the post-breeding gathering.*

American Avocet (*Recurvirostra americana*)

Unexpectedly this species was present in low numbers for most of the year. For the early fall passage there was one on August 27. For the main fall passage there was one on November 3 with two on November 12, three on November 14, four on November 16, five from November 19 to November 26 and six on November 30. That closed the fall passage. For the winter passage there were five on December 4 and December 7 with six from December 11 to January 11. That completed the winter passage. For the early spring passage there were eight from January 14 to January 28 with seven on February 2 and six to February 8. There were seven on February 11 with six to February 25. I have not picked the “seasons” out of thin air. This species is a perfect example of how a change occurs just at the time that I normally indicate that there was a change in the passages i.e. from winter to the early spring passage. So now we are at the end of the early spring passage and the start of the late spring passage. There were singles on March 14 and March 18. Later there were two on April 11 and April 15. That closed the late spring passage. For the summer passage there were two on June 9. Later there were singles on June 26, June 28 and June 30. For the early fall passage there were two on July 4, July 8 and July 12, then singles seen on July 16, July 19 and July 23. There were no later sightings.

Greater Yellowlegs (*Tringa melanoleuca*)

Seen in small numbers through the year; there was a non-breeding population during the summer of 2000 at the Sand Farm Cattail Marsh. In 1999 there had been a two week break between the late spring and the early fall passages. Early fall records: *there were singles on June 29 and July 6 with two from July 14 to July 23*, then singles seen to August 18. There were three on August 20 with nine on August 25, then five seen on August 27 with three on September 3 and one on September 10. That was the early close to the early fall passage. For the main fall passage there were singles on October 8 and October 12 with six on October 23, 11 on October 26 and 23 on October 29, then 12 seen on November 5 with ten on November 6. There were 22 on November 9 with 25 on November 12, then 17 seen on November 14 with 15 on November 16. There were 18 on November 19 with ten to November 26. That closed the main fall passage. For the winter passage there were 16 on November 30 with 14 on December 7 and 11 on December 11. There were 18 on December 14 with nine to December 27 and four on December 30. There were six on January 1 with seven to January 7 and 11 on January 11, then six seen on January 14. That completed the winter passage. For the early spring passage there were nine on January 18 with seven on January 21, six to February 2, four on February 6 and three to February 11. There were 11 on February 16 with 16 on February 21, then 14 seen on February 25 with nine on February 29. That concluded the early spring passage. For the main spring passage there were 11 on March 3 and March 7 with 12 on March 10, 13 on March 14 and 21 on March 21, then eight seen on March 25 with seven on March 27. There were 13 on March 30 with 19 on April 3, then 16 seen on April 6 with nine on April 11 and eight on April 15. There were ten on April 19 with nine to May 4 and five on May 7. There were six on May 13 with ten on May 16, then two seen on May 21 with one on May 23 and May 27. That ended the main spring passage. For the summer passage there were two on May 30 and June 3 with three on June 6, six on June 9, eight on June 19 and 13 on June 26, then 12 seen on June 30 with 11 on July 4. That concluded the summer passage. For the early fall passage there were 14 on July 8 with 20 on July 16 and 24 on July 23, then 18 seen on July 26 with 12 on August 2 and four on August 13.

Lesser Yellowlegs (*Tringa flavipes*)

A passage migrant, the spring passage being the stronger of the two; there was also a winter passage although numbers were then lower. Early fall records: *there were 61 on July 14 with nine on July 20, two on July 23 and singles to August 3. There were four on August 6 with five on August 10 and 21 on August 20*, then two seen on August 25 with singles to September 3. There were six on September 6 with 18 on September 10. Later there were singles on September 25 and October 2. That was the early fall passage. For the main fall passage there was one on October 6 with 24 on October 8, then seven seen on October 12 with one on October 19. There were four on October 29 with five on November 3, 55 to November 6 and

110 on November 9, then 75 seen on November 12 with 69 on November 14, 26 on November 19 and 19 on November 22. That closed the main fall passage. For the winter passage there were 29 on November 26 with 31 on November 30 and 37 on December 4, then 30 seen on December 11 with 16 on December 14, seven to December 22 and two to January 1. There were nine on January 4 with seven on January 7. That completed the winter passage. For the early spring passage there were 27 on January 11 with 18 on January 14. There were 19 on January 18 with 21 on January 21, then 12 seen on January 25 with nine on January 28. There were 15 on February 2 with 21 on February 6, 23 on February 11, 36 on February 16 and 49 on February 21, then 40 seen on February 25 with 28 on February 29. That concluded the early spring passage. For the main spring passage there were 30 on March 3 with 39 on March 7, then 32 seen on March 14 with 22 on March 18. There were 29 on March 21 with 36 on March 25, then 26 seen on March 27. There were 27 on March 30 with 40 on April 3, then 37 seen to April 11. There were 67 on April 15 with 80 on April 19 and 129 on April 26, then 43 seen on April 30 with 21 on May 4, 15 on May 7, nine on May 13, four on May 16 and later one on May 30. That ended the main spring passage. There were no summer sightings. For the early fall passage there were eight on June 28 with 11 on June 30, then seven seen on July 4 with one on July 8. There were three on July 12 and July 16 with 11 on July 19, then five seen to July 30 with singles to August 13.

Solitary Sandpiper (*Tringa solitaria*)

This was a surprisingly rare passage migrant this year. For the early fall passage there were singles on August 31 and September 6. For the late fall passage there was one on November 19. For the late spring passage there were singles on April 26 and May 16. Finally there was one for the early fall passage on July 12.

Willet (*Tringa semipalmata*)

This was a vagrant. Early fall record: *there were eight on July 27*. That is still (2014) the highest count for Zellwood. For this year there was one on August 20.

Spotted Sandpiper (*Actitis macularius*)

A passage migrant; the greatest numbers were seen during the spring passage. Early fall records: *there were singles on July 16, July 23 and August 3 with two on August 10 and August 20*, then singles seen to September 8. That was the extent of the early fall passage. There were no further sightings until the spring. For the spring passage there was one on April 15 with four on April 26, then three seen on April 30 with two on May 2. There were three on May 4 with

five on May 13, then four seen on May 16. That completed the spring passage. For the early fall passage there were three on July 16, July 23 and July 26 with singles to August 6.

Upland Sandpiper (*Bartramia longicauda*)

This was a passage migrant; the greatest numbers were seen during the early fall passage. Early fall records: *there were singles on July 9 and July 20 with five on July 23 and July 27, then six seen on August 3 with one on August 10.* That was the extent of the early fall passage. For the spring passage there were singles on March 21, March 25, March 30 and April 26 with three on April 30, then one seen on May 4. That closed the spring passage. For the early fall passage there was one on August 6 with two on August 13.

Whimbrel (*Numenius phaeopus*)

This was a vagrant. For the spring passage there was one on May 13.

Long-billed Curlew (*Numenius americanus*)

This was a vagrant. Early fall record: *there was one at the Sod Farm on June 25, 1999.* This species is rare even on the coasts of central Florida.

Ruddy Turnstone (*Arenaria interpres*)

This was a vagrant. For the spring passage there was one on May 16.

Red Knot (*Calidris canutus*)

This was another vagrant. For the late fall passage there was one on November 30. For the late spring passage there was one on April 3. Finally for the early fall passage there was one on July 23.

Semipalmated Sandpiper (*Calidris pusilla*)

A quite common passage migrant; exceptionally similar numbers were seen in both the spring and the fall of 2000. Early fall records: *there were singles on July 14, July 20 and July 27 with 18 on August 6.* Later there were five on August 20 with seven on August 25, then six seen

on August 31 with one on September 3. That was the extent of the early fall passage. There were no further sightings until the spring. For the spring passage there were singles on March 30 and April 3 with six on April 11 and April 19, then 126 seen on April 26 with 37 on April 30 and 26 on May 2. There were 132 on May 4 with 150 on May 7 and 185 on May 13, then 125 seen on May 16 with singles on May 21, May 27, June 3, June 6, June 9, June 14 and June 19. The spring passage appears to have stretched well into the period normally covered by a summer passage. For the early fall passage there were two on July 4 and July 8 with 50 on July 12, then 40 seen on July 16. There were 46 on July 19 with 132 on July 23, then seven seen on July 26 with five on August 2 and one on August 9.

Western Sandpiper (*Calidris mauri*)

This was a less common passage migrant and winter visitor; the heaviest passage being in November and April. Early fall record: *there were three on July 14*. For this year there were singles on August 20 and August 25 with four on September 6. Later there was one on September 17 with ten on September 23. That was the early fall passage. For the main fall passage there was one on October 12. Later there was one on November 3 with 12 on November 5 and 113 on November 6, then 70 seen on November 9 with six on November 12 and two on November 14. There were nine on November 16 with 14 on November 19, then nine seen on November 22 with two on November 26. That closed the main fall passage. For the winter passage there were three on November 30 with 13 on December 4, then 12 seen on December 7 with nine on December 11, four on December 14, three on December 19, two on December 22 and one on December 30. There were two on January 1 with three on January 4, then one seen on January 7. That completed the winter passage. For the early spring passage there were three on January 11 with 12 on January 18, then seven seen on January 25 with two to February 8 and one on February 11. There were seven on February 16 with four to February 25, two on February 29 and one on March 3. That concluded the early spring passage. For the main spring passage there were seven on March 7 with 13 on March 14, then 11 seen on March 21 with nine on March 25, three to March 30 and two to April 6. There were four on April 11 with nine on April 15, 60 on April 19 and 63 on April 26, then 17 seen on April 30 with six on May 2 and singles to May 7. That was the main spring passage. For the early fall passage there were four on July 8 with ten on July 16 and 16 on July 19, then three seen on July 23. There were no further sightings until September.

Least Sandpiper (*Calidris minutilla*)

A common passage migrant and winter visitor; there were sightings through the summer this year. Early fall records: *there were singles on July 4 and July 6 with three on July 12 and 31 on July 14, then five seen on July 16. There were 11 on July 20 with 21 on July 23, 27 on*

August 3 and 29 on August 6, then 14 seen on August 13 with 13 on August 18, three on August 20, two to August 27 and one on August 31. There were two on September 3 with six on September 6 and 11 on September 10, then one seen on September 17. There were three on September 23 with six on September 25 and 13 on September 30, then two seen on October 8 with one on October 12. There were 22 on October 14 with eight to October 23 and one on October 26. Perhaps the early fall passage ran to this point this year if so for the main fall passage there were two on October 29 with three on November 3, 82 on November 5 and 262 on November 9, then 235 seen on November 12 with 150 on November 14. There were 276 on November 16 with 430 on November 19, then 308 seen on November 22 with 242 on November 26 and 140 on November 30. That closed the main fall passage. For the winter passage there were 395 on December 4 with 405 on December 7 and 420 on December 14, then 76 seen on December 19 with 55 on December 22 and 32 on December 27. There were 56 on December 30 with 61 on January 1, then 28 seen on January 4. That completed the winter passage. In reality the main fall passage and the winter passage were a single event. For the early spring passage there were 40 on January 7 with 205 on January 11, 210 on January 18 and 280 on January 21, then 77 seen on January 25 with 75 on February 2 and 24 on February 6. There were 86 on February 8 with 175 on February 11, 232 on February 16 and 429 on February 21, then 324 seen on February 25 with 317 on February 29. That concluded the early spring passage. For the main spring passage there were 359 on March 3 with 450 on March 7, then 419 seen on March 14 with 128 on March 18. There were 227 on March 21 with 258 on March 25, 275 on March 30, 282 on April 6 and 384 on April 11, then 315 seen on April 15 with 271 on April 19, 166 on April 26, 110 on May 2, 77 on May 7, 27 on May 13, 23 on May 16 and one on May 21. That ended the main spring passage. There were sightings during the summer so for the summer passage there were three on June 6 and June 9 with two on June 14. There were three on June 19 with singles to June 28. For the early fall passage there were 17 on July 8 with 25 on July 12, 72 on July 19 and 108 on July 23, then seven seen on July 30 with two on August 2. There were 15 on August 6 with eight on August 9 and two on August 13.

White-rumped Sandpiper (*Calidris fuscicollis*)

This was a vagrant. For the spring passage there was one on May 7.

Baird's Sandpiper (*Calidris bairdii*)

This was a vagrant. For the early fall passage there were two on August 6.

Pectoral Sandpiper (*Calidris melanotos*)

An uncommon fall passage migrant; there were only two spring records. Early fall records: *there was one on July 12 with two on July 14, seven on July 20, eight on July 23 and 12 on July 27, then two seen to August 10 with singles to August 18.* There were 11 on August 20 with three on August 25 and one on August 27. There were five on September 6 with nine on September 17, then one seen on September 25. That was the early fall passage. For the main fall passage there were ten on September 30 with 16 on October 2 and 51 on October 19, then 28 seen on October 23 with 12 on October 26 and eight to November 3. There were 12 on November 5 with eight on November 6 and two to November 12. There were five on November 16 with four on November 19 and one on November 22. That closed the main fall passage. There were no further sightings until the spring. For the spring passage there was one on March 27 with six on April 26. For the early fall passage there two on July 12 with three on July 19, then one seen on July 23. There were 32 on July 30 with four on August 2, three on August 6 and two on August 9.

Dunlin (*Calidris alpina*)

A passage migrant in small numbers; more significantly there was a well defined winter passage. For the early fall passage there was one on August 20; such early fall records are exceptional. For the main fall passage there was one on October 14 with two on October 19. Later there were six on November 3 with 14 on November 5 and 21 on November 6, then 14 seen on November 9 with 12 on November 12 and six on November 14. There were 14 on November 16 and November 19 with four on November 22. That closed the main fall passage. For the winter passage there were six on November 26 with 23 on November 30 and December 7, then 16 seen on December 11 with nine on December 14, four on December 19 and three to January 1. There were nine on January 4 and January 11 with three on January 14. That completed the winter passage. For the early spring passage there were six on January 18 with ten on January 21 and 19 on February 2, then one seen on February 6. There were three on February 8 with four on February 11, 11 on February 16, 12 on February 21 and 14 on February 23, then 13 seen to February 29 with eight on March 3. That ended the early spring passage. For the late spring passage there were ten on March 7 with 13 to March 14 and 16 on March 21, then six seen on March 25 with four to April 6, two on April 11 and one on April 15.

Stilt Sandpiper (*Calidris himantopus*)

A passage migrant and winter visitor; exceptionally the heaviest passage was during the winter passage. Early fall records: *there were two on July 14. Later there were 14 on August 3 with eight on August 6 and three on August 10.* For this year there were seven on August 20,

perhaps surprisingly there were no later records for the early fall passage. For the main fall passage there were eight on September 30 again there were no sightings until November. There were six on November 5 with seven on November 6, eight on November 9, 31 on November 12 and 41 on November 16, then 36 seen on November 19 with 25 on November 22. That closed the main fall passage. For the winter passage there were 42 on November 26 with 71 on November 30, then 68 seen to December 11 with 37 on December 14, 29 on December 19, 18 on December 22 and nine on December 27. There were 11 on December 30 with 21 on January 1 and 29 on January 4, then 27 seen on January 7. That completed the winter passage. For the early spring passage there were 38 on January 11 with 34 on January 14, 32 on January 18, 28 on January 25, 17 on January 28, 15 on February 2 and 12 on February 6. There were 26 on February 8 with 19 on February 11, nine on February 16, six on February 23 and five on February 25. That ended the early spring passage. For the late spring passage there were 19 on February 29 and March 7 with six to March 14. There were 13 on March 21 with eight on March 25 and three on March 27. There were 16 on March 30 with 18 on April 6 and 37 on April 11, then 33 seen on April 15 with 13 on April 19. There were 36 on April 26 with nine on May 2 and four to May 7. There were nine on May 13 with one on May 16. That concluded the late spring passage. For the early fall passage there was one on July 12 with seven on July 19 and 12 on July 23, then four seen on July 30 with singles to August 9.

Buff-breasted Sandpiper (*Tryngites subruficollis*)

This was a rare passage migrant. Early fall records: *there were two on August 6 with 12 on August 13*. For this year there were two on September 10. That was the early fall passage.

Short-billed Dowitcher (*Limnodromus griseus*)

An uncommon passage migrant; the greatest numbers were seen during the spring passage. Early fall records: *there were five on July 14 with two on July 16. There were also four on July 20 with later one on August 10*. For this year there were four on August 20 with singles to August 27. That closed the early fall passage. For the late fall passage or even the winter passage there were two on November 26. There were no sightings for the early spring passage. For the late spring passage there were eight on March 7 with 16 on March 14, then eight seen on March 18 with five on March 21. There were nine on March 25 with 33 on March 30, 41 on April 6 and 48 on April 11, then 36 seen on April 15 with 24 on April 19 and four to May 2. That completed the late spring passage. For the early fall passage there were three on July 8 with 29 on July 16 and 34 on July 19, then 21 seen on July 23 with 12 on July 30 and singles to August 13.

Long-billed Dowitcher (*Limnodromus scolopaceus*)

There was a strong late fall passage with lesser numbers through the winter; there was also a noticeable return passage in late February and early March. Early fall record: *there was an adult in breeding plumage on July 20*. For the main fall passage there were three on October 2 and October 8 with 16 on October 12 and 19 on October 19, then 15 seen on October 23 with five on October 26. There were 32 on October 29 with 35 on November 3, 52 on November 5, 58 on November 6, 141 on November 9, 240 on November 12, 267 on November 14, 295 on November 19 and 316 on November 22, then 254 seen on November 26. That closed the main fall passage. For the winter passage there were 474 on November 30 with 493 on December 7, then 468 seen on December 11 with 305 on December 14, 91 on December 19, 45 on December 22 and 33 on December 27. In reality the main fall passage and the winter passage to this point were one event, the fall passage. So the winter passage now takes over half of the early spring passage. There were 42 on December 30 with 85 on January 1, 86 on January 4, 92 on January 7, 116 on January 14 and 157 on January 18, then 82 seen on January 21 with 43 on January 25 and 28 on January 28. That completed the winter passage. For the spring passage there were 31 on February 2 with 32 on February 6, 37 on February 8, 44 on February 11, 46 on February 16, 54 on February 21, 103 on February 23, 131 on February 25, 147 on February 29, 178 on March 7 and 200 on March 14, then 61 seen on March 21 with 57 on March 25, eight on March 27, four on March 30 and two on April 3. There were three on April 6 with 14 on April 11, then eight seen on April 15 with six on April 19. Finally for the spring passage there were 32 on April 26. For most migrant species they move through the area in waves. In many cases after an influx arrived the birds gradually left during the following days but this species is different. It seems to arrive in small numbers and then over the following weeks the numbers keep building only to decline again. In general terms for this year there was a fall passage from October 29 to December 27, the winter passage from December 30 to January 28 and the spring passage from February 2 to April 3. Just three mega influxes involved in the above and the seasons are unlike those of other species.

Wilson's Snipe (*Gallinago delicata*)

Seen in low numbers during the fall and winter passages; numbers were higher during the spring passages. For the early fall passage there were singles on September 8 and September 17 with four on September 23, then singles seen to October 2. That was the early fall passage. For the main fall passage there were three on October 6 with nine on October 8 and 24 on October 14, then 12 seen on October 19 with five to October 26 and three on October 29. There were 14 on November 3 with 15 on November 6, then 20 seen on November 12, November 16 and November 22 with 13 on November 26. That closed the main fall passage. For the winter passage there were 14 on November 30 with 20 on December 4 and 37 on December 11, then four seen on December 14. There were 15 on December 19 with 19 on

December 22, then eight seen on December 27. There were 12 on December 30 with 15 on January 1 and 84 on January 4, then 35 seen on January 7. That completed the winter passage. For the early spring passage there were 79 on January 11 with 72 on January 18, 44 on January 21 and 14 on January 25. There were 86 on January 28 with 19 on February 2 and nine on February 6. There were 14 on February 8 with 74 on February 11, then 60 seen on February 16 with four to February 23. That concluded the early spring passage. For the main spring passage there were 14 on February 25 with 115 on March 3, then 52 seen on March 7 with 39 on March 10. There were 66 on March 14 with five on March 21, three to April 3 and singles to April 26.

American Woodcock (*Scolopax minor*)

A very under-recorded passage migrant and winter visitor due to its crepuscular habits; it was seen crossing Canal Road at first light. For the late fall passage there were singles on October 2 and October 29. For the winter passage there was one on December 19. There was also one on January 4 and that could be either a winter or early spring record.

Wilson's Phalarope (*Phalaropus tricolor*)

This was a rare passage migrant. For the early fall passage there was one on August 20 and August 25. For the spring passage there was one on May 27. Finally there was one for the early fall passage on July 23.

Red-necked Phalarope (*Phalaropus lobatus*)

This was a vagrant. For the early fall passage there was an immature on September 23. For the late spring passage there was an adult on May 16. Two records in one year were very exceptional.

Laughing Gull (*Larus atricilla*)

A very uncommon passage migrant this year; the majority were seen during the main spring passage. Early fall record: *there were three on August 13*. For this year there were two on August 18 with one on August 20. Later there was one on September 8. That was the extent of the early fall passage. For the late fall passage there was one on November 26. There were no winter sightings. For the early spring passage there were four on January 7 that was it. For the main spring passage there were singles on March 30 and April 3 with five on April 11, then two seen on April 15 with one on April 19. There were two on April 30 with singles to May 13. That

closed the main spring passage. For the summer passage there were singles on May 21, June 3 and June 6. For the early fall passage there was one on July 8.

Bonaparte's Gull (*Larus philadelphia*)

A rare winter visitor and an uncommon early spring passage migrant. For the winter passage there were singles on December 22 and December 27. For the early spring passage there were 46 on January 25 with 21 on February 2. There were 36 on February 6 with three on February 8 and one on February 16. That closed the early spring passage. Finally for the late spring passage there was one on March 10.

Ring-billed Gull (*Larus delawarensis*)

A passage migrant and winter visitor numbers were very low this year; the greatest numbers were seen during the main spring passage. *Four stayed for the summer of 1999 but two were killed by Bald Eagles. The remaining two stayed to August 3 with one being seen on August 6. That was the end of the summer passage.* There was no early fall passage. For the late fall passage there were five on October 14. Later there were two on October 26 with seven to November 3, 12 on November 9 and 27 on November 12, then 18 seen on November 14 with nine on November 16. There were 12 on November 19 with 43 on November 22, then 11 seen on November 26. That closed the late fall passage. For the winter passage there were 56 on November 30 with ten on December 7 and five on December 11. There were seven on December 14 with 12 on December 19, 41 on December 27 and 48 on January 1, then eight seen on January 4. That completed the winter passage. For the early spring passage there were 11 on January 7 with 14 on January 11 and 73 on January 14, then 29 seen on January 18 with 14 on January 21. There were 27 on January 25 with 32 on January 28 and 162 on February 2, then 112 seen on February 8 with ten on February 11. There were 90 on February 16 with 196 on February 21, then 145 seen on February 23 with 45 on February 25. That ended the early spring passage. For the main spring passage there were 48 on February 29 with 220 on March 3, then 177 seen on March 10 with 15 on March 14 and 12 on March 18. There were 17 on March 21 with 37 on March 25, 136 on March 30 and 164 on April 6, then 106 seen on April 11 with 33 on April 15. There were 122 on April 19 with 40 on April 30, 30 on May 2, nine on May 4 and one on May 7. There were three on May 13 and May 16 with nine on May 21, then two seen on May 23. That concluded the main spring passage. For the summer passage there were singles on June 3 and June 6. For the early fall passage there were singles on June 26, July 8, July 23, July 30, August 2 and August 6.

Herring Gull (*Larus argentatus*)

An uncommon spring passage migrant; there were also five winter sightings. For the winter passage there were singles on December 4, December 30, January 1, January 4 and January 11. For the early spring passage there were two on January 25 with four on February 6 and six on February 11, then two seen to February 21 with one on February 23. That ended the early spring passage. For the main spring passage there were three on February 29 with singles to March 7. There were three on six dates from March 10 to March 27 with two to April 3 and singles to April 19.

Gull-billed Tern (*Geochelidon nilotica*)

This was a vagrant. For the late spring passage there were two on May 2.

Caspian Tern (*Hydroprogne caspia*)

Sightings very limited until mid-November when a major passage started; this passage reached its peak during the winter passage. Numbers then gradually declined until late March when a quite strong spring passage started. From late May to early July sightings minimal. Finally there was a minor passage in the early fall. Early fall records: *there were two on July 4*. For this year there was one on August 31 with two on September 3 and September 10. Later again there were seven on September 25. That was the extent of the early fall passage. For the main fall passage there were two on October 2 with four on October 23 and October 26, then two seen on October 29 with one on November 3. There were eight on November 5 and November 6 with 11 on November 9, 31 on November 12, 44 on November 14, 68 on November 19 and 101 on November 26, then 60 seen on November 30. That closed the main fall passage. For the winter passage there were 106 on December 4 with 153 on December 11, then 44 seen on December 14. There were 104 on December 19 with 189 on December 22, then 27 seen on December 27 with eight on December 30. There were 83 on January 1 with 94 on January 7, then 58 seen on January 11 with three on January 14. That completed the winter passage. For the early spring passage there were 60 on January 18 with 25 on January 21 and 17 on January 25. There were 40 on January 28 with 51 on February 2, then 19 seen on February 6 with four on February 8. There were 24 on February 11 with 33 on February 16, then 28 seen on February 21 with 13 on February 23. There were 32 on February 25 with 23 on February 29, 19 on March 3 and 14 on March 7. That ended the early spring passage. For the main spring passage there were 22 on March 10 with eight on March 14. There were 17 on March 18 and March 25 with 66 on March 27, then 61 seen on April 3 with 56 on April 11 and 42 on April 15. There were 89 on April 19 with 23 on April 26, 14 on April 30, ten on May 2, seven on May 4, two to May 13 and one on May 16. That concluded the main spring passage.

For the summer passage there were three on May 21 with singles to May 27. There were five on June 6 with one on June 14. There were singles on June 26 and June 28. That closed the summer passage. For the early fall passage there were four on June 30 with 11 on July 8, then seven seen on July 12 with four on July 16. There were five on July 19 with 14 on July 23, then 12 seen on July 26 with nine on July 30, two on August 2 and singles to August 13.

Royal Tern (*Thalasseus maxima*)

This was a vagrant. For the early fall passage there was one on September 8.

Common Tern (*Sterna hirundo*)

This was a vagrant. For the early fall passage there was an adult in breeding plumage on June 28.

Forster's Tern (*Sterna forsteri*)

An uncommon passage migrant and winter visitor; numbers were very low this year. Early fall records: *there were singles on July 14, August 3 and August 6.* For this year there were two on August 31 with one on September 3. That was the extent of the early fall passage. For the main fall passage there were two on November 12 with three to November 16 and 13 on November 22, then one seen on November 26. For the winter passage there two on November 30 with five on December 11, then singles seen to December 19. There were four on December 22 with five on December 27, then four seen on December 30 with one on January 1. That completed the winter passage. For the early spring passage there were seven from January 4 to January 11 with two on January 14 and one on January 18. There were ten on January 25 with 23 on January 28, then 13 seen on February 2 with eight on February 6 and five on February 8. There were 11 on February 11 and February 16 with seven on February 21 and three on February 23. That was the end of the early spring passage. For the late spring passage there were four on February 25 with eight on February 29, then two seen on March 3 with singles to March 10. There were seven on March 14 and March 25 with 12 on March 27, then six seen on April 6 with two on April 19 and one on April 30. That closed the late spring passage. There were no summer sightings. For the early fall passage there was one on June 30 with five on July 8, then two seen to July 16. There were six on July 19 with 12 on July 23, then two seen to August 13.

Least Tern (*Sternula antillarum*)

I always find it hard to define this species; it would appear to be a non-breeding spring to early fall visitor. Early fall records: *there were two on June 19 with three on June 22 and June 25, then two seen on June 29. That was probably the summer passage. For the early fall passage there two on July 20 that was it.* There were no further sightings until the spring. For the spring passage there was one on April 26 with four on May 4, then one seen on May 7. For the summer passage there were seven on May 13 with nine on May 16, then two seen to May 23 with one on May 30. There were 17 on June 6 with 11 on June 9 and two to June 19. That closed the summer passage. For the early fall passage there were five on June 28 with ten on July 4, 18 on July 8, 20 on July 12, 38 on July 16 and 54 on July 19, then 28 seen on July 23 with three on July 26. The count of 54 was the highest count for Zellwood but the highest count is now (2014) that of 92 on June 10, 2009.

Black Tern (*Chlidonias niger*)

An uncommon fall passage migrant; there were just two spring records this year. Early fall records: *there were three on July 12 with singles to July 20. There was one on August 3 with two on August 10 and August 13.* For this year there were 26 on August 31 with three on September 3. That was the extent of the early fall passage. For the spring passage there were two on April 30 with one on May 21. For the early fall passage there was one on July 8 with six on July 16 and 16 on July 19, then 11 seen on July 23 with seven on July 26 and five on July 30.

Black Skimmer (*Rynchops niger*)

A late spring passage migrant; there was one record for the early fall passage. There were no sightings until the spring. For the early spring passage there was one on February 16. For the main spring passage there was one on March 21 with five on March 30, 15 on April 3, 18 on April 11, 22 on April 15 and 23 on April 19, then 28 seen on April 26 and May 2 with 25 on May 4, 22 on May 7 and 19 on May 16. That completed the main spring passage. Finally for the early fall passage there was one on July 12.

Rock Pigeon (*Columba livia*)

In 1999 there was a major post-breeding gathering followed by very few sightings from August to the end of November; from December seen in low numbers to the end of the survey year. Not known to breed in the survey area. Early fall records: *for the post-breeding gathering there were 25 on June 12 with 47 on June 14, 96 on June 22 and 106 on June 25, then 58 seen to*

July 14 with 54 on July 16, 53 on July 20, 26 on July 27, 13 on August 3 and one on August 13. The count of 106 is still (2014) the highest count for Zellwood. That was the end of the post-breeding gathering; numbers were now very low by comparison. For the early fall passage there were three on August 31 with eight on September 3, then four seen on September 6 with three on September 8 and two on September 10. Finally for the early fall passage there were four on September 17. For the late fall passage there was one on October 8; later there was one on November 3. There were also 20 on November 26. That closed the late fall passage. For the winter passage there were eight on December 4 with 13 on December 7, then singles seen to December 14. There were 18 on December 19 with three on December 22. There were eight on December 27 and December 30 with ten on January 1, then eight seen on January 4 with two on January 7. That completed the winter passage. For the early spring passage there were five on January 11 with two to February 6. There were seven on February 8 with 14 on February 11 and 18 on February 16, then 13 seen on February 25 with 11 on March 3 and five on March 7. That concluded the early spring passage. For the late spring passage there were six on March 10 with eight on March 14 and 12 on March 18, then seven seen on March 21 with three on March 25. There were 11 on March 27 with four to April 3. There were five on April 6 with eight on April 11, then four seen on April 15 with one on April 26. That ended the late spring passage. For the summer passage there were two on April 30 and May 2 with seven on May 4, then three seen on May 7 with one on May 13. There were ten on May 16 with eight on May 23 and six on May 27. There were 15 on May 30 with two to June 9. There were nine on June 14 with seven on June 26 and two to June 30. That closed the summer passage. For the early fall passage there were five on July 4 with seven on July 8 and 12 on July 12, then ten seen on July 19 with five on July 30, four on August 2 and one on August 6. There were six on August 9 with two on August 13.

Eurasian Collared-Dove (*Streptopelia decaocto*)

Seen in small numbers through the year; there were large parties seen on two dates during the summer passage. During the Breeding Bird Survey no pairs located. Early fall records: *there was one on May 31 with three on June 5 and 36 on June 7, then singles seen to June 14. The count of 36 is still (2014) the highest count for Zellwood. There were two on June 19, June 22 and June 29 with 31 on July 6, then three seen on July 9 with one on July 12. That was the end of the summer passage. For the early fall passage there were four on July 14 and July 20 with two on July 23 and one on July 27. There were three from August 3 to August 25 with seven on August 31, then two seen on September 3 with singles to September 17. There were two on September 23 and September 30 with one on October 2. That ended the early fall passage even though the "passage" really ended on August 31. From October 6 to June 19 there were no influxes; there were mainly singles seen but there were counts of two and three. During this period there were higher counts of 11 on December 7 and 12 on January 1. For the early fall*

passage there were three on June 26 with 12 on June 30, then three seen on July 4 with singles to July 12. There were five on July 16 with singles to July 23. There were two on July 26 with three on July 30, then seven seen from August 2 to August 13 *with four to August 20 and three on August 23*. The counts of 36 on June 7, 1999 and 31 on July 6, 1999 are exceptional; just where did these birds come from?

White-winged Dove (*Zenaida asiatica*)

A regular early fall passage migrant, there were occasional records for the other seasons. Early fall records: *there were singles on June 25, July 9 and July 20 with three on August 13 and August 18, then one seen on August 31*. Finally for the early fall passage there were two on September 25. There were no records for the late fall or the winter passages. For the early spring passage there were two on January 21 with one on February 2. Later there was one on February 25. Those were the early spring sightings. For the late spring passage there was one on March 18 that was it. For the summer passage there were singles on May 2, May 27 and June 6 with two on June 9 and three on June 14. That was the sudden end of the summer passage. For the early fall passage there were singles on June 30 and July 8 with two on July 12. There was one on July 23 with two on July 26, then singles seen on August 2 and August 9. There were six on August 13 *with singles to August 20*.

Mourning Dove (*Zenaida macroura*)

A resident in the wooded borders; they were seen out in the fields all year. There was a major post-breeding gathering in 1999 with a lesser event in 2000. During the Breeding Bird Survey a total of 14 pairs located. The tiny size of the local breeding population is important when looking at the sizes of the post-breeding gatherings. Early fall records: *for the post-breeding gathering there were 125 on May 1 with 145 on May 4, 267 on May 10, 555 on May 18, 1,035 on May 22, 1,405 on May 29 and 1,760 on June 5, then 1,145 seen on June 12 with 965 on June 14, 875 on June 22, 805 on June 25, 730 on July 4 and 445 on July 6; whilst the count of 1,760 was a high count the highest count is now (2014) that of 2,370 on July 30, 2008*. There were 960 on July 9 with 1,340 on July 12, then 1,025 seen on July 16 with 605 on July 20, 510 on July 23, 430 on July 27, 165 on August 3 and 61 on August 6. That was the post-breeding gathering. For the balance of the early fall passage there were 62 on August 10 with 100 on August 13, then 97 seen on August 20 with 56 on August 25. There were 113 on August 27 with 90 on August 31 and 64 on September 3. There were 74 on September 6 with 139 on September 8, then 50 seen on September 17 with 45 to September 30 and 25 on October 2. That was the early fall passage. For the late fall passage there were 35 on October 6 with 85 on October 8, then 36 seen on October 12. There were 42 on October 14 with 45 on October 19 and 125 on October 26, then 107 seen on October 29 with 81 on November 3 and 49 on

November 6. There were 50 on November 9 with 89 on November 12, 97 on November 16 and 175 on November 22, then 112 seen on November 26 with 87 on November 30. That closed the late fall passage. For the winter passage there were 106 on December 4 with 109 on December 11, 130 on December 14 and 168 on December 22, then 108 seen on December 27 with 95 on January 1, 41 on January 4 and 40 on January 7. That completed the winter passage. For the early spring passage there were 108 on January 11 with 109 on January 14, then 106 seen on January 18 with 55 on January 21 and 45 on January 25. There were 98 on January 28 with 29 on February 2. There were 52 on February 6 with 62 on February 8, then 35 seen on February 11. There were 44 on February 16 with 46 on February 21, then 27 seen on February 23 with 19 on February 25. That concluded the early spring passage. Whilst this species may nest at any time of the year the early start to the post-breeding gathering suggests that there is for this species no late spring passage. So for the summer passage there were 29 on February 29 with 81 on March 3, then 45 seen on March 7 with 43 on March 10, 26 on March 18, 14 on March 21 and five on March 25. There were 19 on March 27 with 18 on March 30, 15 on April 3 and 14 on April 6. There were 30 on April 11 with 43 on April 15, then 16 seen on April 19. There were 39 on April 26 with 65 on April 30, then 32 seen on May 2. That ended the summer passage. For the post-breeding gathering there were 51 on May 4 with 61 on May 7, 170 on May 13, 311 on May 21 and 413 on May 27, then 165 seen on May 30. There were 401 on June 3 with 461 on June 6 and 543 on June 14, then 480 seen on June 19 with 318 on June 26. There were 350 on June 28 with 595 on June 30, then 410 seen on July 4 with 400 on July 8. There were 530 on July 12 with 725 on July 19, then 615 seen on July 23 with 450 on July 23, 291 on August 2 and 157 on August 6. There were 317 on August 9 with 52 on August 20 and 36 on August 23. That closed the post-breeding gathering.

Common Ground-Dove (*Columbina passerina*)

Apparently a summer visitor but I suspect they are present but keeping out of sight during the rest of the year. During the Breeding Bird Survey a total of 59 pairs located. Early fall records: *there were 31 on June 14 with 38 on June 19, 44 on June 25, 46 on June 29 and 50 on July 6, then 43 seen on July 12 with 37 on July 16, 23 on July 23, 19 on July 27, 12 on August 3 and eight on August 6. There were 20 on August 10 with 14 on August 13, eight on August 18 and five on August 20. There were 11 on August 25 with ten on August 27 and nine on August 31. There were 12 on September 3 with 25 on September 6, then 17 seen on September 10 with 11 on September 17. There were 15 on September 23 with 24 on September 25, then 20 seen on September 30 with five on October 2, four on October 6 and one on October 8. That was the early fall passage. Numbers were now much lower. For the late fall passage there were three on October 12 with eight on October 14, then six seen on October 23 with five on October 26, three on October 29, two on November 3 and singles to November 9. There were seven on November 12 with three to November 26 and one on December 4. That closed the*

late fall passage. For the winter passage there was one on December 7 with two to December 14, three to December 30 and four on January 4, then two seen on January 11. That completed the winter passage. For the early spring passage there were two on January 28 and February 2 with 14 on February 6, then nine seen on February 8 with three on February 11. There were 12 on February 16 with four on February 21 and three on February 23. That concluded the early spring passage. For the main spring passage there were five on February 25 with six to March 7, nine on March 10 and ten on March 14, then six seen on March 18 with five on March 21. There were nine on March 25 and March 30 with 11 on April 3 and 18 on April 6, then six seen on April 11. There were ten on April 15 with 11 on April 19, 18 on April 30 and 19 on May 2, then 13 seen on May 4. That ended the main spring passage. For the summer passage there were 15 on May 7 with 19 on May 13, 24 on May 16, 31 on May 21 and 34 on May 27, then 25 seen on May 30 with 22 on June 3. There were 36 on June 6 with 40 on June 9, then 28 seen on June 14. There were 32 on June 19 and June 28 with 21 on June 30. That closed the summer passage. For the early fall passage there were 26 on July 4 with 37 on July 8, then 30 seen on July 16 with 25 on July 19. There were 32 on July 23 with 17 on July 30 and ten on August 2. There were 18 on August 6 with 16 on August 13, *11 on August 16 and ten on August 20.*

Budgerigar (*Melopsittacus undulatus*)

This was an exotic; an escaped cage bird. For the early fall passage there was a female by Lust Road on July 23, July 27, August 3 and August 6, 1999. It was initially with Brown-headed Cowbirds but later it was on its own. The plumage was the same as that of a wild female in Australia.

Black-billed Cuckoo (*Coccyzus erythrophthalmus*)

This was a vagrant. For the early fall passage there was one on September 30.

Yellow-billed Cuckoo (*Coccyzus americanus*)

A passage migrant and summer visitor; during the Breeding Bird Survey a total of ten pairs located. Early fall records: *there were two to July 4 and one on July 12. There was also one on August 3.* Later there were singles on August 25 and September 8. Those were the early fall records. For the late fall passage there was one on September 25 with two on September 30. There were later singles on October 12, October 23 and October 26. That closed the late fall passage. For the spring passage there were three on April 30 with singles on May 2, May 13 and May 16. There were also two on May 21 with one on May 23. That ended the spring passage so for the summer passage there were two on May 27 with three on May 30 and five on June 6,

then four seen on June 9 with singles on six dates to July 12. That was the summer passage. For the early fall passage there were two on July 19 with singles to July 30. There were also two on August 2 with singles to August 13.

Groove-billed Ani (*Crotophaga sulcirostris*)

This was a vagrant. For the early spring passage there was one by the Lake Level Canal on February 8; it later crossed over the canal and entered the Duda property.

Barn Owl (*Tyto alba*)

I do not now understand it but there were no sightings prior to July 12, 1999. *On that date a pair with three young located; the young continued to be seen to July 27.* There were scattered records through to the following summer. During the Breeding Bird Survey four pairs located; broods seen from June 14 to August 13 with the largest brood being that of four. Early fall records: *there were four on July 12 with three to July 27.* There was also one on September 23. That was the early fall passage. For the late fall passage there were singles on October 23 and November 5. For the winter passage there were singles on December 7, December 19, December 22, January 1, January 4 and January 7. For the early spring passage there were singles on January 11 and January 14 with three on January 25, then singles seen on January 28, February 16 and February 29. For the late spring passage there were singles on April 3 and April 15. For the summer passage there was one on June 3 with two on June 14 and five on June 19, then two seen to July 8. That ended the summer passage. For the early fall passage there were six on July 12 with five on July 19, four to July 26 and three on July 30. There were five on August 2 with nine on August 9, then six seen on August 13 *with four to August 20.*

Eastern Screech-Owl (*Otus asio*)

Status is unknown as I do not use recordings to get them to respond. Early fall records: *there was one on July 6 with two on July 23.* That closed the early fall passage. There were no records for the late fall passage. For the winter passage there were singles on December 4, December 22 and January 1. There were no records for either spring passage. Finally for the summer passage there was one on June 28.

Great Horned Owl (*Bubo virginianus*)

A resident in the wooded borders; there were no influxes. During the Breeding Bird Survey a total of five pairs located. One to two seen or heard regularly through the year; there were higher counts of three on December 14 and January 1. These counts were both from the winter passage.

Barred Owl (*Strix varia*)

Very uncommon as they were only recorded on 14 out of the 104 surveys. During the Breeding Bird Survey a total of two pairs located. Early fall records: *there were two on June 25 with one on July 20*. Finally for the early fall passage there were two on September 6. For the late fall passage there was one on November 26. For the winter passage there was one on December 14 with two on December 22, then singles seen on December 27 and January 1. For the early spring passage there were two on January 25. Later there was one on February 11 with two on February 16. That was the early spring passage. For the late spring passage there was one on April 3. For the summer passage there were singles on May 27 and June 3 with two on June 9. Finally for the early fall passage there was one on August 13.

Short-eared Owl (*Asio flammeus*)

This was an uncommon winter visitor and a rare passage migrant. For the fall passage there was one on October 23. For the winter passage there was one on November 26 with two on December 4 and three on December 7, then one seen on December 11. There were two on December 19 with three on December 27, December 30 and January 7, then two seen on January 11. The counts of three were the highest counts for Zellwood but the highest count is now (2014) that of nine on December 29, 2006. That ended the winter passage. For the early spring passage there were singles on February 8 and February 25. For the late spring passage there were also singles on March 7 and March 25.

Common Nighthawk (*Chordeiles minor*)

A summer visitor and passage migrant; there were only low numbers seen this year. During the Breeding Bird Survey a total of four pairs located. Early fall records: *there were two on July 12 and July 16 with singles to August 3*. Later there was one on September 8. That closed the early fall passage. There were no further sightings until the spring. For the spring passage there were two on April 11 with four on April 19, then three seen to April 30. There were four on May 2 with five on May 4, then two seen on May 13 with one on May 16. That

was the spring passage. For the summer passage there were singles from May 21 to June 6 with three on June 9, then singles seen to July 4. For the early fall passage there were two on July 8 and July 12 with three on July 23, then singles seen to August 6. There were also two on August 9. That was the early fall passage.

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

A summer visitor in small numbers; pairs were found along Canal Road. During the Breeding Bird Survey a total of two pairs located. Late summer record: *there were five on June 29*. There were no further sightings until the following year. For the spring passage there were two on April 3 with singles to April 15. For the summer passage there were three on April 19 with four on April 30, then three seen to May 7 with singles on five dates to June 9.

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

This was a rare winter and spring passage migrant. It was doubtless under-recorded due to its nocturnal habits. For the winter passage there were singles on December 14 and December 22. For the early spring passage there was one on January 28. For the main spring passage there were singles on April 3 and April 11.

Chimney Swift (*Chaetura pelagica*)

There was a major fall passage this year but numbers were low during the spring and summer passages. This species did not breed in the survey area but will have done so in the township of Zellwood. Early fall records: *there were three on July 14 with singles to July 27. There were six on August 3 with three on August 10 and two on August 13*. There were 66 on August 18 with nine on August 20 and three on August 27. There were 165 on August 31 with 173 on September 6, then three seen on September 8 with two on September 10. There were 151 on September 17 with 270 on September 23, then 60 seen on September 25 with 26 on September 30. That was the early fall passage. For the main fall passage there were 1,510 flying to the south on October 2 with in the area 177 on October 6 and 35 on October 8. The count of 1,510 was the highest count for Zellwood but the highest count is now (2014) that of 8,100 on September 24, 2008. There were 390 on October 12 with 400 on October 14, then 19 seen on October 19 with one on October 26. That closed the main fall passage. For the spring passage there was one on March 27 with two on April 3 and April 6, then one seen on April 11. There were two on April 15 with seven on April 19, then five seen on April 26 with two to May 2. That concluded the spring passage. For the summer passage there were nine on May 4 with ten on May 13 and 23 on May 16, then six seen to May 23 with five on May 27. There were ten on May

30 with 20 on June 6, then seven seen on June 9 with three on June 14. There were eight on June 19 with four to June 28. There were nine on June 30 with two on July 4. That was the summer passage so for the early fall passage there were three on July 8 with five on July 12, July 16 and July 23, then 67 seen on July 30 with 11 on August 2 and one on August 6. There were 87 on August 9 *with 18 on August 16 and ten on August 20.*

Ruby-throated Hummingbird (*Archilochus colubris*)

This was a vagrant; this species does not like areas of open farmland. Early fall record: *there was one on July 4.* For this year there was one on September 17. That was the early fall passage. For the late spring passage there were singles on April 11 and May 13.

Black-chinned Hummingbird (*Archilochus alexandri*)

This was a vagrant. There was a male on the northern border on December 19.

Belted Kingfisher (*Megaceryle alcyon*)

A passage migrant and winter visitor in very low numbers this year there were no summer sightings. Early fall records: *there were singles on June 25 and July 14 with three on July 27,* then singles seen to August 18. There were two on August 20 with five on September 6, then one seen on September 8. There were three on September 17 with four on September 23, then two seen to September 30. That was the early fall passage. For the main fall passage there were four on October 2 with two to October 8. There were four on October 12 with six on October 14, then five seen to October 23 with two on October 26. There were six on October 29 with five to November 9 and four on November 12. There were six on November 16 with three on November 19. There were four on November 22 with six on November 26, then three seen on November 30 with two on December 4. That closed the main fall passage. For the winter passage there were three on December 7 with four on December 11, then two seen on December 14 with one on December 19. There were two from December 22 to December 30 with three on January 1 and January 7, then two seen on January 11. That completed the winter passage. For the early spring passage there were five on January 14 with four on January 21, then one seen on January 25. There were two on January 28 with three on February 2, then one seen on February 6. There were two from February 8 to February 25 with three on February 29, then two seen on March 3. That ended the early spring passage. For the late spring passage there were three on March 7 with five on March 10, then two seen to March 18. There were three on March 21 with four on March 25, then three seen on March 27 with singles to April 6.

That was the end of the late spring passage. There were no summer sightings. For the early fall passage there were singles on July 8, July 23 and August 6 with three on August 13.

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

This was a vagrant. For the late spring passage there was one on April 3.

Red-bellied Woodpecker (*Melanerpes carolinus*)

A common resident in the wooded borders; individuals do tend to wander throughout the area. During the Breeding Bird Survey a total of 39 pairs located. Early fall records: *there were five on June 19 with nine to June 25, 11 on July 4 and 12 on July 9, then eight seen on July 12 with two on July 14. There were six on July 16 with 15 on July 20, then 11 seen on July 23 with eight on July 27, seven to August 6, six on August 10 and three on August 18.* There were five on August 20 with ten on August 25, then 11 seen on August 27 and September 3 with ten on September 6, nine on September 8 and six on September 10. There were 13 on September 17 with 14 from September 23 to September 30, then 11 seen on October 2 with eight on October 6. That was the early fall passage. For the late fall passage there were nine on October 8 with 11 on October 12 and 18 on October 19, then 11 seen on October 26 with five to November 3, four to November 9 and two to November 16. There were seven on November 19 with six on November 26 and four on November 30. That closed the late fall passage. For the winter passage there were ten from December 4 to December 14 with 13 on December 22, then ten seen to January 1 with nine on January 7, five on January 11 and two on January 14. That completed the winter passage. For the early spring passage there were six on January 18 with seven on January 21 and 18 on January 28, then 12 seen to February 6 with ten on February 8 and nine on February 11. There were 14 on February 16 with six on February 21 and three on February 23. There were eight on February 25 with 12 on February 29, then six seen to March 7. That ended the early spring passage. For the late spring passage there were ten on March 10 with three on March 14. There were four on March 18 with six on March 21, then five seen on March 25 with two to March 30. There were six from April 3 to April 11 with nine on April 15 and ten on April 19, then eight seen to April 30. That was the late spring passage. For the summer passage there were 13 on May 2 with 12 on May 4, seven on May 13 and four on May 16. There were 16 on May 21 with eight to May 27. There were ten on May 30 with 12 on June 3 and 15 on June 6, then six seen on June 9. There were 11 on June 14 with 12 on June 19, then 13 seen on June 28 and July 4 with ten on July 8, nine on July 12 and eight on July 16. That closed the summer passage. For the early fall passage there were 16 on July 19 with 14 on July 23, 11 on July 30, ten on August 2, nine to August 13 *and eight on August 16.*

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

An uncommon passage migrant and winter visitor there was no passage in the late spring. For the late fall passage there was one on October 14 with two on October 19 and four on October 23, then two seen on October 26 with singles on November 6 and November 9. The count of four was the highest count for Zellwood but the highest count is now (2014) that of ten on December 13, 2006. There were also singles on November 19 and November 26. That closed the late fall passage. For the winter passage there were two on December 7 with one on December 11. There were two on January 1 with one on January 11. That completed the winter passage. For the early spring passage there were singles on February 2, February 6 and February 29. There were no later records.

Downy Woodpecker (*Picoides pubescens*)

A common resident in the wooded borders; there was the suggestion of a passage in the fall. During the Breeding Bird Survey a total of 14 pairs located. Early fall records: *there were four on July 4 with five on July 6, then two seen to July 14. There were three on July 16 and July 20 with five on July 23, then two seen on August 3 with one on August 6. There were two from August 10 to August 25 with four on August 27 and six on August 31, then four seen on September 3 with two on September 8 and one on September 10. There were four on September 17 with six on September 23, then four seen on September 25. That was the early fall passage. For the main fall passage there were five on September 30 with six on October 2, then five seen on October 6 with three on October 8. There were 11 on October 12 with 14 on October 19, then six seen on October 26 with five on October 29, three on November 6 and one on November 9. There were two on November 12 and November 22 with singles to December 4. That closed the late fall passage. I have no idea why this species was so hard to find in the late fall. For the winter passage there were five on December 7 with three on December 14 and two on December 19. There were five on December 22 with three on December 27 and two on December 30. There were six on January 1 with three on January 4. That completed the winter passage. This passage was such a sharp contrast to the lack of passage in November. For the early spring passage there were four on January 7 with five on January 11, then two seen on January 14. There were three on January 18 with four on January 21 and six on January 25, then ten seen on January 28 and February 6 with nine on February 11 and seven on February 16. There were nine from February 21 to February 29 with five on March 3 and three on March 7. That ended the early spring passage. For the late spring passage there were six on March 10 with five on March 18, four on March 25, two on March 30 and singles to April 19. That concluded the late spring passage so for the summer passage there were two on April 26 with four to May 2 and five on May 4, then one seen on May 13. There were two on May 16 with five on May 21 and eight on May 30, then seven seen on June 3 with five on June 6 and three to June 14. There were six on June 19 with three on June 26. There were four on June 28 with ten*

on June 30, then eight seen to July 12 with four on July 16. That was the summer passage. For the early fall passage there were eight on July 19 with three on July 26 and two on July 30. There were four on August 2 with eight on August 9, then four seen on August 13.

Hairy Woodpecker (*Picoides villosus*)

This was a vagrant. For the early fall passage there was one on August 27. For the early spring passage there was one on February 11.

Northern Flicker (*Colaptes auratus*)

A resident in the wooded borders; during the Breeding Bird Survey a total of five pairs located. Early fall records: *there were seven on July 4 with five to July 12 and three to July 16. There were five on July 20 with two to July 27 and one on August 3. There were two on August 6 with three to August 18, four to September 3 and five on September 6, then two seen on September 8. There were three on September 10 with four to September 23 and six on September 25, then two seen on September 30. That was the early fall passage. For the late fall passage there were three on October 2 and October 6 with four on October 8, then three seen to October 14. There were eight on October 19 with five on October 23 and two to October 29. There were three on November 3 with two on November 16 and singles to November 26. That closed the late fall passage. For the winter passage there were three on December 4 with two to December 14 and one on December 19. There were three on December 22 with singles to December 30. There were three on January 1 with two on January 7 and singles to January 14. That completed the winter passage. For the early spring passage there were three on January 18 with six on January 28, then five seen to February 8 with three to February 25 and two on February 29. That ended the early spring passage. For the late spring passage there were singles on March 7 and March 10 with two on March 14, then singles seen to April 3. There were two on April 6 with three on April 11, then two seen to April 30 with one on May 7. That closed the late spring passage. For the summer passage there were three on May 13 with two to May 27. There were four on May 30 with singles to June 6. There were two on June 9, June 19 and June 26 with singles to June 30. There were two on July 4 with singles to July 12. That was the summer passage. For the early fall passage there were three on July 16 with singles to July 26. There were two on July 30, August 6 and August 13.*

Pileated Woodpecker (*Dryocopus pileatus*)

A resident in the larger pieces of woodland; during the Breeding Bird Survey a total of three pairs located. Early fall records: *there were two from June 29 to July 6, then singles seen*

to July 20. There were two from July 23 to August 3 with one on August 10. There were two on August 13 with singles to August 25. There were two on August 27 with singles to September 6. There were two from September 8 to September 25 with four on September 30, then one seen on October 2. That was the early fall passage. For the late fall passage there were three from October 6 to October 19 with two on October 26 and one on October 29. The only November sighting for the late fall passage was that of one on November 19. For the winter passage there were two on November 26 with one on December 4. There were two on December 7 with singles to December 14. There were two on December 19 with three on December 22, then singles seen to January 7. That completed the winter passage. For the early spring passage there were three on January 11 with two on January 14 and one on January 18. There were two on January 21 and January 28 with six on February 2, then two seen to February 8. There were three on February 11 with four on February 16, then singles seen to February 25. That concluded the early spring passage. For the late spring passage there were two on February 29 with four on March 3 and five on March 10, then two seen on March 14 with one on March 18. There were three on March 21 with singles to March 30. There were two from April 3 to April 15 with one on April 19. There were two on April 26 and May 2 with one on May 4. That ended the late spring passage so for the summer passage there were singles on May 13 and May 16 with two on May 21, then singles seen to June 30. That closed the summer passage. For the early fall passage there were two on July 4 with singles to July 30. There were two on August 2 with singles to August 13.

Eastern Wood-Pewee (*Contopus virens*)

An uncommon passage migrant being seen in the wooded borders; there was a single spring record. For the early fall passage there were two on August 31 with two again on September 6. That was the early fall passage. For the main fall passage there were two on September 25 with singles on September 30, October 6, October 8 and October 12. That closed the main fall passage. For the spring passage there was one on April 30.

Acadian Flycatcher (*Empidonax virens*)

This was a rare early fall passage migrant. There were singles on August 31, September 8 and September 23.

Willow Flycatcher (*Empidonax traillii*)

This was a vagrant. *There was an adult male by Canal Road (now the Stormwater Ponds) on July 27, 1999; it was singing.*

Eastern Phoebe (*Sayornis phoebe*)

A common fall passage migrant there were decreasing numbers through to the spring. For the fall passage there were singles on September 25, October 2 and October 6 with three on October 12, 12 on October 14, 68 on October 19, 76 on October 23, 94 on October 26 and 107 on October 29, then 65 seen on November 3 with 63 on November 6. There were 71 on November 9 with 33 on November 12. There were 50 on November 16 with 66 on November 19 and 74 on November 26, then 37 seen on November 30. That was the fall passage. For the winter passage there were 65 on December 4 with 52 on December 7. There were 53 on December 11 with 57 on December 14, then 46 seen on December 22 with 39 on December 27. There were 57 on December 30 with 62 on January 1, then 49 seen on January 7 with 35 on January 11 and 31 on January 14. That completed the winter passage. For the early spring passage there were 34 on January 18 with 36 on January 21 and 40 on January 28, then 39 seen on February 2 with 34 on February 6. There were 40 on February 8 with 50 on February 11, then 38 seen on February 16 with 28 on February 21. There were 37 on February 23 with 49 on February 25 and 51 on February 29, then 39 seen on March 3 with 29 on March 7, 14 on March 10, five on March 14, four to March 25 and one on March 27. There was no influx for the late spring passage so the last influx of the early spring passage can be seen in its entirety.

Vermillion Flycatcher (*Pyrocephalus rubinus*)

This was a vagrant. For the late fall passage there was an adult female on October 19 at the eastern end of the McDonald Canal.

Ash-throated Flycatcher (*Myiarchus cinerascens*)

These are the first records for what became one of the Zellwood “specialties”. For the early spring passage there was one on February 6 on the eastern border with two there on February 11 and February 23. On the latter date there was one on the northern border. On February 29 there was one at each site with one on the northern border on March 7.

Great Crested Flycatcher (*Myiarchus crinitus*)

A summer resident in the wooded borders; there was only a trace of the spring and fall passages. During the Breeding Bird Survey a total of ten pairs located; the first fledged young was seen on June 19. Early fall records: *there were four on June 29 with ten on July 4, then nine seen on July 6 with four on July 9, two on July 12 and singles to July 16. There were three on July 20 with four on July 23 and August 3, then two seen on August 6 with singles to August 18.*

There were five on August 20 with two to August 31 and singles to September 10. That closed the early fall passage. There were no further sightings until the spring. For the spring passage there was one on March 25 with three on April 3, four to April 19, six on April 26 and nine on May 2, then seven seen on May 13 with five on May 21, three on May 27 and singles to June 14. This is one of those summer visitors where the locally breeding birds are already on their nests whilst more northerly breeding birds are still passing through. So for the all comers' summer passage there were five on June 19 and June 28 with two to July 4. That completed the summer passage. For the early fall passage there were four on July 8 with nine on July 16, then two seen on July 19 with singles to August 9. Finally there were two on August 13.

Cassin's Kingbird (*Tyrannus vociferans*)

This was a vagrant. There was one initially by Hooper Farms Road from December 4. It later moved to Lust Road and then to the eastern end of the McDonald Canal where it stayed to April 26. This individual returned to winter for a number of years. See the following reports for details.

Western Kingbird (*Tyrannus verticalis*)

A spring passage migrant; there were much lower numbers seen during the late fall and winter passages. For the late fall passage there was one on October 29 with two on November 3 that was it. For the winter passage there was one on November 26 with six on December 4, nine to December 19 and 16 on December 22, then three seen on December 30 with two on January 1. There were also nine on January 7 with one on January 11. That completed the winter passage. For the spring passage there was one on January 28 with five on February 2, 12 on February 16, 15 on February 23, 21 on February 25, 31 on February 29 and 33 on March 3, then 30 seen on March 10 with 22 on March 14 and 21 on March 18. There were 23 on March 21 with 29 on March 25, then 17 seen on March 27. There were 21 on March 30 with 23 on April 3 and 29 on April 6, then 16 seen on April 11 with eight on April 15. There were 29 on April 19 with 13 on April 26 and six on April 30. There were seven on May 2 and May 4 with eight on May 7, then two seen on May 13 with one on May 16.

Eastern Kingbird (*Tyrannus tyrannus*)

A passage migrant with a major flight in the early fall. This was a non-breeding summer visitor; at least breeding was not proved. Early fall records: *there were singles on June 22, July 6, July 14, July 20 and August 10*. There were five on August 25 with six on August 27. On August 31 a total of 347 flew to the south; this is still (2014) the highest count for Zellwood. There were

five on September 3 with one on September 6. Later there was one on September 17 with two on September 23, then one seen on September 25. That was the early fall passage; there were no further sightings until the spring. For the spring passage there were three on April 6 with one on April 11. There were three on April 15 with seven on April 19 and 13 on April 26, then four seen on May 2 with two on May 4. That was the end of the spring passage. For the summer passage there was one on May 21 with two on June 9, then one seen on June 14. There were also two on June 19. Those were the summer records; there was no evidence of breeding although they may well have done so. For the early fall passage there was one on July 4 with two on July 8, then one seen on July 16. Finally there were two on July 23, August 9 and August 13.

Gray Kingbird (*Tyrannus dominicensis*)

This was a rare passage migrant. Early fall record: *there was one on August 13*. For this year there was one on August 18. That was the early fall passage. Finally for the spring passage there was one on April 6.

Scissor-tailed Flycatcher (*Tyrannus forficatus*)

An uncommon spring passage migrant; there was a single fall record. For the late fall passage there was one on October 26. There were no winter records. For the early spring passage there were singles on January 7, February 2, February 8, February 23, February 25, February 29 and March 3. That closed the early spring passage. For the late spring passage there were singles on March 7 and March 10 with two on March 18, then singles seen on March 21, March 25 and March 30.

Fork-tailed Flycatcher (*Tyrannus savana*)

This is a vagrant anywhere in the United States....For the early fall passage there was an adult by Lust Road on July 23. There have been three since: there was one by Hooper Farms Road from December 10, 2005 to January 15, 2006, there was one by Lake Apopka just to the south of the Lust Road pump house from July 13, 2012 to July 15, 2012 and there was one at Potter's Farm from July 17, 2013 to July 21, 2013. I wonder just how many locations have four records of this national rarity.

Loggerhead Shrike (*Lanius ludovicianus*)

The highest numbers were seen from late July to mid-January otherwise numbers were much lower. During the Breeding Bird Survey a total of five pairs located. Early fall records: *there were four on June 14 with six to June 22, eight on June 25, nine on July 4, then ten seen on July 6 and July 12 with six on July 14. There were nine on July 16 with 11 on July 20 and 15 on July 23, then nine seen on July 27 with seven on August 3. There were ten on August 6 with 13 on August 10, then ten seen on August 13 with nine on August 18, seven on August 25 and five on August 27. There were 14 on August 31 with 16 on September 3, then ten seen on September 6. There were 11 on September 8 with 12 on September 10 and 13 on September 17, then ten seen to September 30 with nine on October 2 and three on October 6. That was the early fall passage. For the late fall passage there were seven on October 8 with nine on October 12, 12 on October 14 and 16 on October 23, then 13 seen on October 29 with 12 on November 6 and 11 to November 19. There were 13 on November 22 with 12 on November 26 and nine on November 30. That closed the late fall passage. For the winter passage there were 14 on December 4 with 13 on December 7, ten on December 11 and nine on December 14. There were 13 on December 19 with seven on December 22 and three on December 27. There were seven on December 30 with 11 on January 1 and 13 on January 4, then 12 seen on January 7. That completed the winter passage. For the early spring passage there were 16 on January 11 with 14 on January 14, seven to January 28, six to February 11 and three to February 23. There were five on February 25 and February 29 with two on March 3. That was the early spring passage. There was no late spring passage as this species nests so early. For the summer passage there were three on March 7 with four to March 14, five to March 30 and six on April 3, then three seen on April 6 with one on April 11. There were four on April 15 with two to April 26 and one on April 30. There were three on May 2 and May 4 with two to May 13 and one on May 16. That closed the summer passage. For the early fall passage there were six on May 21 with two on May 23. There were four on May 27 with seven on May 30, then five seen on June 6 with three on June 9 and two on June 14. There were five on June 19 with seven on June 26, ten on June 28 and 17 on July 4, then ten seen on July 8 with nine on July 12 and seven to July 19. The count of 17 was the highest count for Zellwood but the highest count is now (2014) that of 18 on February 3, 2002. There were 12 on July 23 with eight on July 30 and seven to August 6. There were eight on August 9 with ten on August 13, *then nine seen on August 16 with five on August 20.**

White-eyed Vireo (*Vireo griseus*)

A widespread resident; there was a minor fall passage this year. During the Breeding Bird Survey a total of five pairs located. Early fall records: *there were singles from June 25 to July 4. Later there were singles from July 23 to August 10.* There were also singles from August 27 to September 8 with two on September 10, three on September 17, four on September 23

and 13 on September 25, then six seen on September 30. That was the early fall passage. For the main fall passage there were 11 on October 2 with 12 on October 6, then ten seen to October 19 with seven on October 23, two to October 29 and one on November 9. That closed the main fall passage. In later years with a heavier passage the two fall passages merged into one. For the winter passage there were two on November 26 with singles to December 7. There were two on December 11 and December 14 with singles to January 4. There were four on January 7 with two on January 11. That completed the winter passage. For the early spring passage there were two on January 28 with five on February 6, then three seen on February 8 with two on February 11. There were five on February 16 with two to February 23. There were six on February 25 with four on February 29 and two on March 3. That ended the early spring passage. For the late spring passage there were three on March 7 with four on March 10, then one seen on March 14. There were two on March 18 with five on March 21, then three seen to March 30 with two to April 11. There were three on April 15 with two on April 19 and one on April 26. That concluded the late spring passage. For the summer passage there were two on April 30 with three on May 4 and May 13, then one seen on May 16. There were two on May 21 with three on May 23, then two seen to May 30 with one on June 3. There were three on June 6 with one on June 9. There were two on June 14 with four from June 19 to July 4, then singles seen to July 12. That was the summer passage. For the early fall passage there were two on July 16 with three on July 19, then singles seen to July 30. There were three on August 2 and August 13 *with two to August 20 and one on August 23.*

Bell's Vireo (*Vireo bellii*)

This was a vagrant. For the early spring passage there were singles on the northern border on February 6 and February 16.

Yellow-throated Vireo (*Vireo flavifrons*)

This was a vagrant. For the early fall passage there was one on September 3 and for the late spring passage there was one on March 21.

Blue-headed Vireo (*Vireo solitarius*)

An uncommon late fall to late spring visitor; most were seen during the spring passages. For the late fall passage there were singles on November 9, November 12, November 26 and November 30. For the winter passage there were two on December 7 with singles to December 14. There were three on December 22 with singles to January 11. That completed the winter passage. For the early spring passage there were singles on January 21, February 2 and

February 6 with two on February 8, then singles seen on February 11, February 16, February 23 and February 25. There were also two on February 29 with one on March 3. That was the end of the early spring passage. For the late spring passage there were singles on March 7, March 10, March 18, March 25 and April 3.

Philadelphia Vireo (*Vireo philadelphicus*)

This was a vagrant. For the late fall passage there was one on October 14; it was in the woods on the eastern border north of the McDonald Canal.

Red-eyed Vireo (*Vireo olivaceus*)

A quite common early fall passage migrant; there were only three records for the spring passage. There were no sightings during the summer months. For the early fall passage there were singles on July 9, July 12, July 14 and August 10 with two to August 27 and four from August 31 to September 8, then three seen to September 17 with two on September 23. There were five on September 25 with six on September 30, then two seen on October 6. That closed the early fall passage. There were no later fall records. For the spring passage there were singles on April 15, May 2 and May 21. Finally for the early fall passage there was one on July 16.

Blue Jay (*Cyanocitta cristata*)

A common resident in the wooded borders; there appeared to be actual passage in the late fall and the early spring. During the Breeding Bird Survey a total of 25 pairs located. Early fall records: *there were 13 on July 4 with 14 on July 6, then 13 seen on July 12 with five on July 14. There were ten on July 16 with 15 on July 20, then eight seen on July 23 with seven on July 27. There were 13 on August 3 with 14 on August 6, then 13 seen on August 10 with seven on August 13 and six on August 18. There were seven on August 20 with 12 on August 25, then ten seen to September 3 with nine on September 6. There were 11 on September 8 with 14 on September 10, 18 on September 17, 20 on September 23 and 21 on September 30, then 12 seen on October 2 with 11 on October 6. That was the early fall passage. For the late fall passage there were 19 on October 8 with 24 on October 12 and 25 on October 14, then 22 seen on October 19 with 18 on October 23, 12 on October 26, 11 on October 29, six on November 6, five on November 9, three to November 19 and one on November 22. That single influx was the late fall passage I have shown this as two events although the actual passage spanned parts of both events. For the winter passage there were four on November 26 with seven on December 4, then six seen on December 7 with two on December 11. There were four on December 14*

with five on December 19 and eight on December 22, then four seen on December 27. There were five on December 30 with seven on January 1, then four seen on January 4. There were five on January 7 with nine on January 11, then three seen on January 14. That completed the winter passage. For the early spring passage there were six from January 18 to January 25 with 16 on January 28, then 14 seen on February 2 with 13 on February 6, 12 on February 8 and eight on February 11. There were 16 on February 16 with ten to February 23 and eight on February 25. Those last two influxes may just indicate a passage. That concluded the early spring passage. For the late spring passage there were 11 on February 29 with nine on March 3 and eight on March 7. There were 11 on March 10 with eight to March 18, seven on March 21, six on March 25 and four on March 27. There were five on March 30 with nine on April 3, then eight seen to April 11. There were ten on April 15 with 11 on April 19, 12 on April 30 and 16 on May 2, then seven seen on May 4 with four on May 7. That closed the late spring passage so for the summer passage there were ten on May 13 with 16 on May 21, then eight seen on May 23 with five on May 27 and three on May 30. There were five on June 3 with ten on June 6, then six seen to June 14. That appeared to be the early end of the summer passage. For the early fall passage there were ten on June 19 with 12 to June 28, 13 on July 4 and 22 on July 8, then 13 seen on July 12 with nine on July 16. There were 14 on July 19 with 15 on July 23, then 11 seen on July 26. There were 13 on July 30 with 21 on August 2, then ten seen to August 9 with seven on August 13.

American Crow (*Corvus brachyrhynchos*)

A casual visitor; there were more records for the winter and the early spring than for the other seasons. For the early fall passage there was one on September 17 with two on September 23. For the main fall passage there were five on October 26 with two on October 29 and singles on November 6 and November 16. That closed the main fall passage. For the winter passage there were two on December 4, December 19, December 22 and January 1. That completed the winter passage. For the early spring passage there was one on January 21 with four on February 2, then two seen on February 6 with one on February 21. There were two on February 29 with singles on March 3 and March 7. That ended the early spring passage. For the late spring passage there was one on April 19. There were no summer records. For the early fall passage there were three on June 28 with two on July 26 and one on July 30.

Fish Crow (*Corvus ossifragus*)

A resident; there was a major early spring passage and a minor post-breeding gathering. During the Breeding Bird Survey a total of 11 pairs located. Early fall records: *for the minor post-breeding gathering there were ten on June 14 with 15 on June 19, 21 on June 22 and 97 on June 29, then 53 seen on July 6 with 34 on July 12. There were 132 on July 14 with 49 on July 16.*

There were 59 on July 19 with 74 on July 20, then 16 seen on July 23 with ten on August 3 and three on August 6. There were 12 on August 10 with three on August 13 and two on August 18. That was the end of the post-breeding gathering. For the early fall passage the only records were of one on August 27, two on August 31 and later one on September 17. That was all that remained of the early fall passage. For the main fall passage there were ten on September 30 with three on October 6. Later there were two on October 19 with five on October 26 and six on November 6, then two seen to November 12. There were ten on November 16 with 11 on November 22, then one seen on November 26. That closed the main fall passage. For the winter passage there were three on November 30 with nine on December 4 and 45 on December 7, then one seen on December 11. There were 32 on December 14 with 93 on December 19, then 49 seen on December 22 with 26 on December 27 and six on December 30. There were 92 on January 1 with singles to January 7. That completed the winter passage. For the early spring passage there were 115 on January 11 with singles to January 21. There were 14 on January 25 with 18 on January 28, 45 on February 2 and 663 on February 6, then 238 seen on February 8 with 227 on February 11 and 113 on February 16. There were 2,220 on February 21 with 68 on February 25 and 16 on February 29. There were 2,155 on March 3 with 1,905 on March 7 and six on March 10. That concluded the early spring passage; only low numbers now seen. For the late spring passage there were 22 on March 14 with 31 on March 18 and 95 on March 21, then 17 seen on March 27 with seven on March 30, six on April 3 and five on April 6. There were eight on April 11 with seven on April 15 and five on April 19. That closed the late spring passage. For the summer passage there were six on April 26 with eight on April 30, 16 on May 2 and 21 on May 4, then 16 seen on May 13 with 13 on May 16. There were 17 on May 21 with 11 to May 30, ten on June 3 and six on June 6. There were eight on June 9 with nine on June 14, then eight seen on June 19. That was the summer passage. For the post-breeding gathering there were 12 on June 26 and June 28 with 16 on June 30, 164 on July 4 and 167 on July 8, then 144 seen on July 12 with 93 on July 16 and 27 on July 19. There were 43 on July 23 with 139 on July 26 and 158 on July 30, then 40 seen on August 6 with 18 on August 13.

Purple Martin (*Progne subis*)

A non-breeding summer visitor with minor passages in the fall and the spring; there was however a major post-breeding gathering in 1999 with only a minor event in 2000. Early fall records: *for the post-breeding gathering there were 19 on May 25 and May 29 with 63 on May 31 and 700 on June 7, then 200 seen on June 12 with 50 on June 14. There were 1,935 on June 19 with 815 on June 25 and 575 on June 29. The count of 1,935 was the highest count for Zellwood but the highest count is now (2014) that of 2,850 on June 20, 2004. There were 1,795 on July 4 with 1,365 on July 6, 675 on July 12, 535 on July 16, 290 on July 20, 235 on July 23 and 28 on July 27. There were 34 on August 3 with 140 on August 6 and 436 on August 10, then 12 seen on August 13 with three on August 20. That was the end of the post-breeding gathering.*

For the early fall passage there were seven on September 3 with eight on September 8, then one seen on September 10. Exceptionally there were two on September 25. That was the early fall passage. There were no further sightings until the spring passage. For the spring passage there were three on February 2 and February 6 with eight on February 8, then one seen on February 16. There were five on February 21 with eight on February 23, then two seen to February 29 with one on March 3. That was the spring passage. For the summer passage there were two on March 7 and March 10 with nine on March 14, then seven seen on March 18 with four on March 27 and singles to April 3. There were four on April 6 with 11 on April 11, then two seen to April 30 with one on May 2. That ended the summer passage. For the post-breeding gathering there were two on May 4 with four on May 13, seven on May 16, 17 on May 21 and 23 on May 23, then 15 seen on May 27 with 12 on May 30. There were 66 on June 3 with 107 on June 6 and 372 on June 9, then 235 seen on June 19 with 217 on June 26. There were 685 on June 28 with 490 on June 30 and 270 on July 4. There were 760 on July 8 with 238 on July 16, 209 on July 19, 125 on July 26, 11 on July 30 and four on August 2. There were six on August 6 with 18 on August 13, *then one seen to August 20.*

Tree Swallow (*Tachycineta bicolor*)

Passage migrant and winter visitors there were only low numbers this year; even so the highest numbers were seen during the spring passages. Early fall records: *there were two on June 22 with singles on June 25, July 12, August 6* and September 10. There were three on September 17 with six on September 23 and 42 on September 25, then ten seen on October 2 with six on October 6. That was the early fall passage. For the main fall passage there were 760 on October 8 with 73 on October 14 and 12 on October 19. There were 30 on October 23 and October 26 with 47 on October 29 and 54 on November 3, then seven seen on November 6. There were 12 on November 9 with 58 on November 12 and 112 on November 16, then 75 seen on November 19. There were 108 on November 22 with 206 on November 26, then 85 seen on November 30. That closed the main fall passage. For the winter passage there were 146 on December 4 with 40 on December 7. There were 75 on December 11 with 121 on December 14 and 458 on December 22, then 20 seen on December 27. There were 75 on December 30 with 140 on January 1 and 715 on January 4, then 510 seen on January 11 with 78 on January 14. That completed the winter passage. For the early spring passage there were 1,170 on January 18 with 47 on January 21 and two on January 25. There were 35 on February 2 with 45 on February 6, 94 on February 8, 310 on February 16, 560 on February 21, 575 on February 23 and 1,030 on February 25, then 605 seen on March 3 with ten on March 7. That concluded the early spring passage. For the main spring passage there were 335 on March 10 with 1,140 on March 14, then 555 seen on March 18 with 500 on March 21 and 345 on March 25. There were 670 on March 27 with 1,050 on March 30, then 410 seen on April 3 with 20 on April 6. There were 142 on April 11 with 800 on April 15, then 535 seen on April 19 with 305 on April 26, 57 on April 30,

24 on May 2, six on May 4, two on May 7 and one on May 13. Finally for the main spring passage there was one on May 23 and May 27. There were no very early fall records this year.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

An early fall passage migrant above all else; there was a minor late fall passage and an even lighter late spring passage. Early fall records: *there were three on June 25 with singles to August 3. There were three on August 6 with singles to August 13.* There were three on August 18 and August 20 with two on August 31 and one on September 8. There were two on September 17 with five on September 30, then singles seen to October 6. That was the early fall passage. For the late fall passage there were four on October 8 with five on October 14, then two seen on October 19 with one on October 23. That closed the late fall passage. There were no winter or early spring records. For the late spring passage there were singles on April 3, April 6 and April 11 with two on April 15. There were no summer sightings. For the early fall passage there were singles on June 26 and June 30 with two on July 12, then singles seen on July 16, July 19 and July 23. There were three on July 30 with singles to August 9. Finally there were two on August 13.

Bank Swallow (*Riparia riparia*)

This was an early fall passage migrant; there were eight records for the spring passage. Early fall records: *there were singles on July 20 and July 23 with two to August 3 and six on August 6, then one seen on August 10. There were two on August 13 with five on August 18, 18 on August 25, 21 on August 31, 27 on September 3 and 29 on September 6, then 28 seen on September 8 with 13 on September 17 and 11 on September 23.* There were 24 on September 25 with three on September 30 and one on October 2. There were two on October 6 with one on October 8. That closed the early fall passage. There were no further sightings until March. For the late spring passage there were singles on March 27 and April 3 with two on April 11 and four on April 15, then two seen to April 26 with one on April 30. Finally for the late spring passage there were three on May 4. For the early fall passage there were singles on July 16 and July 19 with three on July 23 and July 26, then one seen on July 30. There were two on August 2 with three on August 6 and five on August 13, *then one seen on August 16.*

Cliff Swallow (*Petrochelidon pyrrhonota*)

An early fall passage migrant; there was a single spring record. Early fall records: *there was one on August 3 with two on August 6, then three seen on August 13 and August 18 with two to August 25 and singles to September 6.* There were three on September 8 with one on

September 10. There were three on September 17 with nine on September 23 and 68 on September 25, then three seen on September 30. That was the early fall passage. The count of 68 was the highest count for Zellwood but the highest count is now (2014) that of 71 on October 1, 2006. For the late spring passage there was one on April 30. For the early fall passage there were singles on July 23, and July 26 with two on August 9, then one seen on August 13.

Barn Swallow (*Hirundo rustica*)

A summer visitor and passage migrant; the heaviest passage was during the fall. During the Breeding Bird Survey a total of 48 pairs located; I did not record the first fledged young. Early fall records: *there were 60 on July 6 with 100 on July 9, then 55 seen on July 12 with 35 on July 14. There were 40 on July 16 with 75 on July 20 and 85 on July 23, then 65 seen on July 27 with 43 on August 3. There were 85 on August 6 with 444 on August 10, then 270 seen on August 13 with 170 on August 18. There were 832 on August 20 with 385 on August 25 and 129 on August 27. There were 515 on August 31 with 570 on September 3 and 606 on September 8, then 410 seen on September 17 with 210 on September 25 and 43 on September 30. That was the early fall passage. For the late fall passage there were 125 on October 2 with 200 on October 6 and 515 on October 8, then nine seen on October 12. There were 26 on October 14 with 68 on October 19 and 75 on October 23, then 73 seen on October 29 with five on November 3. There were 14 on November 5 with 33 on November 6 and 85 on November 9, then 20 seen on November 12 with 18 on November 16, 13 on November 19, ten on November 22 and singles to November 30. That closed the late fall passage. There were no winter sightings. For the early spring passage there were singles on February 16, February 21, February 23, February 25 and March 3. That concluded the early spring passage. For the main spring passage there were three on March 7 and March 10 with five on March 14, seven on March 18, 21 on March 21, 30 on March 25, 40 on March 27 and 43 on March 30, then 35 seen on April 3 with 30 on April 6. There were 42 on April 11 with 84 on April 15 and 126 on April 26, then 107 seen on April 30 with 59 on May 2, 52 on May 4 and 42 on May 7. That ended the main spring passage. Locally the breeding pairs will now have fledged young so the summer passage here will have started back in early April. Now it is the summer passage for everyone. There were 57 on May 13 with 62 on May 16, 64 on May 21 and 73 on May 23, then 64 seen on May 27 with 50 on May 30, 42 on June 3 and 37 on June 6. There were 51 on June 9 with 52 on June 14, 62 on June 19, 71 on June 28, 81 on June 30 and 115 on July 8, then 60 seen on July 12. That was the summer passage. For the early fall passage there were 66 on July 16 with 74 on July 19, then 57 seen on July 23. There were 59 on July 26 with 73 on July 30, 110 on August 6 and 710 on August 13, *then 101 seen on August 16 with 49 on August 20. All the birds seen from August 6 to August 20 were recorded as flying rapidly to the south i.e. this was the period of most intense passage.**

Carolina Chickadee (*Poecile carolinensis*)

This was a vagrant. For the late fall passage there was one on November 9; this was in the woods between Lust and Hooper Farms Roads.

Tufted Titmouse (*Baeolophus bicolor*)

A resident in the wooded borders; there was no suggestion of influxes. During the Breeding Bird Survey a total of three pairs located. Up to three a day seen regularly through the year; there were higher counts of four on July 23 and April 30.

Carolina Wren (*Thryothorus ludovicianus*)

A common resident throughout; there is just the possibility of passage in October. During the Breeding Bird Survey a total of 69 pairs located. Early fall records: *there were 17 on July 9 with 19 on July 12, then seven seen on July 14. There were 15 on July 16 with 17 on July 20 and 20 on July 23, then 15 seen on July 27 with 11 on August 3 and nine on August 6. There were 11 on August 10 with 16 to August 20 and 18 on August 25, then 12 seen to August 31.* There were 19 on September 3 with 17 on September 6 and 11 on September 8. There were 15 on September 10 with 18 on September 17 and 19 on September 23, then 18 seen on September 25. That was the early fall passage. For the late fall passage there were 20 on September 30 and October 2 with 22 on October 6, 23 on October 12 and 33 on October 19, then 21 seen on October 23 with 13 on October 29, 12 on November 6 and seven on November 9. It was this influx which suggested a fall passage. There were eight on November 12 with 12 on November 16, then eight seen on November 19. There were nine on November 22 with 15 on November 26, then seven seen on November 30. That closed the late fall passage. For the winter passage there were 18 on December 4 with 16 on December 11, 15 on December 19 and 11 on December 22. There were 19 on December 27 with 17 to January 7 and 13 on January 11. That completed the winter passage. For the early spring passage there were 14 on January 14 and January 18 with 11 on January 21 and nine on January 25. There were 26 on January 28 with 23 on February 6 and 21 on February 8. There were 22 on February 11 with 25 on February 16, then 18 seen on February 21 with nine on February 23. There were 22 on February 25 with 19 on February 29. That concluded the early spring passage. For the late spring passage there were 23 on March 3 with 19 on March 10 and 11 on March 14. There were 18 on March 18 with 20 on March 21 and March 25, then ten seen on March 27. There were 13 on March 30 with 17 on April 3 and 22 on April 6, then 17 seen on April 11. There were 19 on April 15 with 24 on April 19, then 27 seen on April 26 and April 30 with 23 on May 2, 22 on May 4 and 12 on May 7. That was the late spring passage so for the summer passage there were 29 on May 13 with 42 on May 21, then 22 seen on May 27 with 17 on May 30. There were 22 on June 3 with 32 on

June 6, then 15 seen on June 9. There were 18 on June 14 with 23 on June 19 and 24 on June 26, then 18 seen on June 28. That ended the summer passage. For the early fall passage there were 21 on June 30 with 25 on July 4, then 22 seen on July 12 with 20 on July 16. There were 22 on July 19, with 20 to July 30 and 19 on August 2. There were 22 on August 6 with 29 on August 9, 37 on August 20 and 41 on August 27, then 29 seen on August 30.

Bewick's Wren (*Thryomanes bewickii*)

This was a vagrant. There was one on February 25 and March 14, both sightings were near the eastern end of Lust Road. There is a description in Appendix B.

House Wren (*Troglodytes aedon*)

A common fall passage migrant; there were decreasing numbers through to the spring. For the fall passage there were six on October 2 with 20 on October 8, 38 on October 12, 46 on October 14, 72 on October 14, 80 on October 23, 81 on October 26 and 92 on October 29, then 60 seen on November 3. There were 83 on November 6 with 127 on November 9 and 154 on November 16, then 125 seen on November 19. There were 130 on November 22 with 210 on November 26, then 70 seen on November 30. That closed the fall passage. For the winter passage there were 139 on December 4 with 91 on December 7 and 90 on December 11. There were 95 on December 14 with 82 on December 19, 79 on December 22 and 54 on December 27. There were 82 on December 30 with 81 on January 1, 77 on January 7, 65 on January 11 and 23 on January 14. That completed the winter passage. For the early spring passage there were 55 on January 18 with 28 on January 21 and 19 on January 25. There were 48 on January 28 with 40 on February 2. There were 47 on February 6 with 57 on February 8, then 52 seen on February 11 with 47 on February 21, 42 on February 25 and 38 on February 29. That concluded the early spring passage. For the late spring passage there were 49 on March 3 with 60 on March 10, then 38 seen on March 14 with 32 on March 18. There were 40 on March 21 with 52 on March 25, then 26 seen on March 27. There were 39 on March 30 with 48 on April 3, then 28 seen on April 6 with 25 on April 11, 18 on April 15, 13 on April 19, three on April 30 and one on May 2.

Sedge Wren (*Cistothorus platensis*)

A passage migrant and winter visitor; all these wrens appear to have different patterns of occurrence. This species has a light passage in October with a strong passage in November and December. Passage in January and February was again light with a stronger passage in March and April. For the fall passage there were singles on October 8 and October 12 with

three on October 14, five on October 19 and seven on October 23, then six seen to October 29. There were seven on November 3 with ten on November 6, 13 on November 9, 36 on November 12 and 42 on November 16, then 25 seen on November 19. There were 38 on November 22 with 49 on November 26, then 26 seen on November 30. The count of 49 was the highest count for Zellwood but the highest count is now (2014) that of 108 on November 26, 2000. That closed the fall passage. For the winter passage there were 36 on December 4 with 40 on December 7, then 35 seen on December 11 with 33 on December 14 and 29 on December 19. There were 36 on December 22 with 44 on December 27, then 31 seen on January 1 with 20 on January 4, 19 on January 7, 18 on January 11 and six on January 14. That completed the winter passage. For the early spring passage there were 21 on January 18 with 11 on January 21 and nine on January 25. There were 17 on January 28 with 18 on February 2, 20 on February 8 and 29 on February 16, then 15 seen on February 23 with 12 on February 25. That ended the early spring passage. For the main spring passage there were 18 on February 29 with 17 on March 7, 13 on March 10 and nine on March 14. There were 27 on March 18 with 28 on March 21 and 34 on March 25, then 13 seen on March 27. There were 15 on March 30 with 41 on April 3, then 24 seen on April 6. There were 27 on April 11 with 42 on April 15, then 34 seen on April 19 with 13 on April 26 and eight on April 30.

Marsh Wren (*Cistothorus palustris*)

This species had a light passage during the fall with a heavy passage from December to early February. Numbers for the rest of the spring were lower. For the fall passage there were two on September 25 and October 2 with six on October 12, 14 on October 19 and 18 on October 26, then 17 seen on November 3 with 13 on November 6, 11 on November 12 and ten on November 16. There were 22 on November 19 and November 22 with 41 on November 26, then 20 seen on November 30. That closed the fall passage. For the winter passage there were 68 on December 4 with 69 on December 7, 107 on December 11 and 109 on December 14, then 64 seen on December 19. The count of 109 was the highest count for Zellwood but the highest count is now (2014) that of 211 on November 9, 2005. There were 73 on December 22 with 83 on December 27, 92 on December 30 and 94 on January 1, then 83 seen on January 7 with 79 on January 11 and eight on January 14. That completed the winter passage. For the early spring passage there were 82 on January 18 with 56 on January 21 and 36 on January 25. There were 88 on January 28 with 72 on February 2. There were 74 on February 6 with 103 on February 8, then 76 seen on February 11 with 73 on February 16, 52 on February 23, 48 on February 29, 36 on March 3, 35 on March 10, 33 on March 14, 22 on March 18 and 19 on March 21. There was no new influx at the start of the late spring passage so there was nothing to cover up the decline of the last influx of the early spring passage which exceptionally continued to this point. Very belatedly for the late spring passage there were 30 on March 25 with 22 on March 27. There were 26 on March 30 with 36 on April 3, 45 on April 6, 53 on April 11 and 61 on April 15,

then 36 seen on April 19 with 18 on April 26, 12 on April 30, five on May 4, two on May 7 and one on May 13.

Golden-crowned Kinglet (*Regulus satrapa*)

This was a vagrant. For the winter passage there was one on December 7 and for the early spring passage there was one on January 25. Both sightings were on the northern border.

Ruby-crowned Kinglet (*Regulus calendula*)

An uncommon passage migrant; numbers during the winter were even lower. For the fall passage there were singles on October 6, October 12, October 14 and October 19 with five to October 26 and six on October 29, then three seen on November 3 with two on November 6. There were four on November 9 and November 12 with 11 on November 19, then three seen to November 26. That closed the fall passage. For the winter passage there were four on November 30 with five on December 4 and nine on December 7, then six seen to December 14 with five on December 19. There were seven on December 22 with three on December 27. There were four on December 30 with five on January 1 and January 4, then four seen on January 7 with three on January 11. That completed the winter passage. For the early spring passage there were five on January 14 and January 21 with 13 on January 25 and 17 on January 28, then six seen on February 2. There were 11 on February 6, February 8 and February 16 with eight on February 23, six on February 29 and four on March 3. That was the early spring passage. For the late spring passage there were ten on March 7 with seven on March 10, four on March 14, two on March 18 and one on March 25.

Blue-gray Gnatcatcher (*Polioptila caerulea*)

Seen in numbers from mid-September to the end of February; the highest numbers were seen during the early spring passage. Early fall records: *there were two on June 14 with singles on June 29, July 16 and July 23. There were three on August 3 with singles to August 13.* For this year there were two on August 20 and August 27 with seven on August 31 and September 6, then five seen on September 8. That was the very early end of the early fall passage. For the main fall passage there were ten on September 10 with 18 on September 17, 22 on September 23, 26 on September 25 and 38 on September 30, then 30 seen on October 6 with 19 on October 8. There were 33 on October 12 with 39 on October 19, then 29 seen on October 23 with 26 on October 29, 22 on November 3 and 16 on November 6. There were 25 on November 9 with 24 on November 16 and 19 on November 19. There were 20 on November 22 with 28 on November 26, then 27 seen on November 30 with 23 on December 4. That closed

the main fall passage. For the winter passage there were 34 on December 7 with 25 on December 14, 22 on December 22 and 17 on December 27. There were 36 on December 30 with 44 on January 1, then 27 seen on January 4. That completed the winter passage. For the early spring passage there were 33 on January 7 with 39 on January 11, then 32 seen on January 18 with 26 on January 21. There were 31 on January 25 with 72 on January 28, then 52 seen on February 2 with 51 on February 6. There were 55 on February 8 with 68 on February 16, then 29 seen on February 21. There were 33 on February 23 with 42 on February 25, then 35 seen on February 29 with 22 on March 3, 19 on March 7, nine on March 10 and four on March 18. This is yet another instance where you can see the decline of an influx unhindered by an incoming influx. That ended the early spring passage. There were no further sightings until June; I treat those sightings as being part of the early fall passage so for that passage there were two on June 9 with singles on June 19, July 4, July 8 and July 16. There were two on July 19 with singles to July 26. There were three on August 2 with two to August 9. There were three on August 13 with six on August 16, then four seen on August 23 with three on August 27.

Veery (*Catharus fuscescens*)

This was a rare passage migrant. For the fall passage there were singles on October 2, October 6 and November 3.

Gray-cheeked Thrush (*Catharus minimus*)

This was a vagrant. For the fall passage there was one on October 6.

Bicknell's Thrush (*Catharus bicknelli*)

This was a vagrant. For the spring passage there was one on the northern border on May 27. There is a description in Appendix B.

Swainson's Thrush (*Catharus ustulatus*)

This was a rare passage migrant. For the fall passage there were singles on September 25, September 30, October 2 and October 6. For the spring passage there was one on April 15.

Hermit Thrush (*Catharus guttatus*)

A very uncommon passage migrant and winter visitor; there were only singles seen. For the fall passage there were singles on November 3 and November 9. For the winter passage there were singles on December 11, December 19 and January 1. For the early spring passage there were singles on January 28, February 2, February 6, February 23 and February 25.

Wood Thrush (*Hylocichla mustelina*)

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

American Robin (*Turdus migratorius*)

A passage migrant and winter visitor; the greatest numbers were seen during the early spring passage. For the fall passage there were singles on November 6 and November 9 with 21 on November 12 and 291 on November 16, then eight seen on November 22 with one on November 26. That closed the fall passage. For the winter passage there were 14 on November 30 with two on December 7 and one on December 11. There was one on December 27 with two on December 30 and 49 on January 7, then one seen on January 11. That completed the winter passage. For the early spring passage there were 130 on January 14 with 346 on January 21 and 1,725 on January 28, then 763 seen on February 6 with 180 on February 8, 140 on February 11, 87 on February 23 and 53 on February 25. That was the early spring passage. As often happens with the change of passage there was a major change in the numbers seen. For the late spring passage there were 180 on February 29 with five on March 3, two on March 10 and one on March 14. There were no later records.

Gray Catbird (*Dumetella carolinensis*)

A passage migrant and winter visitor; there was no major passage in the fall this year. There were no summer sightings in either year. For the fall passage there were two on September 25 with three on September 30, 16 on October 2, 22 on October 6, 34 on October 8, 40 on October 12, 61 on October 14, 64 on October 19 and 71 on October 23, then 65 seen on October 26 with 46 on October 29 and nine on November 3. There were 18 on November 6 with 20 on November 9 and 28 on November 16, then 23 seen to November 22. There were 44 on November 26 with ten on November 30. That closed the fall passage. For the winter passage there were 30 on December 4 with 35 on December 11, then 22 seen to December 22 with eight on December 27. There were 28 on December 30 with 17 to January 4. That completed the winter passage. For the early spring passage there were 19 on January 7 with 17 on January

11 and three on January 14. There were seven on January 18 with ten to January 25, 15 on January 28 and 18 on February 2, then 15 seen on February 6. There were 16 on February 8 with 19 on February 11 and 24 on February 16, then 12 seen on February 21 with 11 to February 25. There were 20 on February 29 with 12 on March 3. That ended the early spring passage. For the main spring passage there were 13 on March 7 with 18 on March 10, then nine seen on March 14. There were 11 on March 18 with 16 on March 21 and 29 on March 25, then two seen on March 27. There were 11 on March 30 with 23 on April 3, 24 on April 11, 39 on April 15 and 50 on April 19, then 40 seen on April 26 with 25 on April 30, 21 on May 2, six on May 4, two on May 13 and one on May 21.

Northern Mockingbird (*Mimus polyglottos*)

A widespread resident; there appeared to be a minor post-breeding gathering and later a minor fall passage. During the Breeding Bird Survey a total of 51 pairs located. Early fall records: *for the post-breeding gathering there were 23 on June 14 and June 22 with 33 on June 25 and 39 on July 4, then 24 seen on July 6 with 16 on July 12 and 13 on July 14. There were 19 on July 16 with 22 on July 20, then 20 seen on July 23 with 18 on August 3 and six on August 6. That was the post-breeding gathering. For the early fall passage there were 19 on August 10 with six on August 13 and five on August 18. There were 17 on August 20 with seven on August 25 and one on August 27. There were 12 on August 31 with ten to September 6 and six on September 8. There were ten on September 10 with 16 on September 17 and 19 on September 23, then 21 seen on September 30 and October 2 with 14 on October 6. That was the early fall passage. For the late fall passage there were 20 on October 8 with 30 on October 12 and 32 on October 19, then 20 seen on October 23 with 14 on October 26, nine to November 6 and eight on November 9. There were 11 on November 12 with 13 on November 19, then nine seen on November 26 with two on November 30. That closed the late fall passage. For the winter passage there were 15 on December 4 with 11 on December 7, nine on December 11 and eight on December 14. There were nine on December 19 with 15 on December 22, then five seen on December 27. There were ten on December 30 with 18 on January 1, then nine seen to January 7. That completed the winter passage. For the early spring passage there were 11 on January 11 with five on January 14. There were six from January 18 to January 25 with 11 to February 2, 16 on February 6 and 17 on February 8, then 12 seen on February 11 with nine on February 16 and six on February 21. There were 11 on February 23 with 13 on February 25 and February 29, then six seen on March 3 with five on March 7. That ended the early spring passage. For the main spring passage there were 16 on March 10 with three on March 14. There were nine on March 18 with 14 on March 21 and 20 on March 25, then ten seen on March 27. There were 11 on March 30 with 16 on April 3, then 20 seen on April 6 and April 15 with 16 on April 26 and 15 on April 30. That was the main spring passage so for the summer passage there were 20 on May 2 with 19 on May 4 and 14 on May 7. There were 15 on May 13 with 18 on May 16 and 33 on*

May 21, then 30 seen on May 27 with 26 on May 30, 25 on June 6, 22 on June 14 and 16 on June 19. That finished the summer passage. For the post-breeding gathering there were ten on June 26 and June 28 with 29 to July 4 and 36 on July 8, then 30 seen on July 12 with 21 on July 16, 19 on July 23, 15 on July 26, 14 on July 30 and seven on August 2. That closed the post-breeding gathering; just one influx this year. For the early fall passage there were 12 on August 6 with 18 on August 9, *then 11 seen on August 16 with ten on August 20.*

Brown Thrasher (*Toxostoma rufum*)

Present all year but it became very hard to find from mid-October to late February. I am always undecided as to whether they have for the most part left the area or whether they are just skulking in the cover. During the Breeding Bird Survey a total of 12 pairs located; the first broods were seen on June 29, 1999 and June 9, 2000. In the early fall there is some event that is akin to a post-breeding gathering. Early fall records: *there were five on June 25 with eight on June 29 and 14 on July 4, then seven seen on July 6 with five to July 12 and three on July 14. There were five from July 16 to July 27 with seven on August 3, then four seen to August 10 with three on August 13.* There were nine on August 18 with eight on August 25, seven on August 27 and four on August 31. There were nine on September 3 and September 6 with ten on September 10, then seven seen on September 23 with three on September 25. That was either the early fall passage or a post-breeding gathering. For the late fall passage there were eight on September 30 and October 2 with seven on October 8 and six on October 12. There were 11 on October 14 with three on October 23 and singles to November 12. That was the early end of the late fall passage. For the winter passage there was one on December 19 with two on January 1, then one seen on January 4. For the early spring passage there were two on January 11 with one on January 14. There were two on January 28 and February 6. Later there were four on February 23 with two on February 25 and February 29. That ended the early spring passage. For the late spring passage there were two on March 3 and March 7 with four on March 10 and March 18, then singles seen to March 27. There were two on March 30 with three on April 3 and April 6, then two seen to April 15. There were four on April 19 with two to April 30. That closed the late spring passage. For the summer passage there were four on May 2 with two to May 21. There were three on May 23, May 27 and June 3 with four on June 6, seven to June 14 and ten on June 19, then six seen on June 26 with five to June 30. That was the summer passage. For the "post-breeding gathering" there were seven on July 4 with five on July 12 and four on July 16. There were 12 on July 19 with nine on July 23 and four on July 26. There were eight on July 30 and August 2 with nine on August 6 and ten on August 13, *then two seen on August 16.*

European Starling (*Sturnus vulgaris*)

A resident; there was a variable population through the year. There was a major post-breeding gathering in 1999 which was followed by very low numbers during the early fall passage. In the late fall there was a noticeable passage with a one day event during the winter passage. Numbers were low through the early spring passage but there was a marked late spring passage; again numbers were low during the summer passage. Finally there was a post-breeding gathering; that passage was lighter this year. During the Breeding Bird Survey a total of 11 pairs located. Early fall records: *for the post-breeding gathering there were 44 on May 25 with 157 on May 29, then 155 seen on May 31 with 145 on June 5. There were 275 on June 7 with 563 on June 12 and 680 on June 19, then 580 seen on June 22 with 540 on June 25. There were 770 on June 29 with 695 on July 6, 625 on July 12 and 275 on July 14. There were 735 on July 16 with 620 on July 20, 158 on July 23, 135 on July 27, 22 on August 3, seven on August 6, five on August 10 and one on August 13.* That was the very long post-breeding gathering. For the remainder of the early fall passage there were six on August 20 with seven on August 27, then three seen to September 10 with two on September 17. There were three on September 23 with five on September 30 and six to October 8. That ended the early fall passage. For the main fall passage there were two on October 19 with 22 on October 23, 38 on October 26, 96 on November 3 and 154 on November 9, then 65 seen on November 16 with 50 on November 19, 19 on November 22, five on November 30 and three on December 4. That closed the main fall passage. For the winter passage there were 16 on December 7 with 168 on December 19, then 13 seen on December 22 with six on December 27, three on December 30 and two on January 1. That completed the winter passage. For the early spring passage there were four on January 4 with 35 on January 11 and January 14, then 27 seen on January 21 with 17 on January 25 and five on January 28. There were 12 on February 2 with 44 on February 6, then 23 seen on February 8 with 16 on February 11 and four on February 16. There were 19 on February 21 with ten on February 23 and nine on February 25. That concluded the early spring passage. This species nests very early so there was no late spring passage. For the summer passage there were 23 on February 29 with 32 on March 3, then 13 seen on March 7. There were 18 on March 10 with 158 on March 14, then 84 seen on March 18 with 13 on March 21. There were 29 on March 25 with 173 on March 27, then 36 seen on March 30 with six to April 6 and five on April 11. There were ten on April 15 and April 19 with 12 on April 26 and 20 on April 30, then 16 seen on May 2 with 11 on May 4 and one on May 7. That ended the summer passage. For the post-breeding gathering there were eight on May 13 with 14 on May 16, 35 on May 21, 100 on May 27, 107 on May 30 and 161 on June 3, then 104 seen on June 6 with 15 on June 9. There were 157 on June 14 with 177 on June 19, 247 on June 26 and 300 on June 30, then 67 seen on July 4 with 54 on July 8 and six on July 12. There were 590 on July 16 with 133 on July 19, 84 on July 23 and three on July 26. That was the post-breeding gathering. For the early fall passage there were 12 on July 30 with 18 on August 2, then eight seen on August 9 with two on August 13.

American Pipit (*Anthus rubescens*)

A common passage migrant and winter visitor; the greatest numbers were seen during the fall passage. For that passage there was one on October 26 with three on October 29, 15 on November 3, 200 on November 9, 256 on November 12 and 273 on November 14, then 141 seen on November 16 with 107 on November 19 and 75 on November 22. There were 143 on November 26 with 109 on November 30 and 36 on December 4. That closed the fall passage. For the winter passage there were 72 on December 7 with 26 to December 14. There were 80 on December 19 with 145 on December 22, then 140 seen on December 27 with 65 on December 30 and 25 to January 4. That completed the winter passage. For the early spring passage there were 160 on January 7 with 172 on January 11, then 58 seen on January 18 with ten on January 21. There were 41 on January 25 with 46 on January 28, then 35 seen on February 2. There were 43 on February 6 with 70 on February 8, then 34 seen on February 11. There were 48 on February 16 with 120 on February 11 and 125 on February 23, then 110 seen on February 25 with 35 on March 3, 29 on March 7, ten on March 10 and one on March 14. That closed the early spring passage; there were no later records.

Cedar Waxwing (*Bombycilla cedrorum*)

There were no fall or winter sightings; there was however a minor early spring passage which was followed by a major late spring passage. For the early spring passage there were 22 on January 11 with eight on January 21. There were 26 on January 28 with five to February 6. There were 24 on February 8 with three on February 16 and one on February 21. Finally for the early spring passage there were two on February 25. There was now a month long gap before the next sighting. For the main spring passage there were nine on March 25. Later there were four on April 11 with 37 on April 15, 75 on April 19, 140 on April 26, 252 on April 30 and 256 on May 2, then 173 seen on May 4 with 125 on May 7 and 49 on May 13. There were no later records.

Blue-winged Warbler (*Vermivora pinus*)

This was a vagrant. For the early fall passage there was one on August 27.

Tennessee Warbler (*Vermivora peregrina*)

This was an uncommon fall passage migrant. For the early fall passage there were singles on August 31 and September 3 with three on September 17, then one seen on September 25. For the main fall passage there were two on October 2 with one on October 8.

There were three on October 14 with two on October 19 and October 23. There were no later records.

Orange-crowned Warbler (*Vermivora celata*)

A passage migrant and winter visitor; the greatest numbers were seen during the spring passage. For the fall passage there was one on October 26 with two to November 3, three on November 6 and five on November 9, then three seen to November 22 with one on November 26. That closed the fall passage. For the winter passage there were four on November 30 with five on December 7, then two seen to December 14. There were five on December 19 with three on December 22 and two on December 27. There were five on December 30 with three on January 1 and two on January 4. That completed the winter passage. For the early spring passage there were five on January 7 with two to January 14 and one on January 18. There were three on January 21 with four on January 25 and seven on January 28, then six seen on February 6 with three on February 8. There were six on February 11 with seven on February 16, eight on February 23 and 15 on February 29, then five seen on March 3 with four on March 7, three on March 10, two to March 21 and singles to March 27. That last influx showed that there were no new arrivals during the last month of the passage.

Nashville Warbler (*Vermivora ruficapilla*)

This was a vagrant. For the early spring passage there was one on January 28. It was with a wandering flock of Yellow-rumped Warblers that was making their way through the woods by Lake Apopka.

Northern Parula (*Parula americana*)

A summer visitor to the wooded borders; sightings were limited when they stopped singing. There was a minor fall passage in 1999. During the Breeding Bird Survey a total of two pairs located. Early fall records: *there was one on August 13* with three on August 25, then one seen on August 31. There were three on September 3 with four on September 17, then one seen on September 25. That was the early fall passage. For the late fall passage there were four on October 6 with three on October 12, two on October 14 and one on October 19. That closed the late fall passage. There were no winter sightings. For the spring passage there were four on February 29 with two on March 3 and singles to March 14. There were two on March 18 with singles to March 30. That was the spring passage. As this species nest so early we go straight to the summer passage there were three on April 3 with singles to April 15. There were three on

April 19 with four on April 26 and five on May 2, then singles seen to May 21. Finally for the summer passage there were three on June 6. There were no records for the early fall passage.

Yellow Warbler (*Dendroica petechia*)

This was a common fall passage migrant; there were no sightings for the spring passage. Early fall records: *there were eight on August 3 with 49 on August 6, then 15 seen on August 13 with ten on August 18. There were 27 on August 20 with 57 on August 25, then 53 seen on August 31 with 46 on September 3, 37 on September 6, 18 on September 8, 15 on September 10 and ten to September 23. There were 25 on September 25 with 16 on October 2, five on October 6 and one on October 14. That completed the early fall passage; there were no later records. There were also no records for the spring passage. For the following early fall passage there was one on July 19 with four on July 30, then one seen on August 2. There were four on August 6 with nine on August 9, 55 on August 13 and 64 on August 16, then 35 seen on August 20 with 31 on August 23, 18 on August 27, 13 on August 30 and eight to September 7. There were 19 on September 10 and September 19 with 15 on September 21, six on September 27 and two on October 1.*

Chestnut-sided Warbler (*Dendroica pensylvanica*)

This was a vagrant. For the fall passage there were singles on October 8, October 14 and October 19; all from very different locations.

Magnolia Warbler (*Dendroica magnolia*)

This was a vagrant. For the fall passage there were singles on September 23, October 14 and October 19.

Cape May Warbler (*Dendroica tigrina*)

This was a rare spring passage migrant. For the spring passage there were two on April 15 with singles on April 19, May 2 and May 4.

Black-throated Blue Warbler (*Dendroica caerulescens*)

A rare fall passage migrant; there was a single spring record. For the early fall passage there was one on August 27. For the main fall passage there were singles on October 2, October 8 and October 19. For the spring passage there was one on April 26.

Yellow-rumped Warbler (*Dendroica coronata*)

A passage migrant and winter visitor; the greatest numbers were seen during the early spring passage. For the fall passage there were two on October 29 with 55 on November 3, 56 on November 6 and 90 on November 12, then 66 seen on November 16 with 54 on November 19, 47 on November 22 and 28 on November 26. That closed the fall passage. For the winter passage there were 77 on November 30 with 153 on December 7, then 70 seen to December 14 with 36 on December 19. There were 66 on December 22 with 87 on December 27 and 92 on December 30, then 57 seen on January 1 with 55 on January 4. That completed the winter passage. For the early spring passage there were 82 on January 7 with 225 on January 14 and 351 on January 21, then 262 seen on January 25 with 164 on January 28 and 120 on February 2. There were 295 on February 6 with 93 on February 8 and 33 on February 11. There were 71 on February 16 with 98 on February 21, then 67 seen on February 23 with 62 on February 25. That was the early spring passage. For the late spring passage there were 94 on February 29 with 105 on March 3, then 48 seen on March 7 with 46 on March 10. There were 80 on March 14 with 28 on March 21, four on March 25 and two on March 27.

Black-throated Green Warbler (*Dendroica virens*)

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

Blackburnian Warbler (*Dendroica fusca*)

This was a vagrant. For the late fall passage there were two on October 2; they were in the woods on the eastern border.

Yellow-throated Warbler (*Dendroica dominica*)

This was a rare passage migrant. For the early fall passage there was one on August 25 with later one on September 25. For the late fall passage there was one on November 9.

Pine Warbler (*Dendroica pinus*)

This was an uncommon fall and early spring passage migrant. For the fall passage there was one on September 30. Later there was one on October 19 with six on October 29. That was the fall passage. There were no winter sightings. For the early spring passage there were two on January 25 with singles on February 2, February 6 and February 8. Later there was one on February 16 with two on February 23, then one seen on February 29.

Prairie Warbler (*Dendroica discolor*)

An uncommon passage migrant and winter visitor; normally there were no more than three a day seen. Early fall records: *there were singles on July 23 and July 27 with three on August 3, then two seen on August 6. There were three from August 10 to August 18 with four on August 20 and August 25, then one seen on August 27.* There were three on September 3 with six on September 6, then two seen on September 8 with one on September 10. There were 13 on September 17 with five on September 23, three on September 25, two to October 2 and one on October 6. That was the early fall passage. For the late fall passage there were two on October 8 with three on October 12, then two seen to October 19. There were four on October 23 with singles to November 3. There were two on November 6 with singles to November 22. There were two on November 26 with singles to December 4. That closed the late fall passage. For the winter passage there were two on December 7 with singles to January 1. For the early spring passage there were two on January 14 with singles to January 28. There were two on February 6 with three on February 8, then two seen on February 11 with singles to February 23. There were three on February 25 with two on February 29. That ended the early spring passage. For the main spring passage there were singles on March 14 and March 21 with three on March 25, then singles seen to April 6. There were three on April 11 with four on April 15, then two seen on April 26 with one on April 30. That concluded the main spring passage. There were no summer sightings. For the early fall passage there were two on July 19 with three on July 23, then two seen on July 30 with one on August 6. There were three on August 9 with seven on August 13 *and ten on August 16, then one seen on August 20.*

Palm Warbler (*Dendroica palmarum*)

Seen in quite low numbers this year from September to May; there were minor short-lived passages in October, December and February. For the fall passage there were three on September 17 with six on September 23, 24 on September 25, 63 on September 30 and 65 on October 2, then 56 seen on October 6 with 19 on October 8. There were 67 on October 12 with 123 on October 14 and 234 on October 19, then 150 seen on October 23 with 58 on October 26, 55 on October 29 and 53 on November 3. There were 56 on November 6 with 26 on

November 9. There were 53 on November 12 with 103 on November 16, then 47 seen on November 19 with 42 on November 22. There were 82 on November 26 with 26 on November 30. That closed the fall passage. For the winter passage there were 71 on December 4 with 100 on December 7, 110 on December 14, 112 on December 22 and 142 on December 30, then 127 seen on January 1 with 123 on January 7, 87 on January 11 and 21 on January 14. That completed the winter passage. For the early spring passage there were 42 on January 18 with 72 on January 21, 94 on January 28, 105 on February 6 and 170 on February 8, then 107 seen on February 16 with 43 on February 21 and 30 on February 23. There were 65 on February 25 with 77 on February 29, then 38 seen on March 3. That ended the early spring passage. For the late spring passage there were 42 on March 7 with 62 on March 10, then 50 seen on March 14 with 29 on March 18. There were 42 on March 21 with 46 on March 25, then ten seen on March 27. There were 25 on March 30 with 26 on April 3 and 55 on April 6, then 27 seen on April 11 with 24 on April 15 and 20 on April 19. Once again this species had a round up influx there being 31 on April 26 with 21 on April 30 and one on May 2.

Bay-breasted Warbler (*Dendroica castanea*)

This was a vagrant. For the fall passage there was one on October 19; this was in the woods on the eastern border.

Blackpoll Warbler (*Dendroica striata*)

A spring passage migrant; there were no October sightings this year. For the spring passage there was one on April 15 with eight on April 26 and ten on April 30, then one seen on May 2. There were also two on May 4 with one on May 13.

Cerulean Warbler (*Dendroica cerulea*)

This was a vagrant. For the early fall passage there was one on August 13; this was in the woods on the northern border.

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

A scarce passage migrant and winter visitor; there were no early fall records from the previous survey year. For the early fall passage there was one on August 25 with two on August 31. There were no September records. For the main fall passage there were singles on October 6, October 19 and November 30. For the winter passage there was one on December 22. For

the early spring passage there were singles on January 7, January 25, January 28 and February 23. For the main spring passage there were two on April 15 with one on April 30. Finally there were two on May 2.

American Redstart (*Setophaga ruticilla*)

This was a quite common passage migrant in both the spring and the fall. Early fall records: *there were singles on August 6 and August 13* with two on August 18, then one seen on August 20. There were two on August 25 with seven on August 27, then three seen to September 3 with one on September 6. There were three on September 17 with four on September 23 and 11 on September 25, then two seen on September 30. That was the early fall passage. For the late fall passage there were eight on October 2 and October 8 with seven to October 19 and one on October 23. That closed the late fall passage. For the spring passage there were singles on March 10, April 15 and April 19 with five on April 26 and 12 on April 30, then two seen on May 2 with one on May 4. There were two on May 7 with three on May 13, then two seen on May 16. That completed the spring passage. For the early fall passage there were eight on August 13 *with five on August 16, four on August 20 and two on August 23.*

Prothonotary Warbler (*Protonotaria citrea*)

This was an uncommon passage migrant. For the early fall passage there were singles on August 25 and September 17. For the spring passage there was one on April 6. Finally for the early fall passage there was one on August 13.

Worm-eating Warbler (*Helmitheros vermivora*)

This was a vagrant. For the late fall passage there was one on October 8; this was in the woods on the eastern border.

Ovenbird (*Seiurus aurocapilla*)

A passage migrant and winter visitor; the greatest numbers were seen during the fall passages. For the early fall passage there was one on August 27 with two on September 3 and four on September 6, then three seen to September 10 with one on September 17. There were nine on September 23 with eight on September 30 and four on October 2. That was the early fall passage. For the late fall passage there were nine on October 6 with eight on October 8, six to October 19, four on October 23, three on October 29 and two to November 9. Finally for the

late fall passage there were three on November 12. For the winter passage there were singles on December 4, December 7, December 11, December 14, December 22, December 30, January 1, January 4 and January 7. For the early spring passage there were singles on February 8 and February 11 with two on February 16 and February 21, then one seen on February 23. Finally for the early spring passage there were two on February 29. For the late spring passage there were singles on March 10, March 18, April 30, May 2 and May 27.

Northern Waterthrush (*Seiurus noveboracensis*)

A fall passage migrant with a much shorter passage in the spring; a single individual stayed through the winter. For the early fall passage there were two on August 27 with four on September 3, then two seen on September 6. There were three on September 8 with four to September 17, seven on September 23 and ten on September 25, then four seen on September 30 with three on October 2. That was the early fall passage. For the late fall passage there were nine on October 6 with four on October 8 and two on October 12. There were four on October 14 with three on October 23 and one on October 26. That closed the late fall passage. From November 19 to February 16 a single individual wintered by the Lake Level Canal. For the late spring passage there were singles on March 7 and April 11 with two on April 15, then one seen on April 19. There were 11 on April 26 and April 30 with three on May 2 and one on May 13.

Louisiana Waterthrush (*Seiurus motacilla*)

An early fall passage migrant and a late spring passage migrant; there were no sightings outside of these two events. Early fall records: *there was one on August 10 with two on August 13*, four on August 20 and five on August 25, then two seen on August 27 with one on August 31. There were five on September 3 and September 6 with four on September 10, three on September 17 and one on September 23. That closed the early fall passage. There were no further sightings until the late spring passage. For that event there was one on March 7 with two on March 10, then singles seen on March 18, March 25 and March 30. There were two on April 3 with one on April 6. There were three on April 15 with one on April 19. That completed the late spring passage. For the early fall passage there were singles on July 23, July 26 and August 9 with eight on August 13 *and 34 on August 16, then 23 seen on August 20 with 18 on August 27, five on August 30 and singles to September 13.*

Common Yellowthroat (*Geothlypis trichas*)

A common fall passage migrant with decreasing numbers through to the spring; there were no summer records. Early fall records: *there were singles on August 6 and August 13 with*

two on August 25 and August 27, then one seen on August 31. There were 13 on September 3 with 23 on September 6, 27 on September 10, 57 on September 17 and 176 on September 25, then 56 seen on September 30. That was the early fall passage. For the late fall passage there were 81 on October 2 with 80 on October 6 and 47 on October 8. There were 65 on October 12 with 69 on October 14 and 112 on October 19, then 68 seen on October 26 with 47 on October 29, 36 on November 3, 31 on November 9 and 17 on November 12. There were 31 on November 16 with 32 on November 19 and 37 on November 26, then 15 seen on November 30. That was the late fall passage. For the winter passage there were 43 on December 4 with 53 on December 11, then 43 seen on December 14. There were 44 on December 19 with 52 on December 22, then 47 seen on December 27. There were 50 on December 30 with 54 on January 1, then 46 seen on January 7 with 40 on January 11 and 14 on January 14. That completed the winter passage. For the early spring passage there were 34 on January 18 with 29 on January 21 and 25 on January 25. There were 61 on January 28 with 35 on February 2. There were 60 on February 6 and 68 on February 8, then 63 seen on February 11 with 54 on February 16, 29 on February 21 and 28 on February 23. There were 34 on February 25 with 45 on February 29, then 44 seen on March 3 with 26 on March 7. That finished the early spring passage. For the late spring passage there were 62 on March 10 with 26 on March 14 and 17 on March 18. There were 35 on March 21 with 33 on March 25 and eight on March 27. There were 13 on March 30 with 24 on April 3, then 13 seen on April 6. There were 15 on April 11 with 19 on April 15 and 26 on April 26, then 15 seen on April 30 with 13 on May 2, four on May 4 and three on May 7. There were six on May 13 with three on May 16, two on May 23 and singles on May 27, May 30 and June 6. That concluded the late spring passage. There were no later sightings.

Hooded Warbler (*Wilsonia citrina*)

This was a vagrant. For the early fall passage in 2000 there was a female on August 6 on the eastern border with a male on August 9 on the northern border. There had been no sightings earlier in the year.

Wilson's Warbler (*Wilsonia pusilla*)

This was a vagrant. For the early spring passage there was one on February 8; this was in the woods by the Hooper Farms Road gate.

Yellow-breasted Chat (*Icteria virens*)

A summer visitor a strange statement as this species is not meant to breed in central Florida. During the Breeding Bird Survey a total of 19 pairs located; a brood of two was seen on July 19. This species has now bred in every year from 2000 to at least 2013. For the spring passage there was one on April 19. For the summer passage there were singles on May 13 and May 16 with seven on May 21, then three seen on May 23 with one on May 27. There were eight on May 30 and June 3 with 11 on June 9, then six seen on June 19 with five to June 28. There were nine on June 30 with five on July 4 and singles to July 12. There were two on July 16 with five on July 19, then singles seen to July 26. There were two on July 30 with one on August 2. That completed the summer passage.

Summer Tanager (*Piranga rubra*)

This was a rare fall passage migrant. For the late fall passage there were singles on September 30 and October 8 with two on October 19. For the early fall passage of the following year there was one on July 16.

Scarlet Tanager (*Piranga olivacea*)

This was a vagrant. For the late fall passage there was one on October 2; this was by Canal Road.

Eastern Towhee (*Pipilo erythrophthalmus*)

A resident in the scrub borders; during the Breeding Bird Survey a total of 48 pairs located. Early fall records: *there were eight on July 14 with four on July 16. There were five from July 20 to July 27 with six on August 3, then three seen to August 10. There were five on August 13 with six on August 18 and seven on August 20, then five seen to September 3 with four on September 6 and two on September 8. There were three on September 10 and September 17 with seven on September 23, then five seen on September 25 with two on September 30. That was the early fall passage. For the late fall passage there were three on October 2 with five on October 6, eight on October 12 and nine on October 14, then seven seen to October 23 with four on October 29 and three to November 6. There were five on November 9 and November 12 with three on November 16 and one on November 19. That closed the late fall passage. For the winter passage there were two on November 22 and November 26 with three on November 30 and four on December 4, then one seen on December 7. There were two from December 11 to December 19 with three on December 22, four on December 27 and nine on*

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

Chipping Sparrow (*Spizella passerina*)

This was a rare passage migrant and winter visitor. For the fall passage there was one on October 12. For the winter passage there were singles on December 7, December 27 and January 7. There were no later records.

Clay-colored Sparrow (*Spizella pallida*)

A minor early spring passage migrant; there were no winter sightings for this year. For the early spring passage there were three on January 11. Later there were singles on February 2, February 6, February 8, February 11, February 16, February 21, February 23, February 25 and February 29. That was the early spring passage; there were no later records.

Field Sparrow (*Spizella pusilla*)

This was a spring passage migrant. There were two on January 11, January 14 and January 18 with three on January 25 and five from February 2 to February 25, then four seen on February 29 with two on March 3. That closed the early spring passage. For the late spring passage there were two on March 7 and March 10 with three on March 14, March 18 and March 21. There were no later records.

Vesper Sparrow (*Pooecetes gramineus*)

A passage migrant and winter visitor; the greatest numbers were seen during the early spring passage. For the fall passage there were three on November 6 and November 9 with singles to November 30. That was the extent of the fall passage. For the winter passage there was one on December 11 with two on December 14, then six seen on December 19 and December 22 with four on December 27, three on December 30 and one on January 1. That completed the winter passage. For the early spring passage there were five on January 4 with nine on January 7, then four seen on January 11 with three to January 21 and two on January 25. There were six on January 28 with two on February 2 and one on February 8. There were 12 on February 11 with four on February 16, three on February 23 and one on February 25. That closed the early spring passage so for the late spring passage there were 15 on February 29 with 12 on March 10 and singles on March 14 and March 18.

Lark Sparrow (*Chondestes grammacus*)

This was a vagrant. For the early fall passage there was one on August 18; this was at the eastern end of Lust Road. For the late fall passage there was another on September 30, October 2 and October 6; this one was at the northern end of Laughlin Road.

Savannah Sparrow (*Passerculus sandwichensis*)

A common passage migrant and winter visitor; the greatest numbers were seen from late October to early February. For the fall passage there was one on October 6 with 12 on October 12, 30 on October 14, 52 on October 19 and 140 on October 23, then 75 seen on October 26 with 53 on October 29. There were 77 on November 3 with 135 on November 6, 180 on November 9 and 300 on November 12, then 180 seen on November 16 with 90 on November 22. There were 125 on November 19 with 160 on November 26, then 117 seen on November 30 with 70 on December 4. That closed the fall passage. For the winter passage there were 100 on December 7 with 235 on December 11 and December 19, then 100 seen on December 22 with 75 on December 27. There were 110 on December 30 with 125 on January 1 and 135 on January 4, then 110 seen on January 7 with 65 on January 11 and 40 on January 14. That completed the winter passage. For the early spring passage there were 115 on January 18 with 55 on January 21. There were 90 on January 25 with 110 on January 28, then 60 seen on February 2 with 57 on February 6. There were 82 on February 8 with 165 on February 16, then 23 seen on February 21. There were 35 on February 23 with 45 on February 25, then 39 seen on February 29. That ended the early spring passage. For the late spring passage there were 42 on March 3 with 55 on March 10 and 61 on March 18, then 60 seen on March 25 with 35 on March

27. There were 45 on March 30 with 51 on April 3, then 44 seen on April 6 with 41 on April 11, 37 on April 15, 29 on April 19, 21 on April 26, 12 on April 30, seven on May 2, six on May 4, three to May 16 and singles to May 30.

Grasshopper Sparrow (*Ammodramus savannarum*)

A very uncommon winter and spring passage migrant; there were only two winter records. For that passage there were singles on December 4 and December 22. For the early spring passage there were singles on January 25, February 2, February 6 and February 8 with two on February 11. That was the extent of the early spring passage. For the main spring passage there were two on March 7 with singles on March 10 and March 14. There were four on March 27 with two on April 3 and one on April 19.

Le Conte's Sparrow (*Ammodramus leconteii*)

This was a vagrant. For the early spring passage there was one on January 18; this was on Potter's Farm.

Song Sparrow (*Melospiza melodia*)

An uncommon passage migrant and winter visitor; this is a secretive species so it is probably under-recorded. For the fall passage there were singles on October 26, November 3, November 9 and November 12 with two on November 16, then one seen on November 19. That was the fall passage. For the winter passage there were two on December 7 with three on December 19, then singles seen to December 30. Finally for the winter passage there were two on January 1. For the early spring passage there was one on January 18 with two on January 21, then singles seen on February 6, February 8 and February 16. There were two on February 25 with singles on February 29, March 7 and March 10. That completed the early spring passage; there were no later records.

Lincoln's Sparrow (*Melospiza lincolni*)

A very uncommon winter visitor and spring passage migrant; this species is even more secretive than the Song Sparrow. For the winter passage there were singles on December 7 and December 22. For the early spring passage there was one on January 18 with two on January 21, then singles seen on February 8 and February 16. There were two on February 23 with three

on February 25, then singles seen on February 29 and March 3. That closed the early spring passage. For the late spring passage there was one on March 14.

Swamp Sparrow (*Melospiza georgiana*)

A passage migrant and winter visitor; they were only seen in low numbers which was in sharp contrast to the numbers seen in later years (the high count is now (2014) that of 1,126 on November 21, 2004). For the fall passage there was one on October 19 with five on October 23, 11 on October 26 and 13 on November 3, then eight seen on November 6. There were 11 on November 9 with 12 to November 16, 33 on November 22 and 53 on November 26, then 19 seen on November 30. That closed the fall passage. For the winter passage there were 23 on December 4 with 59 on December 7 and 70 on December 11, then 58 seen on December 14 with 38 on December 19. There were 46 on December 21 with 57 on December 27 and 73 on January 1, then 41 seen on January 4 with 40 on January 7, 35 on January 11 and two on January 14. That completed the winter passage. For the early spring passage there were 27 on January 18 with 32 on January 21 and 40 on January 28, then 35 seen on February 6 with 31 on February 8. There were 45 on February 11 with 26 on February 16 and 15 on February 21. There were 16 on February 23 with 25 on February 25, then 14 seen on February 29. That ended the early spring passage. For the late spring passage there were 12 on March 7 with 24 on March 10, then seven seen on March 14. There were 16 on March 18 with 24 on March 21, then 21 seen on March 25 with ten on March 27. There were 11 on March 30 with 13 on April 3 and 32 on April 6, then 25 seen on April 15 with 12 on April 19, five on April 26, three on April 30, two on May 4 and one on May 7.

White-throated Sparrow (*Zonotrichia albicollis*)

This had vagrant status this year. For the fall passage there were singles on October 19 and November 3 that was it.

White-crowned Sparrow (*Zonotrichia leucophrys*)

Unlike last year this was a rare passage migrant and winter visitor. For the fall passage there were two on November 16 that was it. For the winter passage there was one on December 19 with two on December 22. For the early spring passage there were singles on January 11, January 25, February 8, February 23 and March 3. Finally and more normally for the late spring passage there were nine on April 3.

Northern Cardinal (*Cardinalis cardinalis*)

A widespread resident as expected numbers were highest during the summer months although there were indications of a minor passage in October. During the Breeding Bird Survey a total of 176 pairs located. Early fall records: *there were 24 on July 16 with 30 on July 20 and 31 on July 23, then 29 seen on July 27 with 22 to August 13 and 12 on August 18.* There were 27 on August 20 with 34 on August 25 and 35 on August 27, then 20 seen on August 31. There were 26 on September 3 with 30 on September 6, then 15 seen on September 8. There were 25 on September 10 with 29 on September 17, 34 on September 23, 35 on September 25, 41 on October 2 and 54 on October 6, then 44 seen on October 8. That closed the early fall passage. For the main fall passage there were 47 on October 12 with 73 on October 14, then 60 seen on October 19 with 45 on October 23. There were 50 on October 26 with 53 on October 29, then 30 seen on November 3. It was the last two influxes that might indicate a fall passage. There were 36 on November 6 with 46 on November 9, then 29 seen on November 12 with 23 on November 16. There were 36 on November 19 with 30 on November 26 and 13 on November 30. That closed the main fall passage. For the winter passage there were 33 on December 4 with 34 on December 11, then 28 seen on December 19 with 26 on December 22 and 12 on December 27. There were 28 on December 30 with 33 on January 1 and 39 on January 4, then 38 seen on January 7 with 30 on January 11 and 23 on January 14. That completed the winter passage. For the early spring passage there were 30 on January 18 and January 21 with 33 on January 25 and 61 on January 28, then 53 seen on February 2. There were 55 on February 6 with 56 on February 8 and 69 on February 11, then 61 seen on February 16 with 52 on February 21 and 42 on February 23. There were 44 on February 25 with 65 on February 29, then 63 seen on March 3 with 52 on March 7. That ended the early spring passage. For the late spring passage there were 69 on March 10 with 49 on March 14 and 45 on March 18. There were 66 on March 21 with 58 on March 25 and 30 on March 27. There were 38 on March 30 with 52 on April 3 and 74 on April 11, then 71 seen on April 15 with 65 on April 19. That finished the late spring passage. For the summer passage there were 73 on April 26 with 75 on April 30 and 80 on May 2, then 53 seen on May 4 with 25 on May 7. There were 67 on May 13 with 77 on May 21, then 71 seen on May 23 with 57 on May 27 and 52 on May 30. There were 75 on June 3 with 87 on June 6, then 66 seen on June 9 with 64 on June 14, 55 on June 19 and 54 on June 26. There were 69 on June 28 with 86 on June 30, then 70 seen on July 4 with 68 on July 8, 65 on July 12, 55 on July 19 and 45 on July 23. That long decline is often an indicator that a major passage has come to an end in this case the summer passage. So for the early fall passage there were 50 on July 26 with 52 on July 30 and 53 on August 2, then 52 seen on August 9 with 40 on August 13.

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant. For the spring passage there was a female on April 30; this was by Canal Road.

Blue Grosbeak (*Guiraca caerulea*)

A summer visitor and passage migrant although the passage was light this year; this species is not meant to winter in the United States but it does so at Zellwood. During the Breeding Bird Survey a total of 59 pairs located; broods were first seen from June 19 to August 18. Early fall records: *there were 11 on July 16 with 13 on July 20, then 11 seen on July 27 with, six on August 3 and five on August 6. There were ten on August 10 with 18 on August 13, then ten seen on August 18 with eight on August 20. There were 11 on August 25 with seven to September 3, three on September 6 and two to September 10. There were four on September 17 and September 25 with three on September 30. That was the early fall passage. For the late fall passage there were nine on October 2 with four on October 6 and singles to October 12. There were five on October 14 and October 19 with singles to November 9. That was the early end of the late fall passage. Now for the passage that is not meant to exist; the winter passage; there were singles on November 26, December 22, January 1 and January 11. For the early spring passage there were singles on January 14 and January 18 with two on January 21 and January 25, then one seen on January 28. There were three on February 2 with singles to February 29. That ended the early spring passage. There was now a break of nearly a month; this break has been recorded in later years. For the main spring passage there were two on March 25. Later there was one on April 3 with two on April 6, then one seen on April 11; now the summer visitors started to arrive. There were two on April 15 with seven on April 19, 13 on April 26 and 23 on April 30, then 22 seen on May 2 with 11 on May 4 and seven on May 7. That concluded the main spring passage. For the summer passage there were 20 on May 13 with 24 on May 21, then 23 seen to June 3 with 19 on June 6. There were 30 on June 9 with 20 to June 19. That was the summer passage. For the early fall passage there were 29 on June 26 and June 28 with 39 on July 4, then 35 seen on July 8 with 24 to July 16. The count of 39 was the highest count for Zellwood but the highest count is now (2014) that of 72 on October 1, 2006. There were 31 on July 19 with 30 on July 26, 27 on July 30 and 19 on August 2. There were 24 on August 6 with 33 on August 9, then 23 seen on August 13 with 22 on August 20, 18 on August 27, ten on August 30, eight on September 3, six on September 7 and five to September 13.*

Indigo Bunting (*Passerina cyanea*)

A summer visitor with a minor passage in the fall; outside of these two events numbers were very low with no records for December. During the Breeding Bird Survey a total of 32 pairs located; the only brood recorded was that of two on July 8, 2000. Early fall records: *there were six on July 4 and July 6 with three to July 12 and two to July 20. There were three from July 23 to August 10 with two on August 13 and one on August 18. There were two on August 25 with singles to September 8. Now there was a minor fall passage from September 17 to November 16. There was one on September 17 with six on September 25 and 22 on October 2, then 19 seen on October 8 with 11 on October 12. There were 16 on October 14 with 25 on October 19, then eight seen on October 23 with five on October 26, three on October 29, two on November 6 and singles to November 16. There were three on November 19 with singles to November 30. That closed what appeared to be a single fall passage. There were no December sightings. For the early spring passage there were singles on January 4 and January 11. Later there were two on January 28, February 2 and February 6 with three on February 8, then two seen to February 16 with one on February 21. There were two on February 25 with three on February 29 and March 3, then one seen on March 7. That concluded the early spring passage. For the main spring passage there was one on March 10 with two on March 18. Later there were two on April 3 with five on April 6, eight on April 15, 22 on April 26 and 28 on April 30, then 14 seen on May 2 with 11 on May 4 and six on May 7. That ended the main spring passage. For the summer passage there were eight on May 13 and May 16 with 14 on May 21, then seven seen on May 23 with six on May 27. There were 14 on May 30 and June 6 with nine on June 9 and six on June 14. That finished the summer passage. For the early fall passage there were 15 on June 19 and June 28 with 19 on June 30 and 21 on July 4, then 17 seen on July 8 with eight to July 16 and seven on July 19. There were ten on July 23 with 13 on July 26, then 12 seen on July 30 with nine on August 2 and five to August 9. There were seven on August 13 *with four on August 16 and one on August 20.**

Painted Bunting (*Passerina ciris*)

A non-breeding summer visitor; outside of the breeding season it is secretive so it is hard to know what is the real situation. With the cessation of song they appeared to leave as there were no sightings from early August to the end of September. Whilst there were records for October and December there was only one record for November. There were sightings through to early March. As with the other species (Blue Grosbeak and Indigo Bunting) there was a break in the sightings from early March to late April; as you can see this appears to be one of the more complicated species. During the Breeding Bird Survey a total of nine males or immature males were found on territory. No females were identified. Early fall records: *there was one on June 22 with two to July 4, then three seen on July 6 and July 12 with singles to July*

27. *There were two on August 3 with singles to August 10.* That was the early end of the early fall passage. For the late fall passage there were three on September 30 with two to October 6 and singles to October 23. Later there were three on November 9. That was the premature end of the late fall passage. There was now a gap of over a month until the winter passage started. For the winter passage there were two on December 19 with singles on December 22 and December 30. For the early spring passage there was one on January 11 with three on January 14, then two seen on January 18 with singles to January 28. There were two on February 2 with three on February 6, then singles seen to February 16. There were also two on February 25 with one on March 3 and March 10. That finished the early spring passage. For the late spring passage; well there was no late spring passage! For the summer passage there were six on April 26 with four on April 30, three to May 4 and one on May 7. There were two on May 13 with five on May 21, then singles seen to May 27. There were two on May 30 with four on June 3, then three seen on June 9 with two on June 14. There were three on June 19 with four on June 28 and six on June 30, then five seen on July 8 with two to July 16 and one on July 19. That was the summer passage. For the early fall passage there were two on July 23 and July 26 with singles to August 13.

Dickcissel (*Spiza americana*)

A summer visitor; now that is not the statement that one would expect for a species that is not meant to breed any nearer than northern Georgia. During the Breeding Bird Surveys of 1999 and 2000 there were a total of 13 pairs in 1999 and eight pairs in 2000. In 1999 females were seen; there was a brood of two on June 29. In 2000 a single female was seen. Early fall records: *there were two males on June 14 with three on June 19, five on June 25 and eight on June 29, then five seen on July 6 with one on July 9. During this influx there was a female and the two juveniles on June 29 with a female on July 6. The count of 11 on June 29 was the highest count for Zellwood but the highest count is now (2014) that of 143 on May 22, 2005. That was the end of the summer passage. For the early fall passage there were three on July 12 with one on July 12.* For these I did not note sex or age. Finally for the late fall passage there was one on October 2. In 2000 there were for the summer passage four males on April 30 and May 2 with six to May 7 and seven on May 16, then three seen on May 21. During this influx there were single females on April 30 and May 4. There were four males on May 23 and May 30 with five on June 3, then three seen on June 6 with two on June 9.

Bobolink (*Dolichonyx oryzivorus*)

A very common spring passage migrant; numbers during the fall passage were by comparison minimal. For the early fall passage there were 24 on August 27 with 104 on August

31, then 93 seen on September 3 with ten on September 8 and six on September 10. There were 27 on September 17 with three on September 25 and two to October 2. That closed the early fall passage. There were no later sightings. For the spring passage there were seven on April 15 with 39 on April 19, 800 on April 26 and 3,140 on April 30 (the high count in 1999 was that of 3,120 on May 1), then 865 seen on May 4 with 515 on May 7, 104 on May 13, 55 on May 16, five on May 21, and three on May 23. That closed the spring passage. For the early fall passage there were two on August 13.

Red-winged Blackbird (*Agelaius phoeniceus*)

A common resident; numbers were variable but I cannot identify any specific events other than a weak post-breeding gathering. During the Breeding Bird Survey a total of 545 pairs located in 1999 with 1,109 pairs in 2000. Early fall records: *for the post-breeding gathering there were 370 on June 25 with 810 on July 4, then 405 seen on July 6 with 340 on July 9, 250 on July 12, 180 on July 14 and 130 on July 16. There were 165 on July 20 with 220 on July 23, then 170 seen on July 27 with 140 on August 3. There were 530 on August 6 with 155 on August 10, 150 on August 13 and 104 on August 18. There were 340 on August 20 with 175 on August 25. There were 225 on August 27 with 835 on August 31, then 325 seen on September 3 with 110 on September 6. That finished the post-breeding gathering. For the remainder of the early fall passage there were 116 on September 8 with 146 on September 10, 340 on September 17 and 555 on September 23, then 125 seen on September 25. That ended the early fall passage. For the late fall passage there were 240 on September 30 with 260 on October 2 and 420 on October 8, then 220 seen on October 12 with 140 on October 19 and 135 on October 23. There were 185 on October 26 with 135 on November 3 and 13 on November 6. There were 180 on November 9 with 250 on November 12, then 195 seen on November 16. There were 240 on November 19 with 520 on November 22, then 405 seen on November 26 with 150 on November 30. That closed the late fall passage. For the winter passage there were 295 on December 4 with 335 on December 7, 560 on December 11, 605 on December 19 and 1,165 on December 22, then 490 seen on December 30 with 460 on January 1. There were 910 on January 4 with 670 on January 7 and 390 on January 11. That completed the winter passage. For the early spring passage there were 450 on January 14 with 590 on January 18, then 250 seen on January 21. There were 300 on January 25 with 340 on January 28 and 835 on February 2, then 525 seen on February 6 with 440 on February 8. There were 540 on February 11 with 357 on February 16 and 210 on February 23. There were 215 on February 25 with 305 on February 29, then 240 seen on March 3. That finished the early spring passage. For the late spring passage there were 290 on March 7 with 480 on March 14, then 380 seen on March 18 with 170 on March 21. There were 295 on March 25 with 305 on March 27 and 530 on March 30, then 360 seen on April 3 with 240 on April 6. There were 410 on April 11 with 225 on April 15, 160 on April 19 and 135 on April 26. That concluded the late spring passage. For the*

summer passage there were 385 on April 30 with 195 on May 2 and 165 on May 4. There were 185 on May 7 with 295 on May 13 and May 21, then 170 seen on May 23. There were 275 on May 27 with 280 on May 30 and 310 on June 3, then 115 seen on June 6. There were 165 on June 9 with 240 on June 14, then 195 seen on June 19 with 155 on June 26. There were 170 on June 28 with 360 on June 30, then 110 seen on July 4. That finished the summer passage. For the post-breeding gathering there were 115 on July 8 with 195 on July 12, 405 on July 16 and 460 on July 23, then 375 seen on July 30 with 210 on August 2. There were 720 on August 6 with 375 on August 9, *260 on August 16 and 190 on August 20. There were 195 on August 23 with 205 on August 27 and 245 on August 30, then 115 seen on September 7 with 55 on September 10, 37 on September 13, 27 on September 19 and 15 on September 21.* That was the actual end of the post-breeding gathering. That passage really ended on September 7 but there was no incoming early fall passage influx to cover up its continuing decline.

Eastern Meadowlark (*Sturnella magna*)

A resident in any short grass habitat; there were indications of a fall passage. During the Breeding Bird Survey a total of 22 pairs located; the first fledged young was seen on July 4 (1999). Early fall records: *there were six on June 25 with ten on June 29 and July 4, then six seen to July 14. There were nine on July 16 and July 23 with eight to August 6, three to August 13 and one on August 18.* There were two on August 20 and September 3 with three from September 6 to September 23, then two seen on September 25. That was the early fall passage. For the main fall passage there were ten on September 30 with 16 on October 2, then 14 seen on October 8 with two on October 12. There were four on October 14 with seven on October 19 and eight on October 23, then five seen on October 26 with three on October 29 and two on November 3. There were three on November 6 with two on November 12 and one on November 16. There were three on November 19 with eight on November 26, then singles seen to December 4. That closed the main fall passage. For the winter passage there were six on December 7 with two on December 11. There were five on December 14 with nine on December 19, then seven seen on December 22 with four on December 27 and two to January 1. There were three on January 4 with six on January 7, then three seen on January 11. That completed the winter passage so for the early spring passage there were three on January 14 with six on January 18, then three seen on January 21 with two on January 25. There were 21 on January 28 with eight on February 6, two to February 11 and one on February 16. There were three on February 21 with eight on February 23, then three seen on February 25. That ended the early spring passage. For the main spring passage there were five on February 29 with seven on March 3, then four seen on March 7. There were five on March 10 with eight on March 14, then four seen on March 18 with three on March 21. There were eight on March 25 with six on March 27. There were seven on March 30 with ten on April 6, 14 on April 11 and 17 on April 19, then 15 seen on April 30 with 14 on May 2 and six on May 4. That concluded the main spring passage. For the summer passage

there were nine on May 7 with 13 on May 13, then five seen on May 16. There were nine on May 21 with 11 on May 23, 12 on May 27 and 14 on June 3, then ten seen on June 9 with eight on June 14 and four to June 28. There were eight on June 30 with six to July 8 and two on July 12. That was the summer passage. For the early fall passage there were three on July 16 and July 19 with seven on July 23, then five seen to July 30 with four on August 6, two on August 9 and one on August 13.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

This was a vagrant. For the late fall passage there was a male on October 19. Later for the winter passage there was a male on December 11. Both sightings were along Hooper Farms Road.

Common Grackle (*Quiscalus quiscula*)

Seen in very low numbers; the only exception being a minor post-breeding gathering in the early fall of each year. During the Breeding Bird Survey a total of 26 pairs located. Early fall records: *for the post-breeding gathering there were 18 on July 9 with 13 on July 12 and six on July 14. There were 13 on July 16 with 34 on July 20 and 112 on July 23, then 26 seen on July 27 with 18 on August 3. There were 165 on August 6 with 238 on August 13 and 466 on August 18, then 414 seen on August 25 with 325 on August 27, 236 on August 31, 92 on September 3, 77 on September 8 and 72 on September 10. There were 98 on September 17 with 164 on September 23, then 99 seen on September 30 with 72 on October 6, 16 on October 8 and three on October 12. That ended the post-breeding gathering. For the late fall passage there were 12 on October 14 with 15 on October 19, then 14 seen on October 26 with 13 on October 29. There were 19 on November 3 with 13 on November 6 and six on November 9. There were 44 on November 12 with 23 on November 16, 21 on November 19 and three on November 22. There were 38 on November 26 with 29 on November 30 and 18 on December 4. That closed the late fall passage. For the winter passage there were 44 on December 7 with 11 on December 11 and five on December 14. There were nine on December 19 with 12 on December 22 and 15 on December 30, then seven seen to January 4. That completed the winter passage. For the early spring passage there were nine on January 7 with 11 on January 14, then eight seen on January 21 with six on January 25 and two to February 6. There were eight on February 8 with 16 on February 11, then six seen on February 16 with four on February 23 and two on February 25. That concluded the early spring passage. For the late spring passage there were five on February 29, March 3 and March 7 with four on March 14 and three to March 21. There were five on March 25 with three on March 27 and one on March 30. That appeared to be the end of a very short late spring passage. For the summer passage there were five on April 3 and*

April 6 with seven on April 11, then six seen on April 15 with five on April 19. There were eight on April 26 with seven on May 2, six on May 4 and four on May 7. There were five on May 13 with 12 on May 16 and 16 on May 21, then nine seen on May 23. There were ten on May 27 with 17 on May 30, then 13 seen on June 3 with 11 on June 6. That finished the summer passage. For the post-breeding gathering there were 14 on June 9 with 32 on June 19, 53 on June 26, 120 on June 28, 180 on July 4 and 190 on July 12, then 105 seen on July 16. There were 128 on July 19 with 192 on July 23 and 389 on July 30, then 248 seen on August 6 with 174 on August 9 and 51 on August 13. *There were 67 on August 16 with 130 on August 20, then 68 seen on August 23 with 65 on August 27. There were 93 on August 30 with 35 on September 7, 18 on September 10 and six on September 13. That closed the post-breeding gathering.*

Boat-tailed Grackle (*Quiscalus major*)

A common resident; there were post-breeding gatherings in each year; there was also a passage in the late fall. During the Breeding Bird Survey a total of 134 pairs located. Early fall records: *for the post-breeding gathering there were 115 on May 22 with 205 on May 25, 355 on May 31, 425 on June 5, 640 on June 12, 1,350 on June 19, 2,015 on June 22 and 2,140 on June 25, then 1,190 seen on June 29 with 760 on July 4. There were 1,010 on July 6 with 2,050 on July 12, then 1,275 seen on July 16 with 1,090 on July 20 and 615 on July 23. There were 1,070 on July 27 with 2,170 on August 3, then 1,260 seen on August 6 with 670 on August 10, 550 on August 13 and 390 on August 18. That was the post-breeding gathering. For the early fall passage there were 550 on August 20 with 565 on August 25, then 335 seen on August 27. There were 480 on August 31 with 530 on September 3 and 885 on September 8, then 770 seen on September 17 with 440 on September 23 and 300 on September 25. There were 460 on September 30 with 195 on October 2. That was the early fall passage. For the late fall passage there were 250 on October 6 with 275 on October 8, then 95 seen on October 12 with 93 on October 19 and 28 on October 23. There were 870 on October 26 with 36 on October 29. There were 60 on November 3 with 110 on November 6, 340 on November 9, 370 on November 12, 490 on November 16 and 1,465 on November 19, then 1,425 seen on November 22 with 910 on November 30, 560 on December 4 and 295 on December 7. That closed the main fall passage. For the winter passage there were 715 on December 11 with 200 on December 14. There were 510 on December 19 with 810 on December 22, then 70 seen on December 27. There were 100 on December 30 with 580 on January 1, then 230 seen on January 7 with 186 on January 11. That completed the winter passage. For the early spring passage there were 192 on January 14 with 165 on January 18, 143 on January 21, 67 on January 25 and 37 on January 28. There were 286 on February 2 with 125 on February 6. There were 174 on February 8 with 470 on February 11, then 135 seen on February 16 with 85 on February 23 and 65 on February 25. That concluded the early spring passage. As this species nests so early we go straight to the summer passage there were 160 on February 29 with 220 on March 7 and 370 on March 10, then 250*

seen on March 18 with 95 on March 21. There were 98 on March 25 with 185 on March 27 and 345 on March 30, then 180 seen on April 6 with 132 on April 11. There were 135 on April 15 with 140 on April 19, 265 on April 26, 270 on April 30 and 280 on May 2, then 130 seen on May 4 with 90 on May 7. There were 310 on May 13 with 235 on May 16 and 155 on May 21. That was the summer passage. For the post-breeding gathering there were 300 on May 23 with 505 on May 27, then 180 seen on May 30. There were 225 on June 3 with 270 on June 6, 410 on June 14, 470 on June 19, 555 on June 28 and 670 on June 30, then 635 seen on July 8 with 520 on July 12 and 270 on July 16. There were 445 on July 19 with 1,060 on July 23 and 1,375 on July 30, then 1,260 seen on August 6 with 340 on August 9, 300 on August 13, *142 on August 20, 103 on August 23 and 27 on August 27. That closed the post-breeding gathering.*

Shiny Cowbird (*Molothrus bonariensis*)

This was a vagrant. *For the early fall passage there was a male on July 12, 1999.* There were no sightings for this year.

Brown-headed Cowbird (*Molothrus ater*)

A summer visitor but only one pair known to have bred; exceptionally there was a major post-breeding gathering in 1999. The only other event of note was a minor late fall and winter passage. Early fall records: *for the post-breeding gathering there were 46 on July 4 with 148 on July 9, 455 on July 12, 550 on July 14 and 1,005 on July 16, then 510 seen on July 20 with 330 on July 27, 95 on August 3, seven on August 6, three on August 10, two on August 13 and singles to August 25.* That was the post-breeding gathering. For the early fall passage there were two on September 8 with one on September 10. There were two on September 17 with 61 on September 23, then 40 seen on September 25. That was the early fall passage. For the main fall passage there was one on October 6 with 14 on October 8, then 11 seen on October 19 with one on October 23. There were 33 on October 26 with 20 on October 29 and five on November 3. There were 53 on November 6 with 85 on November 9, then 75 seen on November 12 with two on November 16. Now the passage started there were 253 on November 19 with 236 on November 22 and 100 on November 26. That closed the main fall passage. The event continued during the winter passage as there were 1,030 on November 30 with 15 on December 4. There were 420 on December 7 with 520 on December 11, then 168 seen on December 14 with 50 on December 19 and six on December 22. There were 12 on December 27 with 215 on December 30 and 470 on January 4, then 400 seen on January 11 with 55 on January 14. That completed the winter passage. For the early spring passage there were 290 on January 18 with 110 on January 21, 100 on January 25 and three on January 28. There were 130 on February 2 with 140 on February 6 and 235 on February 8, then 120 seen on February 11 with 105 on February 16,

ten on February 21 and singles to February 29. That finished the early spring passage. For the late spring passage there were 78 on March 3 with one on March 10. There were three on March 30 and April 3 with two on April 6 and one on April 15. That was the late spring passage. For the summer passage there were singles from May 2 to May 13. Single juveniles were now seen on June 9 and June 26. I believe that any juveniles seen in early June were probably raised on the property. There were two adults on June 28 and June 30. That was the extent of the summer passage. For the early fall passage there were 29 on July 4 (one juvenile) with 19 on July 12 and four on July 16. There were 30 on July 19 with eight on July 26, four on July 30, two on August 6 and singles to August 13. There was no post-breeding gathering this year.

Orchard Oriole (*Icterus spurius*)

An uncommon summer visitor; just one pair located. The breeding population from 2001 to 2004 ranged from ten to 26 pairs. Early fall records: *there was an adult male on June 19 with an immature male on June 29. Un-aged there were three on July 6 with singles on July 20, July 23 and August 3.* Those were the late summer sightings. There were no later fall records. Exceptionally for the early spring passage there was an immature male north of the McDonald Canal on January 7, January 11 and February 6. For the summer passage there were singles on May 21, June 3 and June 9 with two on June 14 and five on June 19, then three seen on June 28 with singles to July 26. There were two on July 30 with singles to August 9.

Baltimore Oriole (*Icterus galbula*)

A passage migrant and winter visitor; the greatest numbers were seen during the early spring passage. For the early fall passage there were singles on September 6 and September 8 with three on September 23. For the late fall passage there was one on October 8. For the winter passage there was one on December 7 with five on December 11, then one seen on December 19. Finally for the early spring passage there were five on January 28 with three on February 2 and two on February 6.

American Goldfinch (*Spinus tristis*)

A winter visitor and spring passage migrant; the greatest numbers were seen during the early spring passage. There were no fall sightings. For the winter passage there was one on November 30 with three on December 4, seven on December 7 and 43 on December 14, then ten seen on December 22 with eight on December 30, seven on January 1 and three on January 4. That completed the winter passage. For the early spring passage there were 12 on January 7

with 16 on January 11, then four seen on January 14 with three on January 18. There were six on January 21 with 15 on February 2, then seven seen on February 6 with five on February 8 and two on February 11. There were 32 on February 16 with 35 on February 21, then five seen on February 23 with three on February 29 and two on March 3. That ended the early spring passage. For the late spring passage there were 11 on March 7 with two to March 21 and singles to April 6. There were also 33 on April 19 with one on April 26.

House Sparrow (*Passer domesticus*)

A summer visitor with a pair breeding at the Workshops; there were isolated late fall and early spring records. Early fall records: *there were two on July 6 with singles to July 20*. For the late fall passage there was one on November 3. There were no winter records. For the early spring passage there were two on February 6 with singles on February 23 and February 29. For the late spring passage there were two on April 3. For the summer passage there were singles from May 2 to May 16 with three on May 21. That was the extent of the summer passage. For the early fall passage there were singles seen from June 30 to July 12 with two on July 16 and July 19, then singles seen to July 26. Finally there were two on July 30 and August 2.

TABLE A

The Spreadsheet - August 15, 1999 to August 14, 2000.

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	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	51	54	58	53	43	66	71	95	64	88	66	91	47	57	80	30
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	1	6	1	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	6	6	4	1	6	2	1	2	6	1	6	5	3	5	4	2
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	19	23	16	20	27	23	26	42	32	42	34	36	25	46	38	12
2	American Bittern	.	.	.	.	1	.	.	.	.	.	.	2	1	1	.	.
2	Least Bittern	1	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	27	33	24	35	16	23	36	20	16	33	30	25	17	29	21	22
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	21	23	22	11	32	26	26	11	19	26	24	14	17	33	41	40
2	Snowy Egret	18	25	11	1	1	3	11	3	10	2	1	3	9	2	1	3
2	Little Blue Heron	13	13	20	18	16	10	14	5	7	9	6	9	17	8	6	18
2	Tricolored Heron	25	28	22	17	9	18	17	15	18	19	6	3	8	8	6	4
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1265	1700	1060	575	1360	895	790	840	900	610	373	825	425	230	135	650
2	Green Heron	9	7	9	2	3	3	6	3	3	3	3	5	4	1	1	.
2	Black-crowned Night-Heron	.	.	.	1	1	1	.	.	.	1	1	.	2	1	3	1
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
2	White Ibis	23	17	3	5	20	3	21	1	.	33	1	.	.	24	5	1
2	Glossy Ibis	111	85	51	50	10	10	8	6	14	12	5	2	12	3	.	.
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	1	1	.	1	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	1	.	6	26	49	42	106	76	74	47	2	.	1	21	29	.
7	Black Vulture	16	2	3	9	3	3	14	.	12	7	1	6	26	4	3	12
7	Turkey Vulture	13	46	86	125	70	103	153	15	153	174	139	214	126	89	170	227
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	294	252	125	89	26	61	73	60	109	76	61	55	2	.	2	.
3	Fulvous Whistling-Duck	.	.	2	2	3	.	.	.	.	.	.	.	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	22	31	13	24	25	18	34	51	53	2	1	.	2	.	1	2
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	8	12	17	10	17	3	9	1	5	5	4	2	2	.	.	.
3	Mottled Duck	162	197	148	109	69	61	77	62	51	38	9	16	4	.	.	.
3	Blue-winged Teal	37	186	273	908	810	440	425	1178	1515	2220	155	145	145	175	78	35
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	1	6	10	3	6	6	4	12	11
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	1	.	.	.	.	.	.	.	3	11	3	1	.	.	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	.	1	1	1	1	.	.	.	.	.	.	.	1	1	1	.
5	Osprey	2	1	3	2	9	6	4	1	3	1	3	3	.	4	4	5
7	Swallow-tailed Kite	.	2	3	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	1	2	1	.	1	1	2	3	1	2	3	4	1	4	1	3
7	Northern Harrier	1	.	.	.	3	6	11	4	12	14	17	26	29	21	12	13
8	Sharp-shinned Hawk	2	2	1	1	2	3	1	1	2	1	1	1	.	1	1	3
8	Cooper's Hawk	1	3	3	3	5	2	1	.	2	1	3	2	2	1	3	.
8	Red-shouldered Hawk	4	6	12	12	13	16	14	10	10	17	10	20	26	19	20	16
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	9	18	15	15	18	17	23	12	16	18	10	17	17	21	10	12
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	1	1	3	2	1	8	11	9	6	16	10	23
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	3
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	2
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	2	.	.	2	.	.	.	.	.	.	1	.	.	.	.	.
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	1	1	1	.	.
2	Purple Gallinule	7	12	10	12	8	4	7	2	7	7	4	5	5	1	1	1
4	Common Moorhen	745	925	1003	816	758	943	1102	1065	1245	1310	515	686	515	363	435	300
1	American Coot	109	74	51	70	70	53	103	97	92	134	56	76	96	56	150	192

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	2	.	1	.	1	.	2	1	1	.	.	.	.	3	12	.
4	American Golden-Plover	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	11	.	.	.	1	5	10	5	1	3	2	2	1	.	2	.
4	Black-necked Stilt	40	51	65	52	7	12	8	8	9	9	.	.	.	.	.	.
4	American Avocet	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	3	9	5	.	3	.	.	1	.	.	.	.	.	.	1
4	Lesser Yellowlegs	3	21	2	1	1	1	6	.	18	.	.	1	.	1	1	24
4	Solitary Sandpiper	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.
4	Willet	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	2	1	1	.	.	.	1	.	.	.	.	.	.	.	.
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	.	5	7	1	6	1	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	1	1	.	.	.	4	.	.	1	10	.	.	.	.	.
4	Least Sandpiper	13	3	2	2	1	2	6	.	11	1	3	6	13	.	.	2
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	1	11	3	1	.	.	5	.	.	9	.	1	10	16	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	7	.	.	.	.	.	.	.	.	.	.	8	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	4	1	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.	3
4	Wilson's Snipe	.	.	.	.	.	.	.	1	.	1	4	.	1	1	3	9
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
4	Wilson's Phalarope	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	2	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	1	2	.	.	2	.	.	.	.	2	.	.
5	Royal Tern	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	2	1	.	.	.	.	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	26	3	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	3	8	4	3	2	4	.	.	.	.	.	1
8	Eurasian Collared-Dove	2	3	3	.	7	2	1	1	1	1	2	1	2	1	1	1

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	3	.	.	.	1	.	.	.	.	.	.	2	.	.	.	.
8	Mourning Dove	58	97	56	113	90	64	74	139	29	50	45	39	45	25	35	85
8	Common Ground-Dove	8	5	11	10	9	12	25	12	17	11	15	24	20	5	4	1
8	Cockatiel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Yellow-billed Cuckoo	.	.	1	.	.	.	.	1	.	.	.	1	2	.	.	.
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	.	.	.	.	1	.	.	1	.	1	2	2	.	1	.	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Chuck-will's-widow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	66	9	.	3	165	95	173	3	2	151	270	60	26	1510	177	35
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	1	2	.	.	1	.	5	1	.	3	4	2	2	4	2	2
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	3	5	10	11	7	11	10	9	6	13	14	14	14	11	8	9
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	1	2	2	4	6	4	1	2	1	4	6	4	5	6	5	3
8	Hairy Woodpecker	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	3	2	4	4	3	4	5	2	3	4	4	6	2	3	3	4
8	Pileated Woodpecker	.	1	1	2	1	.	1	2	.	2	2	2	4	1	3	3

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	2	.	2	.	.	.	.	2	1	.	1	1
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	1	.	.	1	.	.	1	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	1	.	1	1	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	1	5	1	2	2	1	1	1	1	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	.	5	6	347	5	1	.	.	1	2	1	.	.	.	.
8	Gray Kingbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	9	6	7	5	14	16	10	11	12	13	8	10	10	9	3	7
8	White-eyed Vireo	.	.	.	1	1	1	1	1	2	3	4	13	6	11	12	8
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	2	2	4	1	4	4	3	3	2	5	6	12	2	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	6	7	12	7	10	10	9	11	14	18	20	13	21	.	11	19
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	.	.	1	2	.	.	.	.	.
7	Fish Crow	2	.	.	1	2	.	.	.	.	1	.	.	10	.	3	.
7	Purple Martin	.	3	.	.	.	7	.	8	1	.	.	2	.	.	.	.
7	Tree Swallow	.	.	.	.	.	.	.	.	1	3	6	42	3	10	6	760
7	Northern Rough-winged Swallow	3	3	.	.	2	.	.	1	.	2	.	.	5	1	1	4
7	Bank Swallow	5	4	18	4	21	27	29	28	9	13	11	24	3	1	2	1

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
7	Cliff Swallow	3	2	2	1	1	1	1	3	1	3	9	68	3	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	170	832	385	129	515	570	540	606	275	410	60	210	43	125	200	515
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	.	.	3	2	.	1	.	1	.	2	3	3	1	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	9	16	18	12	12	19	17	11	15	18	19	18	20	20	22	11
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	6	5	20
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	2	.	2	1	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Blue-gray Gnatcatcher	.	2	1	2	7	4	7	5	10	18	22	26	38	27	30	19
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	.	.	.	.	.	.	2	3	16	22	34
8	Northern Mockingbird	5	17	7	1	12	10	10	6	10	16	19	17	21	21	14	20
8	Brown Thrasher	9	6	8	7	4	9	9	8	10	4	7	3	8	8	2	7
7	European Starling	.	6	.	7	.	.	1	3	3	2	3	.	5	6	.	6
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	1	1	.	.	.	3	.	1	.	2	.	1
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	3	.	1	3	.	.	.	4	.	1	.	.	4	2

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
7	Yellow Warbler	10	27	57	46	53	46	37	18	15	10	10	25	9	16	5	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.
8	Yellow-throated Warbler	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Prairie Warbler	3	4	4	1	.	3	6	2	1	13	5	3	2	2	1	2
7	Palm Warbler	.	.	.	.	.	.	.	.	.	3	6	24	63	65	56	19
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	1	.	2	.	.	.	.	.	.	.	.	.	1	.
8	American Redstart	2	1	2	7	3	3	1	.	.	3	4	11	2	8	7	8
8	Prothonotary Warbler	.	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	1	.	2	4	3	3	1	9	6	8	4	9	8
7	Northern Waterthrush	.	.	.	2	1	4	2	3	4	4	7	10	4	3	9	4
7	Louisiana Waterthrush	.	4	5	2	1	5	5	3	4	3	1	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	2	2	1	13	23	15	27	57	30	176	56	81	80	47
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
7	Eastern Towhee	6	7	4	5	3	5	4	2	3	3	7	5	2	3	5	3
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	1	.	.	.	.	.	.	.	.	.	.	.	1	1	1	.
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 Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	12	27	34	35	20	26	30	15	25	29	34	35	41	41	54	44
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	10	8	11	4	7	7	3	2	2	4	3	4	3	9	4	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	1	.	2	1	1	1	1	1	.	1	.	6	4	22	7	19
8	Painted Bunting	.	.	.	.	.	.	.	.	.	.	.	.	3	2	2	1
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Bobolink	.	.	.	24	104	93	5	10	6	27	1	3	2	2	.	.
7	Red-winged Blackbird	104	340	175	225	835	325	110	116	146	340	555	125	240	260	84	420
6	Eastern Meadowlark	1	2	1	.	.	2	3	3	3	3	3	2	10	16	2	14
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	466	207	414	325	236	92	64	77	72	98	164	9	99	60	72	16
7	Boat-tailed Grackle	390	550	565	335	480	530	275	885	590	770	440	300	460	195	250	275

Table A. Part 1

Hab	SPECIES	8/18	8/20	8/25	8/27	8/31	9/3	9/6	9/8	9/10	9/17	9/23	9/25	9/30	10/2	10/6	10/8
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	1	.	1	.	.	.	.	2	1	2	61	40	.	.	1	14
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	1	1	.	.	3	.	.	.	.	1
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	74	80	84	82	92	82	84	85	79	91	87	90	92	93	91	85
	TOTAL INDIVIDUALS	4,473	6,113	5,010	4,445	6,556	4,939	4,750	5,747	5,840	7,152	3,502	3,742	2,981	3,922	2,541	4,166

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	35	39	59	40	33	37	38	36	34	21	34	24	22	38	26	33
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	1	1	.	1	1	.	1	.	1	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	4	.	.	.	.	.	.	.	.	.	1	7
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	5	43	18	20	53	51	15	6	39	86	55	28	49	42	66	42
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	42	40	25	20	30	23	11	.	18	12	17	12	13	7	19	10
2	American Bittern	6	1	2	2	4	3	3	1	2	1	7	4	4	3	3	5
2	Least Bittern	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	22	12	17	21	21	25	17	35	30	26	11	33	31	25	37
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	10	8	15	6	18	17	18	18	48	12	15	9	19	12	15	31
2	Snowy Egret	1	9	5	2	2	5	1	6	16	2	9	.	8	4	24	18
2	Little Blue Heron	10	10	14	21	14	20	7	.	24	11	10	6	13	15	26	24
2	Tricolored Heron	4	2	1	6	6	7	5	3	5	3	2	3	4	6	4	9
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	315	230	520	480	560	470	172	.	130	160	120	.	60	120	71	242
2	Green Heron	1	5	2	2	1	2	1	.	1	1	1	1	2	1	1	4
2	Black-crowned Night-Heron	1	1	1	6	.	1	.	.	1	1	.	1	1	.	.	1
2	Yellow-crowned Night-Heron	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	7	8	23	15	36	18	3	.	42	19	1	48	19	2	2	1
2	Glossy Ibis	4	.	2	.	550	20	200	10	51	65	10	16	31	6	13	18
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	10	13	4	1	.	3	8	33	13	33	13	.	.	1
7	Black Vulture	13	6	2	3	8	12	2	.	5	3	1	12	3	9	12	2
7	Turkey Vulture	227	371	345	387	368	511	353	.	99	239	338	.	204	215	88	174
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26	
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	18	10	2	5	6	8	1	8	1	1	.	16	.	.	.	1	
3	Fulvous Whistling-Duck
3	Greater White-fronted Goose
3	Egyptian Goose
3	Snow Goose	1	.	.	.	12
3	Ross's Goose
3	Canada Goose
3	Muscovy Duck
3	Wood Duck	3	4	.	1	.	.	.	.	1	.	.	.	5	.	.	.
3	Gadwall	.	.	.	2	24	21	21	37	25	31	93	98	104	173	222	143	
3	Eurasian Wigeon
3	American Wigeon	.	.	.	9	5	8	15	31	35	29	23	19	18	11	15	19	
3	American Black Duck	.	.	.	.	.	.	.	.	2	2	2	.	1	1	.	1
3	Mallard	.	.	.	.	1	.	2	1	2	.	11	14	7	40	2	14
3	Mottled Duck	7	.	1	4	1	2	.	.	.	.	38	75	35	50	8	18
3	Blue-winged Teal	63	44	45	23	30	4600	320	730	730	625	3850	1950	1010	40	54	30	
3	Cinnamon Teal	.	.	.	.	.	1	1	.	.	1	1	.	.	.	.	.
3	Northern Shoveler	2	3	3	62	18	126	116	128	134	102	121	91	215	220	192	159	
3	Northern Pintail	1	.	.	.	.	26	18	41	57	62	52	42	44	84	101	108
3	Green-winged Teal	2	10	2	8	52	205	230	310	310	450	2250	2450	2170	2300	1720	1770	
3	Eurasian Green-winged Teal
1	Canvasback	2
1	Redhead	.	.	.	1	1	1	2	.	2	1	1	1	1	1	1	.	
1	Ring-necked Duck	5	2	4	112	83	63	100	50	62	172	33	20	26	28	5	8	
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	1	2	2	2	1	3
1	Lesser Scaup	.	.	.	.	2	.	.	.	1	3	3	3	6	4	6	11
1	Black Scoter
1	Bufflehead	.	.	.	.	.	.	.	.	.	1	1	2	2	2	3	3
1	Common Goldeneye
1	Hooded Merganser	.	.	.	.	1	.	.	.	2	1	1	1	8	12	3	4
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
1	Ruddy Duck	.	1	8	8	20	62	10	12	11	23	25	23	40	60	16	8	
5	Osprey	4	2	2	5	2	2	5	.	2	4	5	.	6	5	4	5	
7	Swallow-tailed Kite

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	2	2	3	4	4	3	4	.	2	2	4	3	3	3	2	2
7	Northern Harrier	72	53	84	72	173	156	91	66	97	87	129	157	94	133	123	168
8	Sharp-shinned Hawk	1	5	2	1	5	6	4	.	3	2	4	.	5	4	4	3
8	Cooper's Hawk	1	3	1	1	1	2	1	.	1	1	1	.	1	2	.	1
8	Red-shouldered Hawk	23	23	16	15	20	23	16	.	21	13	20	.	23	19	18	22
8	Broad-winged Hawk	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	23	22	17	18	43	26	21	.	34	24	31	.	30	39	26	36
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	18	25	19	28	23	21	.	21	16	22	.	23	17	17	16
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	3	2	.	1	2	.	.	.	.	.	.	.	1	.	.	.
7	Peregrine Falcon	4	.	.	.	.	.	.	.	1	1	.	1	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	.	.	.	.	.	.	.	.	12	.	.	.	.	.	.
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	1	.	2	2	1	.	.	.	.	.	.	.	.	.	.	1
2	Virginia Rail	.	.	.	1	.	.	1	.	1	.	.	.	.	1	.	2
2	Sora	1	.	1	8	13	11	11	.	10	8	4	4	5	8	1	11
2	Purple Gallinule	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Common Moorhen	260	223	210	115	125	195	106	.	25	25	26	15	21	17	20	28
1	American Coot	223	382	1440	1425	2820	2540	283	.	1700	1655	1355	900	1080	820	816	865

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	1	6	.	1	.	6	.	4	1
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	32	108	116	68	56	75	135	111	93	115	115	.	72	39	40	55
4	American Golden-Plover	.	2	1	.	6	5	.	.	1	.	.	.	1	1	.	1
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	1	.	1	1	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	9	12	16	14	11	16	14	73	238	235	178	.	169	75	119	74
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	1	.	.	.	2	3	4	5	5	5
4	Greater Yellowlegs	1	.	.	6	11	23	4	12	10	22	25	17	15	18	10	10
4	Lesser Yellowlegs	7	.	1	.	.	4	5	55	55	110	75	69	24	26	19	29
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	1	.	.	.	.	.	1	12	113	70	6	2	9	14	9	2
4	Least Sandpiper	1	22	8	8	1	2	3	82	30	262	235	150	276	430	308	242
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	1	.	51	28	12	8	8	12	8	2	2	.	5	4	1	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	1	2	.	.	.	6	14	21	14	12	6	14	14	4	6
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	6	7	8	31	22	41	36	25	42

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
4	Long-billed Dowitcher	16	2	19	15	5	32	35	52	58	141	240	267	243	295	316	254
4	Wilson's Snipe	1	24	12	5	5	3	14	1	15	8	20	12	20	9	20	13
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
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	5	.	.	2	7	7	.	1	12	27	18	9	12	43	11
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	4	4	2	1	8	8	11	31	44	4	68	41	101
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	.	2	3	3	.	13	1
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	20
8	Eurasian Collared-Dove	1	.	1	.	.	.	1	.	.	2	.	.	.	.	1	.

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	36	42	45	33	125	107	81		49	50	89		97	88	175	112
8	Common Ground-Dove	3	8	3	6	5	3	2		1	1	7			3	1	3
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo	1			1	1											
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl				1				1								
8	Eastern Screech-Owl																
8	Great Horned Owl		1		1				1			2			1	1	2
8	Burrowing Owl																
8	Barred Owl																1
7	Long-eared Owl																
7	Short-eared Owl				1												1
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will																
7	Chimney Swift	390	400	19		1											
8	Ruby-throated																
8	Black-chinned																
5	Belted Kingfisher	4	6	5	5	2	6	5		2	5	4		6	3	4	6
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	11	9	18	10	11	5	5		4	4	2		2	7	5	6
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	11	7	14	3	6	5	2		3	1	2		1		2	1
8	Hairy Woodpecker																
8	Red-cockaded																
8	Northern Flicker	3	3	8	5	2	2	3		1				2		1	1
8	Pileated Woodpecker	3	3	3	1	2	1								1		2

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/2	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	3	12	68	76	94	107	65	.	63	71	33	.	50	66	60	74
8	Vermilion Flycatcher	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	1	2	.	.	.	.	.	.	.	.	1
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	9	12	10	16	11	13	6	.	12	11	11	.	11	11	13	12
8	White-eyed Vireo	10	6	10	7	2	2	.	.	.	1	.	.	.	.	.	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	1
8	Philadelphia Vireo	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	24	25	22	18	12	11	3	.	6	5	1	.	3	3	1	4
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	5	2	.	.	1	.	.	.	1	.	.	.
7	Fish Crow	.	.	2	.	5	2	.	.	6	2	2	.	10	2	11	1
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	33	73	12	30	30	47	54	7	.	.	.	.	.	.	108	206
7	Northern Rough-winged	1	5	2	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	9	26	68	75	35	73	5	14	33	85	20	.	18	13	10	1
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Tufted Titmouse	2	1	3	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Brown-headed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	23	20	33	21	9	13	8	.	12	7	8	.	12	8	9	15
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	38	46	72	80	81	92	60	.	83	127	93	.	154	125	130	210
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	1	3	5	7	6	6	7	.	10	13	36	.	42	25	38	49
7	Marsh Wren	6	4	14	13	18	10	17	.	13	8	11	.	10	22	22	41
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	1	1	1	5	5	6	3	.	2	4	4	.	3	11	3	3
8	Blue-gray Gnatcatcher	33	23	39	29	25	26	22	.	16	25	19	.	24	19	20	28
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.
8	Wood Thrush	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	1	1	21	.	291	3	8	1
8	Gray Catbird	40	61	64	71	65	46	9	.	18	20	18	.	28	23	23	44
8	Northern Mockingbird	30	28	32	20	14	9	7	.	9	8	11	.	10	13	6	9
8	Brown Thrasher	6	11	1	3	1	1	1	.	1	.	1	.	.	.	.	.
7	European Starling	.	.	2	22	38	2	96	.	77	154	21	.	65	50	19	4
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	1	3	15	.	5	200	256	273	141	107	75	143
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	3	2	2	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned	.	.	.	.	1	2	2	.	3	5	3	.	3	3	3	1
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	3	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
7	Yellow Warbler	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	.	.	.	.	.	2	55	.	56	31	90	.	66	54	47	28
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Pine Warbler	.	.	1	.	.	6	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	3	2	2	4	.	1	1	.	2	1	.	.	1	.	1	2
7	Palm Warbler	67	123	234	150	58	55	53	.	56	26	53	.	103	47	42	82
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	7	7	7	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	6	3	6	4	1	3	.	.	2	2	3	.	.	.	.	.
7	Northern Waterthrush	2	4	2	3	1	.	.	.	.	.	.	.	.	1	1	1
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	65	69	112	55	68	47	36	.	24	31	17	.	31	32	31	37
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
7	Eastern Towhee	8	9	7	7	2	4	3	.	3	5	5	.	3	1	2	2
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	3	3	.	.	1	1	1	1
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	12	30	52	140	75	53	77	.	135	180	300	.	180	125	90	160
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	1	.	1	.	.	1	1	.	2	1	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	.	.	1	5	11	5	13	.	8	11	12	.	12	11	33	53
7	White-throated Sparrow	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	47	73	60	45	50	53	30	.	36	46	29	.	23	36	27	30
8	Rose-breasted	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	1	5	5	1	1	.	.	.	.	1	.	.	.	.	.	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	11	16	25	8	5	3	.	.	2	1	1	.	1	3	1	1
8	Painted Bunting	1	1	1	1	.	.	.	.	.	3	.	.	.	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	220	40	140	135	185	75	135	.	13	180	250	.	195	240	520	405
6	Eastern Meadowlark	2	4	7	8	5	3	2	.	3	1	2	.	1	3	2	8
7	Yellow-headed Blackbird	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	3	12	15	9	14	13	19	.	13	6	44	.	23	21	3	38
7	Boat-tailed Grackle	95	90	93	28	870	36	60	.	110	340	370	.	490	1465	1425	250

Table A. Part 2

Hab	SPECIES	10/12	10/14	10/19	10/23	10/26	10/29	11/3	11/5	11/6	11/9	11/12	11/14	11/16	11/19	11/22	11/26
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	.	11	1	33	20	5	.	53	85	75	.	2	253	236	100
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	94	91	108	99	100	97	97	37	103	109	104	49	107	102	99	116
	TOTAL INDIVIDUALS	2,792	3,115	4,526	4,284	7,302	10,490	10,962	11,336	14,827	16,522	11,757	6,981	8,634	8,633	7,964	7,186

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	22	18	27	27	21	17	27	19	11	30	23	42	24	26	27	20
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	8	.	.	.	.	5	8	167	326	.	51	.	.	.	24
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	53	58	45	67	58	74	67	87	82	93	64	81	86	86	81	111
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	12	17	17	14	13	23	10	17	13	13	21	13	8	24	17	12
2	American Bittern	2	3	2	2	2	1	1	1	1	1	3	2	1	1	2	3
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	34	24	37	40	20	27	18	27	45	33	33	25	23	34	27	21
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	53	22	51	41	27	19	14	21	21	25	39	23	31	12	14	10
2	Snowy Egret	10	10	8	14	3	5	8	10	20	7	11	11	10	10	5	4
2	Little Blue Heron	12	13	22	24	12	17	15	18	21	11	26	17	17	24	14	19
2	Tricolored Heron	9	7	4	7	4	5	5	8	6	6	5	7	5	4	4	8
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	48	1	25	42	86	91	164	123	200	39	25	108	78	60	132	42
2	Green Heron	5	2	3	2	5	4	1	5	3	3	2	2	1	3	1	1
2	Black-crowned Night-Heron	1	.	.	.	.	1	.	.	.	.	.	.	1	.	1	.
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	4	1	1	.	17	3	2	6	3	2	1	4	1	.	1	.
2	Glossy Ibis	10	17	5	2	3	3	4	2	5	1	1	2	3	4	2	.
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	2	.	2	.	.	.	.	.	.	.	1	.	.	.	.	.
7	Black Vulture	3	4	9	2	9	5	.	11	23	7	25	4	.	17	4	.
7	Turkey Vulture	247	274	336	191	182	58	65	152	147	89	204	84	62	36	102	55
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	13	.	.	.	.	.	.	.	.	.	.	.	.	3	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	1	.	.	.	.	2	2	.	.	.	.	.	.	.	2	.
3	Gadwall	76	92	38	26	17	4	4	4	2	5	.	.	.	.	.	3
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	6	6	4	4	2	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	2	2	1	1	1	1	2	1	2	2	1	.	1	1	1	.
3	Mallard	8	10	4	5	3	6	2	1	5	5	2	5	.	.	.	.
3	Mottled Duck	7	11	16	16	9	22	5	8	6	14	9	14	3	3	1	2
3	Blue-winged Teal	.	2	4	4	63	47	2	2	3	5	1	3	2	1	3	2
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	218	199	253	334	206	378	273	270	324	123	23	11	34	112	62	76
3	Northern Pintail	101	90	127	102	194	100	102	54	65	65	20	1	45	57	67	24
3	Green-winged Teal	590	890	570	1220	2870	1240	640	730	470	640	90	86	385	690	790	520
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	15	31	8	6	171	18	47	39	15	14	3	5	10	10	9	9
1	Greater Scaup	2	2	2	2	1	.	.	.	.	1	.	.	1	.	1	1
1	Lesser Scaup	3	3	1	1	1	4	2	2	2	3	2	3	6	6	4	3
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	4	7	7	6	8	7	4	9	9	5	3	2	5	5	6	5
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	23	12	4	19	8	40	31	33	36	37	20	5	9	2	12	8
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	21	7	5	12	13	10	13	24	5	4	20	8	7	19	28	8
5	Osprey	3	3	3	5	5	4	5	6	8	3	6	4	3	4	2	4
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	4	5	2	2	2	5	2	3	2	2	5	2	2	2	3	6
7	Northern Harrier	116	89	121	107	75	74	181	142	166	171	174	73	223	181	84	127
8	Sharp-shinned Hawk	5	2	3	1	3	4	2	4	5	4	3	2	6	3	3	6
8	Cooper's Hawk	1	.	.	1	1	1	.	1	1	1	1	1	.	.	1	.
8	Red-shouldered Hawk	21	19	17	19	14	14	16	22	22	16	28	21	5	13	22	11
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	1	.	.	1	.	.	.	1	1	.
8	Red-tailed Hawk	25	20	30	20	41	15	38	43	53	32	34	38	48	33	26	22
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	16	12	24	15	16	20	14	18	15	13	16	17	14	13	15	12
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	1	1	.	.	1	1	.	.	.	.	1	2	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	.	.	.	.	1	.	.	.	.	.	1	.	1	.	.
2	Sora	6	6	10	2	7	7	6	11	11	4	8	4	1	6	9	6
2	Purple Gallinule	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Common Moorhen	31	26	21	22	15	32	25	32	29	34	39	49	14	25	19	25
1	American Coot	960	734	625	635	280	233	310	515	480	430	631	568	605	660	670	692

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	8	15	8	8	.	.	.	.	.	.	.	.	.	4	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	35	38	19	12	5	31	10	5	5	7	2	15	3	4	3	3
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	31	82	98	96	76	62	61	98	194	162	134	195	177	256	119	137
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	5	5	6	6	6	6	5	5	5	6	6	6	8	7	8	8
4	Greater Yellowlegs	12	14	11	18	8	9	9	4	6	7	7	11	6	9	7	6
4	Lesser Yellowlegs	37	19	30	16	7	7	2	2	2	9	7	27	18	19	21	12
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	13	12	9	4	3	2	.	1	2	3	1	3	2	12	2	7
4	Least Sandpiper	395	405	315	420	76	55	32	56	61	28	40	205	178	210	280	77
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	15	23	16	9	4	3	3	3	3	9	6	9	3	6	10	9
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	61	68	68	37	29	18	9	11	21	29	27	38	34	32	1	28

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	329	493	468	305	91	45	33	42	85	86	92	86	116	157	82	43
4	Wilson's Snipe	20	7	37	4	15	19	8	12	15	84	35	79	5	72	44	14
4	American Woodcock	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	46
5	Ring-billed Gull	9	10	5	7	12	9	41	36	48	8	11	14	73	29	14	27
5	Herring Gull	1	.	.	.	.	.	.	1	1	1	.	1	.	.	.	2
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	106	64	153	44	104	189	27	8	83	58	94	58	3	60	25	17
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	1	.	5	1	1	4	5	4	1	7	7	7	2	1	.	10
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	8	13	1	1	18	3	8	8	10	8	2	5	2	2	.	2
8	Eurasian Collared-Dove	1	11	1	.	3	1	1	1	12	1	.	1	2	2	2	1

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	106	93	109	130	86	168	108	94	95	41	40	108	109	106	55	45
8	Common Ground-Dove	1	1	2	2	3	3	1	3	1	4		2				
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl		1			1	1			1	1	1	1	1			3
8	Eastern Screech-Owl	1					1			1							
8	Great Horned Owl	1	1	1	3	1	1	1	1	3	1	1	1	1	2	1	1
8	Burrowing Owl																
8	Barred Owl				1		2	1		1							2
7	Long-eared Owl																
7	Short-eared Owl	2	3	1		2	1	3	3	2		3	2				
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will				1		1										
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird					1											
5	Belted Kingfisher	2	3	4	2	1	2	2	2	3	3	2	5		2	4	1
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	10	8	10	10	3	13	6	10	10	8	9	5	2	6	7	4
8	Yellow-bellied Sapsucker		2	1						2			1				
8	Downy Woodpecker	1	5	1	3	2	5	3	2	6	3	4	5	2	3	4	6
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	2	2	2	1	3	1	1	3	1	2	1	1	3		1
8	Pileated Woodpecker	1	2	1	1	2	3		1	1		1	3	2	1	2	

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	65	52	53	57	43	46	39	57	62	44	49	35	31	34	36	20
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	1	.	.	.	1	.	.	.	.	1	.	.	.	.	.
8	Western Kingbird	6	9	.	1	9	16	.	3	2	.	9	1	.	.	.	.
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	14	13	10	9	13	7	3	7	11	13	12	16	14	7	7	7
8	White-eyed Vireo	1	1	2	2	1	1	.	1	1	1	4	2	.	.	.	.
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	2	1	1	.	3	1	.	1	1	1	1	.	.	1	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	7	6	2	4	5	8	4	5	7	4	5	9	3	6	6	6
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	2	.	.	.	2	2	.	.	2	.	.	.	.	.	1	.
7	Fish Crow	9	45	1	32	93	49	26	6	92	1	1	115	.	1	1	14
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	146	40	75	121	8	458	20	75	140	715	73	510	78	1170	47	2
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	.	.	.	.	.	1	.	.	.	.	.	.	.	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	18	13	16	12	15	11	19	17	17	14	17	13	14	14	11	9
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	139	91	90	95	82	79	54	82	81	68	77	65	23	55	28	19
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	36	40	35	33	29	36	44	25	31	20	19	18	6	21	11	9
7	Marsh Wren	68	69	107	109	64	73	83	92	94	57	83	79	8	82	56	36
8	Golden-crowned Kinglet	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Ruby-crowned Kinglet	5	9	6	6	5	7	3	4	5	5	4	3	5	4	5	13
8	Blue-gray Gnatcatcher	23	34	24	25	21	22	17	36	44	27	33	39	29	32	26	31
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	1	.	1	.	.	.	1	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	2	1	.	.	.	1	2	1	.	49	1	130	45	346	50
8	Gray Catbird	30	22	35	21	22	22	8	28	17	17	19	17	3	7	10	10
8	Northern Mockingbird	15	11	9	8	9	15	5	10	18	9	9	11	5	6	6	6
8	Brown Thrasher	.	.	.	.	1	.	.	.	2	1	.	2	1	.	.	.
7	European Starling	3	16	1	.	168	13	6	3	2	4	3	35	35	18	27	17
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	36	72	26	26	80	145	140	65	25	25	160	172	42	58	10	41
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	22	.	.	8	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	1	5	2	2	5	3	2	5	3	2	5	2	2	1	3	4
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	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	72	153	70	70	36	66	87	92	57	55	82	55	225	157	351	262
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
7	Prairie Warbler	1	2	1	1	1	1	.	.	1	.	.	.	2	.	1	1
7	Palm Warbler	71	100	85	110	61	112	70	142	127	25	123	87	21	42	72	31
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	1	1	1	.	.	.	.	.
7	Northern Waterthrush	1	1	1	1	1	1	.	1	.	1	1	.	.	1	1	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	43	30	53	43	44	52	47	50	54	33	46	40	14	34	29	25
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25
7	Eastern Towhee	4	1	2	2	2	3	4	9	4	5	5	2	2	4	3	5
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	1	.	.	.	.	1	.	.	.	1	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	2	2	2	.	3
7	Vesper Sparrow	.	.	1	2	6	6	4	3	1	5	9	4	3	1	3	2
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	70	100	235	130	235	100	75	110	125	135	110	65	40	115	55	90
7	Grasshopper Sparrow	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	2	1	.	3	1	.	1	2	.	.	.	.	1	2	.
7	Lincoln's Sparrow	.	1	.	.	.	1	.	.	.	.	.	.	.	1	2	.
7	Swamp Sparrow	23	59	70	58	38	46	57	55	73	41	40	35	2	27	32	14
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	1	1	.	.	.	.	.	1	.	.	.	1
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	33	28	34	22	28	26	12	28	33	39	38	30	23	30	30	33
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	.	.	.	.	1	.	.	1	.	.	1	1	1	2	2
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.
8	Painted Bunting	.	.	.	.	2	1	.	1	.	.	.	1	3	2	1	1
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	295	335	560	340	605	1165	480	490	460	910	670	390	450	590	250	300
6	Eastern Meadowlark	1	6	2	5	9	7	4	2	2	3	6	3	3	6	3	2
7	Yellow-headed Blackbird	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	18	44	11	5	9	12	1	15	7	7	9	3	11	2	8	6
7	Boat-tailed Grackle	560	295	715	200	510	810	70	100	580	157	230	186	192	165	143	67

Table A. Part 3

Hab	SPECIES	12/4	12/7	12/11	12/14	12/19	12/22	12/27	12/30	1/1	1/4	1/7	1/11	1/14	1/18	1/21	1/25	
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	15	420	520	168	50	6	12	215	50	470	50	400	55	290	110	100	
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.
8	Baltimore Oriole	.	1	5	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	3	7	3	43	3	10	4	8	7	3	12	16	4	3	6	.	
8	House Sparrow
8	Bronze Mannikin
8	Orange Bishop
8	Zebra Finch
8	Pin-tailed Whydah
	TOTAL SPECIES	109	111	109	101	110	118	99	105	111	104	105	110	96	101	105	101	
	TOTAL INDIVIDUALS	5,845	6,313	6,745	5,970	7,371	6,759	3,920	4,751	5,431	5,815	4,230	4,787	4,013	6,233	4,724	3,660	

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	19	21	24	24	26	26	13	21	14	32	22	15	13	14	15	8
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	1	2	.	.	1	.	.	1	2	11	25	7
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	105	95	71	113	176	112	184	110	179	138	158	157	182	224	170	160
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	24	21	17	22	19	25	13	14	8	11	11	10	5	5	5	6
2	American Bittern	2	.	.	1	3	1	.	.	.	.	2	3	3	2	2	1
2	Least Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	52	43	39	40	42	21	22	24	35	23	26	40	27	27	32
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	10	7	33	19	14	16	19	18	16	8	14	14	10	4	6	2
2	Snowy Egret	5	2	4	2	3	4	1	.	3	2	1	3	3	1	3	.
2	Little Blue Heron	16	15	16	20	13	14	9	19	15	10	9	6	6	11	9	6
2	Tricolored Heron	5	5	3	2	3	8	4	3	3	4	6	3	15	3	3	2
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
6	Cattle Egret	11	138	118	65	33	145	39	62	64	32	55	35	39	50	73	41
2	Green Heron	3	1	4	2	1	2	1	1	.	2	.	2	4	3	1	3
2	Black-crowned Night-Heron	.	.	.	.	6	2	.	1	.	1	1	1	1	5	1	.
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	.	.	1	1	.	1	20	1	.	1	19	21	31	45	3	14
2	Glossy Ibis	9	10	17	2	3	4	12	4	10	10	6	12	8	8	.	.
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Black Vulture	.	3	17	19	7	1	4	.	3	.	.	2	.	.	1	7
7	Turkey Vulture	15	320	464	340	104	73	62	23	41	40	19	30	23	11	7	13
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	4	4	4	.	3	2	.	.	4	2	.	.	1	.	2	.
3	Gadwall	.	.	.	.	.	.	3	.	.	.	.	18	9	2	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	1	.	.	5	.	.	.	.	4	.	.	.
3	American Black Duck	1	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Mallard	4	.	.	.	.	.	.	.	2	.	.	2	2	.	1	1
3	Mottled Duck	4	.	2	3	1	8	.	3	15	3	4	3	8	3	2	3
3	Blue-winged Teal	2	4	4	4	2	7	6	8	9	5	6	18	15	15	2	2
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	17	14	30	19	22	26	30	23	22	18	30	47	41	65	43	47
3	Northern Pintail	35	21	17	17	16	2	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	430	1010	350	285	325	534	510	730	560	550	676	480	430	353	214	196
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	8	11	13	17	13	7	12	20	15	20	4	11	4	2	.	.
1	Greater Scaup	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.
1	Lesser Scaup	3	5	4	6	2	5	6	7	6	.	.	1	1	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	4	5	5	1	2	2	1	1	1	1	1	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	12	3	2	8	.	5	6	6	6	4	5	5	.	1	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	11	9	13	10	22	4	1	1	1	.	.	.	.	.	.	1
5	Osprey	19	10	10	14	7	9	7	10	6	5	4	4	5	4	7	5
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	3	8	10	10	8	3	6	3	2	5	3	2	4	3	3	4
7	Northern Harrier	162	71	61	49	63	56	76	103	76	78	118	92	39	104	121	56
8	Sharp-shinned Hawk	6	3	4	2	2	4	3	2	4	3	3	3	2	1	3	1
8	Cooper's Hawk	.	.	1	1	1	1	2	2	1	1	1	1	1	1	.	.
8	Red-shouldered Hawk	15	11	23	20	18	24	15	15	7	11	10	9	8	5	4	6
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	28	22	51	41	55	29	51	53	61	57	71	55	56	94	73	54
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	1	2	3	3	3	3	3	3	3	3	3
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	9	13	20	14	18	19	17	15	11	15	17	17	18	13	13	11
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	2	.	.	1	.	1	.	.	.	.	.	.	1	.	1	.
7	Peregrine Falcon	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	2	1	.	.	2
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	.	.	10	10	.	.	12	1	.	.	17	12	.	1	1
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.
2	Sora	5	6	10	10	8	4	2	3	5	3	2	2	3	3	4	1
2	Purple Gallinule	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Common Moorhen	29	27	29	28	30	27	21	34	18	48	38	30	40	32	16	42
1	American Coot	587	640	430	565	560	517	475	430	420	243	274	187	212	237	189	175

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	2	.	38	.	.	.	1	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8
4	Black-bellied Plover	2	5	5	1	1	4	1	1	10	15	23	11	10	15	19	25
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	105	133	252	258	134	193	212	185	86	54	76	88	53	34	9	2
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
4	American Avocet	8	7	6	6	7	5	6	6	6	.	.	.	.	1	1	.
4	Greater Yellowlegs	3	6	4	3	3	11	16	8	14	9	11	11	12	13	8	21
4	Lesser Yellowlegs	9	15	21	18	23	36	49	30	40	28	30	39	25	32	22	29
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	2	.	2	1	7	4	2	4	2	1	7	5	13	3	11
4	Least Sandpiper	29	75	24	86	175	232	429	283	324	317	359	450	396	419	128	227
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	19	1	3	4	11	12	14	13	13	8	10	13	13	6	16
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	17	15	12	26	19	9	.	6	5	19	7	19	6	6	.	13

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	8	5	16	8	5
4	Long-billed Dowitcher	28	31	32	37	44	46	54	103	131	147	124	178	.	200	2	61
4	Wilson's Snipe	86	19	9	14	74	60	4	4	14	6	115	52	39	66	4	5
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	21	36	3	.	1	.	.	.	.	.	.	1	.	.	.
5	Ring-billed Gull	32	162	94	112	10	90	196	145	45	48	220	39	177	15	12	17
5	Herring Gull	.	1	4	2	6	2	2	1	.	3	1	1	3	3	3	3
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	40	51	19	4	24	33	28	13	32	23	19	14	22	8	17	5
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	23	13	8	5	11	11	7	3	4	8	2	1	1	7	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1
8	Rock Pigeon	.	.	2	7	14	18	10	.	13	8	11	5	6	8	12	7
8	Eurasian Collared-Dove	3	2	3	1	2	1	1	1	1	2	1	3	1	1	1	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove		1							1						1	
8	Mourning Dove	98	29	52	62	35	44	46	27	19	29	81	45	43	24	26	14
8	Common Ground-Dove	2	2	14	9	3	12	4	3	5	6	5	6	9	10	6	5
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani				1												
8	Barn Owl	1					1				1						
8	Eastern Screech-Owl																
8	Great Horned Owl		1	1		2		1				1	2	1			
8	Burrowing Owl																
8	Barred Owl					1	2										
7	Long-eared Owl																
7	Short-eared Owl				1					1			1				
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will	1															
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	2	3	1	2	2	2	2	2	2	3	2	3	5	2	2	3
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	18	12	12	10	9	14	6	3	8	12	6	6	10	3	4	6
8	Yellow-bellied Sapsucker		1	1							1						
8	Downy Woodpecker	10	5	10	5	9	7	9	5	9	9	5	3	6	4	5	3
8	Hairy Woodpecker					1											
8	Red-cockaded Woodpecker																
8	Northern Flicker	6	3	5	5	2	3	3	1	3	2		1	1	2	1	1
8	Pileated Woodpecker	2	6	2	2	3	4	1	1	1	2	4	2	5	2	1	3

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
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	40	39	34	40	50	38	28	37	49	51	39	29	14	5	4	4
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	1	.	2	.	.	3	.	2	.	1	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	1	.	1	.	1	.	1	1	1	1	1	1	1	1	1
8	Western Kingbird	1	5	.	3	.	12	2	15	21	31	33	24	30	22	21	23
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	1	.	1	.	.	.	1	1	1	1	1	1	.	2	1
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	7	6	6	6	6	3	3	3	5	5	2	3	4	4	3	5
8	White-eyed Vireo	2	1	5	3	2	5	2	2	6	4	2	3	4	1	2	5
8	Bell's Vireo	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Blue-headed Vireo	.	1	1	2	1	1	.	1	1	2	1	1	1	.	1	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	16	14	13	12	8	16	10	10	8	11	9	8	11	8	8	7
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	4	2	.	.	.	1	.	.	2	1	1	.	.	.	.
7	Fish Crow	18	45	663	238	227	113	2220	50	68	16	2155	1905	6	22	31	95
7	Purple Martin	.	3	3	8	.	1	5	8	2	2	1	2	2	9	7	.
7	Tree Swallow	.	35	45	94	27	310	560	575	1030	162	605	10	335	1140	555	500
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	1	1	1	1	.	1	3	3	5	7	21
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	.	1	.	1	.	2	.	1	.	.	.	.	1	.	.	.
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	26	15	23	21	22	25	18	9	22	19	23	17	19	11	18	20
8	Bewick's Wren	.	.	.	.	.	.	.	.	1	.	.	.	.	1	.	.
8	House Wren	48	40	47	57	52	43	47	32	42	38	49	36	60	38	32	40
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	17	18	9	20	18	29	14	15	12	18	15	17	13	9	27	28
7	Marsh Wren	88	72	74	103	76	73	37	52	45	48	36	31	35	33	22	19
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	17	6	11	11	6	11	6	8	5	6	4	10	7	4	2	.
8	Blue-gray Gnatcatcher	72	52	51	55	41	68	29	33	42	35	22	19	9	3	4	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	1	1	1	.	.	.	.	1	1	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	1725	375	763	180	140	67	.	87	53	180	5	1	2	1	.	.
8	Gray Catbird	15	18	15	16	19	24	12	11	11	20	12	13	18	9	11	16
8	Northern Mockingbird	11	11	16	17	12	9	6	11	13	13	6	5	16	3	9	14
8	Brown Thrasher	2	.	2	.	.	.	.	4	2	2	2	2	4	1	4	1
7	European Starling	5	12	44	23	16	4	19	10	9	23	32	13	18	158	84	13
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	46	35	43	70	34	48	120	125	110	17	35	29	10	1	.	.
8	Cedar Waxwing	26	5	5	24	.	3	.	1	2	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	7	5	6	3	6	7	5	8	6	15	5	4	3	2	2	2
8	Nashville Warbler	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	4	2	.	1	1	2	1

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	164	120	295	93	33	71	98	67	62	94	105	48	46	80	21	28
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	1	1	.	1	.	2	.	1	.	.	.	.	.	.
7	Prairie Warbler	1	.	2	3	2	1	.	1	3	2	.	.	.	1	.	1
7	Palm Warbler	94	80	105	170	92	107	43	30	65	77	38	42	62	50	29	42
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	1	1	2	2	1	.	2	.	.	1	.	1	.
7	Northern Waterthrush	1	.	.	1	1	1	.	.	.	.	.	1	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	1	2	.	1	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	61	35	60	68	63	54	29	28	34	45	44	26	62	26	17	35
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
7	Eastern Towhee	11	5	13	8	9	15	16	12	6	14	7	11	12	8	8	7
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.
7	Field Sparrow	.	5	5	5	5	5	5	5	5	4	2	2	2	3	3	3
7	Vesper Sparrow	6	2	.	1	12	4	1	3	1	15	.	.	12	1	1	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	110	60	57	82	73	165	23	35	45	39	42	36	55	51	61	29
7	Grasshopper Sparrow	.	1	1	1	2	.	.	.	.	.	.	2	1	1	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	1	1	.	1	.	.	2	1	.	1	1	.	.	.
7	Lincoln's Sparrow	.	.	.	1	.	1	.	2	3	1	1	.	.	1	.	.
7	Swamp Sparrow	40	23	35	31	45	26	15	16	25	14	.	12	24	7	16	24
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	1	.	.	.	1	.	.	1	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	61	53	55	56	69	61	52	42	44	65	63	52	69	49	45	66
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	1	3	.	1	1	.	.	1	.	1	.	.	.	.	.	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	2	2	2	3	2	2	1	.	2	3	3	1	1	.	2	.
8	Painted Bunting	1	2	3	1	1	1	.	.	2	.	1	.	1	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	340	835	525	440	540	357	70	210	215	305	240	290	230	480	380	170
6	Eastern Meadowlark	21	2	8	2	2	1	3	8	3	5	7	4	5	8	4	3
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	2	2	2	8	16	6	2	4	2	5	5	5	3	4	3	3
7	Boat-tailed Grackle	37	286	125	174	470	135	35	85	65	160	85	220	370	235	250	95

Table A. Part 4

Hab	SPECIES	1/28	2/2	2/6	2/8	2/11	2/16	2/21	2/23	2/25	2/29	3/3	3/7	3/10	3/14	3/18	3/21
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	3	130	140	235	120	105	10	1	.	1	78	.	1	.	.	.
8	Orchard Oriole	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	5	3	2	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	1	15	7	5	2	32	35	5	1	3	2	11	2	2	1	2
8	House Sparrow	.	.	2	.	.	.	.	1	.	1	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	102	111	114	120	111	120	99	113	112	111	102	113	116	104	101	96
	TOTAL INDIVIDUALS	5,324	5,716	5,890	4,897	4,626	4,706	6,344	4,313	4,585	3,756	6,553	5,311	3,752	4,783	3,057	2,736

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	12	12	7	4	4	5	4	4	2	4	4	4	2	4	2	2
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	11	23	49	63	56	100	48	187	197	48	82	59	27	25	40	65
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	196	321	167	191	158	78	129	73	56	29	66	31	52	43	40	8
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	6	7	8	8	6	7	10	12	7	9	21	11	9	16	4	21
2	American Bittern	1	3	2	1	2	1	.	.	1	.	1	.	.	.	.	.
2	Least Bittern	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	51	27	40	28	23	26	21	32	52	45	24	31	42	41	33	14
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	1	8	1	4	5	3	5	15	19	12	9	11	8	15	6	12
2	Snowy Egret	.	1	1	1	1	1	2	1	2	1	2	4	4	6	3	7
2	Little Blue Heron	11	11	5	3	6	9	13	12	20	22	20	20	12	29	17	18
2	Tricolored Heron	2	2	2	4	1	1	2	3	6	3	5	5	4	7	5	10
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	56	145	135	45	57	167	70	410	405	610	800	410	188	305	475	550
2	Green Heron	4	2	2	4	6	4	4	4	6	5	6	6	6	7	11	16
2	Black-crowned Night-Heron	6	.	.	2	1	1	.	1	1	.	.	.	.	.	1	.
2	Yellow-crowned Night-Heron	.	.	.	1	.	.	.	.	.	.	.	.	.	4	.	.
2	White Ibis	6	97	139	10	57	25	4	28	31	26	78	28	9	29	17	23
2	Glossy Ibis	3	8	7	1	2	1	12	5	1	2	4	8	.	3	4	12
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	1	1	15	1	.	.	10	.	3
7	Black Vulture	5	4	5	2	1	.	.	2	1	2	5	1	1	1	12	1
7	Turkey Vulture	4	5	2	5	2	1	1	7	3	5	6	3	.	4	4	8
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	1	.	.	.	.	.	.	3	2	2	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
3	American Black Duck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Mallard	2	2	1	2	4	3	3	3	2	2	1	3	2	3	3	6
3	Mottled Duck	2	7	6	3	5	4	5	5	8	7	7	8	7	16	10	17
3	Blue-winged Teal	6	51	16	2	11	4	11	45	26	9	7	4	3	4	2	1
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	29	20	24	17	19	5	5	11	4	8	6	3	1	.	1	1
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	182	104	41	33	18	7	8	3	4	2	3	3	1	1	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
5	Osprey	5	6	14	8	9	15	13	14	18	11	7	14	3	5	4	4
7	Swallow-tailed Kite	.	.	.	1	2	.	.	2	2	.	.	.	.	1	.	1

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	6	2	3	2	4	4	1	4	4	5	1	1	.	1	.	2
7	Northern Harrier	44	119	124	69	33	53	nc	28	23	18	15	10	6	5	6	4
8	Sharp-shinned Hawk	2	1	1	1	1	.	1	.	.	.	1	1	.	.	.	.
8	Cooper's Hawk	.	1	.	1	1	.	.	.	.	.	1	.	.	.	1	1
8	Red-shouldered Hawk	7	4	4	4	4	3	4	3	5	5	3	3	2	5	3	3
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	66	67	49	49	34	28	32	31	21	24	18	14	9	14	15	19
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	3	3	3	3	3	3	2	2	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	9	6	6	1	1	.	4	4	1	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	1	3	.	1	.	.	.	1	1	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	2	2	.	1	1	2	1	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	.	.	8	4	2	5	3	6	12	9	8	5	5	5	10
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	1	1	2	4	5	2	1	2	1	.	.	.	.	.	.	.
2	Purple Gallinule	.	.	.	1	.	2	2	.	10	6	6	6	10	12	10	6
4	Common Moorhen	33	35	36	39	42	44	52	56	56	55	60	66	67	90	74	108
1	American Coot	153	129	97	82	89	81	102	79	89	85	61	57	52	52	59	54

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
2	Sandhill Crane	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	13	8	5	2	10	3	6	67	3	75	3	.	2	8	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	1	1	.	21	1	2	12	10	19	12	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	12	4	3	6	6	9	2	6	.	1	3	2	2	5	6	2
4	Black-necked Stilt	8	6	9	32	36	49	45	40	53	40	40	44	42	43	44	30
4	American Avocet	.	.	.	.	.	2	2	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	8	7	13	19	16	9	8	10	9	9	6	9	5	6	10	2
4	Lesser Yellowlegs	36	26	27	40	37	37	67	80	129	43	16	21	15	9	4	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	1	4	.	3	2	3	1	5	4	.
6	Upland Sandpiper	1	.	1	.	.	.	.	.	1	3	.	1	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	Red Knot	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	1	1	.	6	3	6	126	37	26	132	150	185	125	1
4	Western Sandpiper	9	3	3	2	2	4	9	60	63	17	6	1	1	.	.	.
4	Least Sandpiper	258	189	275	259	282	384	315	271	166	79	110	66	77	27	23	1
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	1	.	.	.	.	.	.	6	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	6	4	4	1	4	2	1	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	8	3	16	14	18	37	33	13	36	.	9	4	4	9	1	.

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	9	7	33	24	41	48	36	24	4	.	4	.	.	.	.	.
4	Long-billed Dowitcher	57	8	4	2	3	14	8	6	32	.	.	.	.	.	.	.
4	Wilson's Snipe	3	1	.	3	1	1	1	1	1	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	1	1	.	5	2	1	.	2	1	.	.	1	.	1
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	37	14	136	91	164	106	33	122	34	40	30	9	1	3	3	9
5	Herring Gull	3	3	2	2	1	1	.	1	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
5	Caspian Tern	17	66	52	61	26	56	42	89	23	14	10	7	2	2	1	3
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	7	12	.	.	6	.	.	2	.	1	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	1	.	.	4	1	7	9	2
5	Black Tern	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	1
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	5	15	6	18	22	23	28	25	28	25	22	12	19	.
8	Rock Pigeon	3	11	4	4	5	8	4	.	1	2	2	7	3	1	10	.
8	Eurasian Collared-Dove	2	2	2	2	1	1	2	2	1	1	1	1	1	1	1	1

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	5	19	18	15	14	30	43	16	39	65	32	51	61	170	155	311
8	Common Ground-Dove	9	8	9	11	18	6	10	11	6	18	19	13	15	19	24	31
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo										3	1			1	1	2
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl				1			1									
8	Eastern Screech-Owl																
8	Great Horned Owl	1	1		1	1		1		1	1	1		1		1	
8	Burrowing Owl																
8	Barred Owl				1												
7	Long-eared Owl																
7	Short-eared Owl	1															
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk						2	1	4	3	3	4	5	1	2	1	1
8	Chuck-will's-widow				2	1	1	1	3	1	4	3	2	3	1		1
8	Eastern Whip-poor-will				1		1										
7	Chimney Swift		1		2	2	1	2	7	5	2	2	9	3	10	23	6
8	Ruby-throated Hummingbird						1								1		
8	Black-chinned Hummingbird																
5	Belted Kingfisher	4	3	1		1											
8	Red-headed Woodpecker				1												
8	Red-bellied Woodpecker	5	2	2	6	6	6	9	10	8	8	13	12	2	7	4	16
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	4	1	2	1	1	1	1	1	2	4	4	5		1	2	5
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	1	1	1	1	2	3	2	2	2	2			1	3	2	2
8	Pileated Woodpecker	1	1	1	2	2	2	2	1	2	1	2	1		1	1	2

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	4	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	1	.	.	3	.	4	4	4	6	4	9	5	.	7	3	5
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	1	.	.	1	.	1	1	1	.	.	.	.	.	.	.
8	Western Kingbird	29	17	21	23	29	16	8	29	13	6	7	7	8	2	1	.
8	Eastern Kingbird	.	.	.	.	3	1	3	7	13	3	4	2	.	.	.	1
8	Gray Kingbird	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	5	4	5	6	3	1	4	2	2	1	3	3	2	2	1	6
8	White-eyed Vireo	2	3	3	2	2	2	3	2	1	2	1	3	2	3	1	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	6	4	5	9	8	8	10	11	10	12	16	7	4	10	6	16
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Fish Crow	12	17	7	6	5	8	7	5	6	8	16	21	8	16	13	17
7	Purple Martin	1	4	1	1	4	11	1	.	2	2	1	2	.	4	7	17
7	Tree Swallow	345	670	1050	410	20	142	800	535	305	57	24	6	2	1	.	.
7	Northern Rough-winged Swallow	.	.	.	1	1	1	2	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	1	.	1	.	2	4	2	2	1	.	3	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	30	40	43	35	30	42	84	42	126	107	59	52	42	57	62	64
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	1	1	2	2	1	1	1	1	4	1	2	1	3	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	20	10	13	17	22	17	19	24	27	27	23	22	12	29	18	42
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	52	26	39	48	28	25	18	13	1	3	1	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	34	13	15	41	24	27	42	34	13	8	.	.	.	.	.	.
7	Marsh Wren	30	22	26	36	45	53	61	36	18	12	3	5	2	1	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	29	2	11	23	16	24	39	50	40	25	21	6	.	2	.	1
8	Northern Mockingbird	20	10	11	16	20	19	20	15	16	15	20	19	14	15	18	33
8	Brown Thrasher	1	1	2	3	3	2	2	4	2	2	4	2	.	2	2	2
7	European Starling	29	173	36	6	6	5	10	10	12	20	16	11	1	8	14	35
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	9	.	.	.	.	4	37	75	140	252	256	173	125	49	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	1	1	3	1	1	1	3	4	3	5	1	.	1	.	1

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	2	1	.	.	1	1	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	4	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	3	.	1	.	1	3	4	1	2	1	.	.	.	.	.	.
7	Palm Warbler	46	10	25	26	55	27	24	20	31	21	1	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	1	.	8	10	1	2	.	1	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	2	.	.	1	2	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	1	1	5	12	2	1	2	3	2	.
8	Prothonotary Warbler	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	1	2	1	11	11	3	.	.	1	.	.
7	Louisiana Waterthrush	1	.	1	2	1	.	3	1	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	33	8	13	24	13	15	19	17	26	15	13	4	3	6	3	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	1	.	.	.	.	.	1	1	7
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
7	Eastern Towhee	11	5	5	9	9	14	11	10	9	12	14	10	9	9	13	20
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	60	35	45	51	44	41	37	29	21	12	7	6	3	1	3	1
7	Grasshopper Sparrow	.	4	.	2	.	.	.	1	.	.	.	.	.	.	.	.
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	21	10	11	13	32	15	25	12	5	3	1	2	1	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	9	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	58	30	38	52	46	74	71	65	73	75	80	53	25	67	48	77
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Blue Grosbeak	2	.	.	1	2	1	2	7	13	23	22	11	7	20	11	24
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	.	.	2	5	2	8	4	22	28	14	11	6	8	8	14
8	Painted Bunting	.	.	.	.	.	.	.	.	6	4	3	3	1	2	.	5
7	Dickcissel	.	.	.	.	.	.	.	.	.	5	4	7	6	4	7	3
7	Bobolink	.	.	.	.	.	.	7	39	800	3140	805	865	515	104	55	5
7	Red-winged Blackbird	295	305	530	360	240	410	225	160	135	385	195	165	185	295	185	295
6	Eastern Meadowlark	8	6	7	5	10	14	13	17	9	15	14	6	9	13	5	9
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	5	3	1	5	5	7	6	5	8	6	7	6	4	5	12	16
7	Boat-tailed Grackle	98	185	345	120	180	132	135	140	265	270	280	130	90	310	235	155

Table A. Part 5

Hab	SPECIES	3/25	3/27	3/30	4/3	4/6	4/11	4/15	4/19	4/26	4/30	5/2	5/4	5/7	5/13	5/16	5/21
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	.	3	3	2	.	1	.	.	.	1	.	1	1	.	.
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	1	1	.	.	33	1	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	2	.	.	.	.	.	.	1	.	.	1	1	3
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	102	99	93	115	107	103	114	110	111	108	110	95	85	100	88	85
	TOTAL INDIVIDUALS	2,768	3,278	3,948	2,717	2,314	2,718	3,077	3,449	4,113	6,222	3,689	2,917	2,056	2,391	2,097	2,319

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	2	4	3	4	2	.	4	1	3	4	3	4	3	3	4	3
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	38	18	15	.	.	.	.	.	.	17	16	9	.	3	3	7
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	8	26	13	18	6	12	26	10	11	13	19	13	18	8	12	16
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	14	16	24	14	17	26	33	41	34	36	46	35	38	34	47	27
2	American Bittern	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
2	Least Bittern	.	1	2	1	.	.	.	1	.	.	.	1	1	1	1	2
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	18	29	40	26	30	25	32	21	18	13	36	41	38	30	26	30
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	18	7	18	17	18	16	21	18	47	45	86	38	40	38	41	47
2	Snowy Egret	3	5	5	5	2	7	3	4	8	48	24	.	15	17	8	15
2	Little Blue Heron	12	20	36	40	24	36	40	38	39	36	30	27	31	23	28	20
2	Tricolored Heron	6	7	8	7	8	9	10	10	17	17	16	22	18	21	9	15
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	450	360	650	401	252	505	475	550	565	660	685	915	635	1055	625	645
2	Green Heron	15	15	16	22	15	21	22	22	24	13	21	15	11	11	10	15
2	Black-crowned Night-Heron	4	5	2	.	.	.	.	1	3	.	4	1	.	3	2	4
2	Yellow-crowned Night-Heron	1	8	8	3	8	3	10	7	11	8	7	2	5	3	2	1
2	White Ibis	9	13	43	14	47	19	57	19	81	89	41	223	10	10	13	9
2	Glossy Ibis	11	7	8	3	19	30	12	20	40	44	29	29	17	11	30	19
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	1	1	2	2	2	8	3
2	Wood Stork	.	.	.	.	4	.	28	85	19	66	54	20	14	13	58	34
7	Black Vulture	21	.	1	5	6	6	6	4	1	4	1	3	3	1	18	4
7	Turkey Vulture	8	3	8	5	8	7	26	36	7	9	19	47	61	50	172	122
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	2	2	.	1	4	.	.	4	2	2	12	2	2	7	9	2
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	5	2	15	13	39	17	34	12	29	16
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.	.
3	Mallard	2	4	4	4	6	4	3	3	4	4	4	1	4	1	2	7
3	Mottled Duck	20	31	30	23	76	54	73	98	83	83	81	35	79	80	67	35
3	Blue-winged Teal	3	2	2	2	.	.	.	.	.	.	.	.	1	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
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	5	2	13	5	12	11	7	7	8	6	10	17	11	12	18	13
7	Swallow-tailed Kite	.	.	.	10	.	3	7	7	.	29	.	36	25	23	4	31

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	2	1	1	2	.	.	2	2	1	2	1	1	1	1	1	1
7	Northern Harrier	4	4	4	4	3	1	2	2	1	1	1	2	1	1	1	2
8	Sharp-shinned Hawk	.	1	.	.	.	1	.	1	.	.	.	.	.	1	.	.
8	Cooper's Hawk	1	.	.	2	1	.	3	2	3	1	.	.	1	3	2	3
8	Red-shouldered Hawk	7	8	5	4	2	3	3	3	5	5	4	6	8	3	4	4
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	12	14	13	13	16	15	17	12	12	14	20	16	16	14	20	15
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	6	16	11	9	14	10	10	9	4	7	15	4	10	5	3	5
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	12	6	13	4	12	9	14	14	13	19	16	15	11	15	15	5
4	Common Moorhen	125	108	100	107	126	134	97	143	143	149	107	163	120	128	105	79
1	American Coot	59	53	59	58	55	52	37	44	30	22	23	21	11	26	7	14

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	2	9	11	14	9	37	8	37	5	46	25	119	7	264
4	Black-necked Stilt	15	6	17	25	38	42	16	21	18	15	22	32	48	65	52	61
4	American Avocet	.	.	.	.	.	2	.	.	1	1	1	2	2	2	1	1
4	Greater Yellowlegs	1	1	2	2	3	6	.	8	13	10	12	11	14	10	20	17
4	Lesser Yellowlegs	.	.	1	.	.	.	.	.	.	8	11	7	1	3	3	11
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	1
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	.	1	1	1	1	1	.	.	.	2	2	50	40	46
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	4	2	10	16
4	Least Sandpiper	.	.	.	.	3	3	2	3	1	1	.	.	17	25	14	72
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	3
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	7

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	3	.	29	34
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	1	1	.	.	.	.	.	.	.	1	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	2	.	.	1	1	.	.	.	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	1	.	.	5	.	1	.	1	1	4	3	11	7	4	5
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	.	1	.	5	2	2	6
5	Least Tern	2	.	1	.	17	11	2	2	5	4	10	10	18	20	38	54
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	1	.	6	16
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	8	6	15	2	2	2	9	2	7	2	2	5	7	12	6	10
8	Eurasian Collared-Dove	3	1	1	1	1	1	3	1	3	1	12	3	1	1	5	1

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove		1			1	2	3				1		1	2		
8	Mourning Dove	278	413	165	401	461	206	543	480	318	350	595	410	400	530	260	725
8	Common Ground-Dove	27	34	25	22	36	40	28	32	23	32	21	26	37	26	30	25
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo	1	2	3	1	5	4	1	1	1	1	1			1		2
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl				1			2	5	2	2	2	2	2	6	3	5
8	Eastern Screech-Owl										1						
8	Great Horned Owl	1			1				1						1	1	1
8	Burrowing Owl																
8	Barred Owl		1		1		2										
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	
8	Chuck-will's-widow	1		1			1										
8	Eastern Whip-poor-will																
7	Chimney Swift	6	5	10	1	20	7	3	8	4	4	9	2	3	5	5	1
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher													1			
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	8	8	10	12	15	6	11	12	6	13	11	13	10	9	8	16
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	3		8	7	5	3	3	6	3	4	10	7	8	8	4	8
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker		2	4	1	1	2	1	2	2	1	1	2	1	1	3	1
8	Pileated Woodpecker					1		1				1	2			1	1

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
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	2	3	1	1	1	.	1	5	2	5	2	2	4	1	9	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	.	.	.	.	2	1	2	.	.	.	1	2	.	1	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	4	7	1	5	3	2	5	7	10	5	17	10	9	7	7
8	White-eyed Vireo	3	2	2	1	3	1	2	4	2	4	2	4	1	1	2	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	8	5	3	5	10	6	6	10	12	12	11	13	22	13	9	14
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.
7	Fish Crow	10	11	11	10	6	8	9	8	12	12	16	164	167	144	93	27
7	Purple Martin	23	15	12	66	107	372	198	235	217	685	490	270	760	80	238	209
7	Tree Swallow	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	1	.	1	.	.	2	1	1
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	73	64	50	42	37	51	52	62	53	71	81	53	115	60	66	74
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	.	.	.	.	.	1	.	.	1	1	1	1	.	.	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	18	22	17	22	32	15	18	23	24	18	21	25	17	22	20	22
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	.	1	.	.	.	1	1	.	1	2
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	17	30	26	12	25	21	22	16	19	19	29	29	36	30	21	13
8	Brown Thrasher	3	3	2	3	4	7	7	10	6	5	5	7	3	5	4	12
7	European Starling	30	100	107	161	104	15	157	177	247	7	300	67	54	6	590	133
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	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	Species	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
7	Palm Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	2	1	1	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	3	1	8	8	7	11	3	6	5	5	9	5	1	1	2	5
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
7	Eastern Towhee	15	13	18	13	12	14	13	16	16	17	21	21	17	15	20	15
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	71	57	52	75	87	66	64	55	54	69	86	70	68	65	54	55
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	18	23	21	23	19	30	20	20	29	29	25	39	35	24	24	31
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	7	6	14	12	14	9	6	15	4	15	19	21	17	8	8	7
8	Painted Bunting	1	1	2	4	1	3	2	3	1	4	6	4	5	2	2	1
7	Dickcissel	4	3	4	5	3	2	.	.	.	.	.	.	.	.	.	.
7	Bobolink	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	170	275	280	310	115	165	240	195	155	170	360	110	115	195	405	165
6	Eastern Meadowlark	11	12	9	14	9	10	8	4	.	4	8	6	6	2	3	3
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	9	10	17	13	11	14	8	32	53	120	53	180	101	190	105	128
7	Boat-tailed Grackle	300	505	180	225	270	260	410	470	415	555	670	480	635	520	270	445

Table A. Part 6

Hab	SPECIES	5/23	5/27	5/30	6/3	6/6	6/9	6/14	6/19	6/26	6/28	6/30	7/4	7/8	7/12	7/16	7/19
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	.	.	.	.	1	.	.	1	2	2	29	13	19	4	30
8	Orchard Oriole	.	.	.	1	.	1	2	5	1	3	1	1	1	1	1	1
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	1	1	1	1	2	2
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	78	77	72	73	76	73	75	77	73	80	80	79	88	89	92	94
	TOTAL INDIVIDUALS	2,067	2,454	2,268	2,351	2,312	2,469	2,979	3,244	3,006	3,816	4,430	3,990	4,129	3,999	3,926	4,093

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
1	Pacific Loon	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	2	2	2	4	3	3
1	Horned Grebe	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.
1	American White Pelican	81	135	110	7	1	2	.
1	Brown Pelican	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.
1	Double-crested Cormorant	16	23	25	19	19	15	21
1	"California" D-c Cormorant	.	.	.	.	.	.	.
1	Anhinga	49	51	57	50	36	17	42
2	American Bittern	.	.	.	.	.	.	.
2	Least Bittern	3	4	2	3	4	3	4
2	Gray Heron	.	.	.	.	.	.	.
2	Great Blue Heron	17	17	33	30	29	28	29
2	Great White Heron	.	.	.	.	.	.	.
2	Great Egret	40	39	50	41	59	49	46
2	Snowy Egret	8	17	20	14	6	10	1
2	Little Blue Heron	22	20	14	19	18	19	13
2	Tricolored Heron	19	19	28	16	18	26	13
2	Reddish Egret	.	.	.	.	.	.	.
6	Cattle Egret	700	270	1210	245	535	410	430
2	Green Heron	13	6	8	10	8	10	12
2	Black-crowned Night-Heron	4	.	4	.	3	.	.
2	Yellow-crowned Night-Heron	1	.	1	.	1	1	.
2	White Ibis	12	18	11	14	9	9	22
2	Glossy Ibis	12	16	30	7	21	10	6
2	White-faced Ibis	.	.	.	.	.	.	.
2	Roseate Spoonbill	8	.	1	.	.	.	.
2	Wood Stork	59	38	19	5	17	7	12
7	Black Vulture	2	3	11	1	9	7	9
7	Turkey Vulture	62	81	97	167	66	266	400
1	Black Swan	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
3	White-faced Whistling-Duck	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	2	11	4	2	8	2	9
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.
3	Wood Duck	10	8	7	7	7	6	11
3	Gadwall	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.
3	Mallard	6	1	1	2	1	3	2
3	Mottled Duck	43	17	17	22	37	31	15
3	Blue-winged Teal	.	.	.	.	.	7	7
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	16	11	13	10	9	10	11
7	Swallow-tailed Kite	46	45	22	11	29	8	7

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
7	Mississippi Kite	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.
5	Bald Eagle	2	2	1	2	4	3	4
7	Northern Harrier	.	.	1	1	2	3	1
8	Sharp-shinned Hawk	1	.	.	.	1	1	1
8	Cooper's Hawk	4	6	5	5	6	10	9
8	Red-shouldered Hawk	7	10	15	9	12	17	16
8	Broad-winged Hawk	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.
8	Red-tailed Hawk	16	15	25	19	21	19	31
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	5	4	7	3	1	2	3
2	Yellow Rail	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.
2	King Rail	1	.	1	1	.	.	.
2	Virginia Rail	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.
2	Purple Gallinule	7	12	4	11	14	7	6
4	Common Moorhen	106	65	91	56	119	72	59
1	American Coot	23	3	8	9	14	11	11

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
1	Caribbean Coot	.	.	.	.	.	.	.
2	Limpkin	1	1	1	.	2	1	3
2	Sandhill Crane	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.
4	Semipalmated Plover	3	.	.	.	2	2	.
4	Wilson's Plover	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.
6	Killdeer	4	19	3	8	10	12	.
4	Black-necked Stilt	94	53	27	24	16	12	8
4	American Avocet	1	.	.	.	.	.	.
4	Greater Yellowlegs	24	18	5	12	2	.	4
4	Lesser Yellowlegs	5	3	5	1	.	1	1
4	Solitary Sandpiper	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.
4	Spotted Sandpiper	3	3	1	1	1	.	.
6	Upland Sandpiper	.	.	.	.	1	.	2
4	Whimbrel	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.
4	Red Knot	1	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	132	7	3	5	.	1	.
4	Western Sandpiper	3	.	.	.	.	.	.
4	Least Sandpiper	108	6	7	2	15	8	2
4	White-rumped Sandpiper	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	2	.	.
4	Pectoral Sandpiper	1	.	32	4	3	2	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.
4	Stilt Sandpiper	12	3	4	1	.	1	.

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.
4	Short-billed Dowitcher	21	6	12	.	.	1	1
4	Long-billed Dowitcher	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.
4	Wilson's Phalarope	1	.	.	.	.	.	.
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	.	.	.	.	.	.	.
5	Ring-billed Gull	1	.	.	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	14	12	9	2	.	1	1
5	Royal Tern	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.
5	Forster's Tern	12	2	2	.	.	.	2
5	Least Tern	28	3	.	.	.	.	.
5	Black Tern	11	7	5	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.
8	Rock Pigeon	1	.	5	4	1	6	2
8	Eurasian Collared-Dove	1	2	3	7	4	7	7

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
8	Diamond Dove							
8	African Collared-Dove	.	.	.	.	.	.	.
8	White-winged Dove	1	2	.	1	.	1	6
8	Mourning Dove	650	345	450	291	157	317	36
8	Common Ground-Dove	32	13	17	10	18	15	16
8	Cockatiel	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	1	1	1	2	1	.	1
8	Smooth-billed Ani	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.
8	Barn Owl	4	4	3	5	4	9	6
8	Eastern Screech-Owl	.	.	.	.	.	.	.
8	Great Horned Owl	2	.	.	1	1	1	1
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	3	1	.	.	1	1	.
8	Chuck-will's-widow	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.
7	Chimney Swift	5	2	67	11	1	87	5
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.
5	Belted Kingfisher	1	.	.	.	1	.	3
8	Red-headed Woodpecker	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	14	9	11	10	9	7	9
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.
8	Downy Woodpecker	1	3	2	4	3	8	4
8	Hairy Woodpecker	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.
8	Northern Flicker	1	1	2	1	2	1	2
8	Pileated Woodpecker	1	.	1	2	1	.	1

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
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	1	1	1	.	1	1	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.
8	Eastern Kingbird	2	.	.	.	.	2	2
8	Gray Kingbird	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	1	.	.	.	.	.	.
8	Loggerhead Shrike	12	4	8	7	7	8	10
8	White-eyed Vireo	1	1	1	3	.	2	3
8	Bell's Vireo	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.
8	Blue Jay	15	11	13	21	10	10	7
8	Florida Scrub-Jay	.	.	.	.	.	.	.
7	American Crow	.	2	1	.	.	.	.
7	Fish Crow	43	139	158	22	40	17	18
7	Purple Martin	72	125	11	4	6	.	18
7	Tree Swallow	.	.	.	.	.	.	.
7	Northern Rough-winged Swallow	1	.	3	1	.	1	2
7	Bank Swallow	3	3	1	2	3	5	.

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
7	Cliff Swallow	1	1	.	.	.	2	1
7	Cave Swallow	.	.	.	.	.	.	.
7	Barn Swallow	57	59	73	48	110	26	710
8	Carolina Chickadee	.	.	.	.	.	.	.
8	Tufted Titmouse	1	.	.	1	1	.	.
8	Brown-headed Nuthatch	.	.	.	.	.	.	.
8	Carolina Wren	20	20	20	19	22	29	19
8	Bewick's Wren	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	1	1	.	3	2	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	.	.	.	.	.	.	.
8	Northern Mockingbird	19	15	14	7	12	18	6
8	Brown Thrasher	9	4	8	8	9	5	10
7	European Starling	84	3	12	18	2	8	2
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	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
7	Yellow Warbler	.	.	4	1	4	9	55
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	3	.	2	.	1	3	7
7	Palm Warbler	.	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	1
8	Black-and-white Warbler	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	8
8	Prothonotary Warbler	.	.	.	.	.	.	1
8	Worm-eating Warbler	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.
7	Louisiana Waterthrush	1	.	.	.	.	1	8
8	Kentucky Warbler	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	.	.	.	.	.
8	Hooded Warbler	.	.	.	.	1	1	.
8	Wilson's Warbler	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	1	2	1	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
7	Eastern Towhee	16	12	19	14	16	14	10
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	45	50	52	53	50	52	40
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.
8	Blue Grosbeak	27	30	27	19	24	33	23
8	Lazuli Bunting	.	.	.	.	.	.	.
8	Indigo Bunting	10	13	12	9	5	5	7
8	Painted Bunting	2	2	1	1	1	.	1
7	Dickcissel	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	2
7	Red-winged Blackbird	460	225	375	210	720	375	115
6	Eastern Meadowlark	7	5	5	1	4	2	1
7	Yellow-headed Blackbird	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.
7	Common Grackle	192	102	389	38	248	174	51
7	Boat-tailed Grackle	1060	415	1375	105	1260	340	300

Table A. Part 7

Hab	SPECIES	7/23	7/26	7/30	8/2	8/6	8/9	8/13
7	Shiny Cowbird	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.
7	Brown-headed Cowbird	6	8	4	.	2	1	1
8	Orchard Oriole	.	1	2	1	1	1	.
8	Baltimore Oriole	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.
8	House Sparrow	1	1	2	2	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.
	TOTAL SPECIES	103	84	90	84	87	87	89
	TOTAL INDIVIDUALS	4,795	2,749	5,228	1,849	3,969	2,753	2,834

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 is covered the Sod Farm. 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

This 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

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
18-Aug-99	185	256	523	805	6	1277	1262	159
20-Aug-99	158	244	679	1037	6	1702	2048	239
25-Aug-99	130	180	578	1098	4	1061	1724	235
27-Aug-99	145	178	1142	881	2	575	1248	274
31-Aug-99	147	167	950	775	40	1361	2497	619
3-Sep-99	144	143	583	962	13	902	1929	263
6-Sep-99	201	253	618	1134	11	803	1456	274
8-Sep-99	237	142	1353	1077	7	848	1806	277
10-Sep-99	200	168	1739	1285	6	906	1339	197
17-Sep-99	266	192	2354	1331	6	616	2119	268
23-Sep-99	162	83	244	533	10	378	1817	275
25-Sep-99	208	69	227	694	16	829	1385	314
30-Sep-99	172	94	162	547	3	436	1225	342
2-Oct-99	165	133	179	388	14	246	2477	320
6-Oct-99	273	115	93	451	7	139	1153	310
8-Oct-99	236	91	50	339	10	664	2402	374
12-Oct-99	310	68	96	320	10	326	1251	411
14-Oct-99	507	66	71	382	15	246	1353	475
19-Oct-99	1555	92	53	420	10	543	1319	534
23-Oct-99	1627	102	114	245	18	502	1244	432
26-Oct-99	3047	670	137	221	14	577	2129	507
29-Oct-99	2778	126	4997	348	20	492	1260	469
3-Nov-99	3007	275	5674	318	22	203	1115	348
5-Nov-99	104	59	10646	357	8	73	87	2
6-Nov-99	1870	250	10657	436	15	376	846	377
9-Nov-99	1977	186	10978	777	34	596	1572	402
12-Nov-99	1527	100	6441	790	73	556	1798	472
14-Nov-99	1016	136	4755	563	68	273	170	0
16-Nov-99	1250	158	3610	746	31	371	1678	790
19-Nov-99	1016	89	2919	910	91	305	2825	478
22-Nov-99	963	118	2314	777	107	267	2893	525
26-Nov-99	994	164	2275	689	127	467	1868	602
30-Nov-99	933	82	1396	832	124	272	2748	379
4-Dec-99	1115	156	1009	953	126	116	1816	554
7-Dec-99	897	120	1315	1110	85	161	2034	591
11-Dec-99	741	153	1017	1000	172	151	3020	491
14-Dec-99	789	142	1712	853	61	169	1727	517
19-Dec-99	574	100	3365	260	125	251	2257	439
22-Dec-99	426	93	1800	227	214	305	3154	540
27-Dec-99	516	74	1032	136	83	369	1303	407
30-Dec-99	753	109	1070	173	60	288	1776	522
1-Jan-00	820	136	877	234	146	421	2260	537
4-Jan-00	956	93	859	303	82	229	2911	382
7-Jan-00	787	130	146	262	129	325	1943	508
11-Jan-00	778	98	120	528	91	478	2190	504
14-Jan-00	761	94	470	387	83	300	1252	666

Habitat	1	2	3	4	5	6	7	8
18-Jan-00	838	103	864	553	98	380	2852	545
21-Jan-00	855	80	929	477	48	264	1097	974
25-Jan-00	893	72	627	232	113	222	938	563
28-Jan-00	773	76	497	211	119	183	1062	2403
2-Feb-00	811	98	1053	221	269	308	2101	855
6-Feb-00	579	133	408	143	182	421	2508	1516
8-Feb-00	766	99	329	224	152	395	2191	741
11-Feb-00	821	132	371	381	68	203	2067	583
16-Feb-00	705	98	580	448	152	387	1704	632
21-Feb-00	711	89	550	596	248	374	3296	480
23-Feb-00	610	72	770	491	177	380	1338	475
25-Feb-00	651	77	613	579	91	263	1824	487
29-Feb-00	449	76	579	604	95	108	1142	703
3-Mar-00	476	83	717	716	251	173	3585	552
7-Mar-00	387	94	569	815	64	156	2822	404
10-Mar-00	419	124	511	551	218	107	1359	463
14-Mar-00	495	112	439	826	42	93	2380	396
18-Mar-00	404	59	265	217	44	86	1653	329
21-Mar-00	357	70	250	459	38	47	1180	335
25-Mar-00	378	86	222	448	79	77	1125	353
27-Mar-00	492	161	185	298	106	155	1647	234
30-Mar-00	328	203	89	426	214	146	2298	244
3-Apr-00	348	64	58	439	180	56	1253	319
6-Apr-00	314	109	58	492	217	73	765	286
11-Apr-00	271	74	24	641	205	190	1016	297
15-Apr-00	293	66	34	588	113	85	1524	374
19-Apr-00	355	104	69	638	256	433	1158	436
26-Apr-00	351	151	45	706	108	415	1839	498
30-Apr-00	175	138	29	359	100	629	4136	656
2-May-00	235	157	25	284	79	817	1487	605
4-May-00	162	121	22	358	60	419	1326	449
7-May-00	142	95	21	375	29	199	887	308
13-May-00	141	163	27	402	31	323	850	454
16-May-00	145	107	21	300	36	486	660	342
21-May-00	150	121	27	142	22	561	665	631
23-May-00	121	109	29	141	12	463	690	502
27-May-00	117	123	41	117	4	374	1028	650
30-May-00	114	199	38	120	15	661	723	398
3-Jun-00	94	142	31	135	9	424	887	629
6-Jun-00	80	187	89	171	36	272	724	753
9-Jun-00	90	175	61	188	22	529	947	457
14-Jun-00	101	249	82	116	12	492	1144	783
19-Jun-00	96	260	108	176	11	591	1267	735
26-Jun-00	78	320	104	176	16	573	1192	547
28-Jun-00	92	400	102	184	14	701	1701	622
30-Jun-00	107	365	136	153	26	698	2049	896

Habitat	1	2	3	4	5	6	7	8
4-Jul-00	82	436	55	217	31	967	1473	729
8-Jul-00	70	213	120	211	50	666	2081	718
12-Jul-00	74	198	100	289	43	1176	1317	802
16-Jul-00	73	252	107	277	69	635	1998	515
19-Jul-00	67	220	60	348	95	912	1401	990
23-Jul-00	169	227	61	515	85	711	2120	907
26-Jul-00	214	207	37	164	37	294	1230	566
30-Jul-00	202	227	29	187	30	1218	2634	701
2-Aug-00	87	171	33	106	15	254	658	525
6-Aug-00	74	209	53	160	15	550	2520	388
9-Aug-00	48	180	49	100	14	424	1349	589
13-Aug-00	77	167	44	75	21	433	1725	292

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

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

Date	Field work hours	Total species	Number of birds
8.18.99	5.50	74	4,473
8.20.99	11.75	80	6,113
8.25.99	10.75	84	5,010
8.27.99	11.00	82	4,445
8.31.99	11.50	92	6,556
9.3.99	11.50	82	4,939
9.6.99	11.50	84	4,750
9.8.99	5.25	85	5,747
9.10.99	11.75	79	5,840
9.17.99	11.00	91	7,152
9.23.99	12.00	87	3,502
9.25.99	11.00	90	3,742
9.30.99	11.25	92	2,981
10.2.99	11.25	93	3,922
10.6.99	11.00	91	2,541
10.8.99	10.00	85	4,166
10.12.99	11.75	94	2,792
10.14.99	11.50	91	3,115
10.19.99	12.00	108	4,526
10.23.99	12.00	99	4,284
10.26.99	12.00	100	7,302

Date	Field work hours	Total species	Number of birds
10.29.99	11.75	97	10,490
11.3.99	11.50	97	10,962
11.5.99	3.00	37	11,336
11.6.99	11.50	103	14,827
11.9.99	11.50	109	16,522
11.12.99	11.50	104	11,757
11.14.99	4.00	49	6,981
11.16.99	11.50	107	8,634
11.19.99	11.50	102	8,633
11.22.99	11.25	99	7,964
11.26.99	11.25	116	7,186
11.30.99	11.25	100	6,766
12.4.99	11.50	109	5,845
12.7.99	11.50	111	6,313
12.11.99	11.50	109	6,745
12.14.99	11.25	101	5,970
12.19.99	11.50	110	7,371
12.22.99	12.25	118	6,759
12.27.99	11.50	99	3,920
12.30.99	11.25	105	4,751
1.1.00	11.75	111	5,431
1.4.00	11.50	104	5,815
1.7.00	11.50	105	4,230
1.11.00	11.50	110	4,787
1.14.00	11.50	96	4,013
1.18.00	11.75	101	6,233
1.21.00	11.75	105	4,724
1.25.00	11.50	101	3,660
1.28.00	11.50	102	5,324
2.2.00	12.00	111	5,716
2.6.00	12.00	114	5,890
2.8.00	12.00	120	4,897
2.11.00	12.00	111	4,626
2.16.00	12.25	120	4,706
2.21.00	12.00	99	6,344
2.23.00	12.00	112	4,313
2.25.00	12.25	112	4,585
2.29.00	12.00	111	3,756

Date	Field work hours	Total species	Number of birds
3.3.00	12.00	102	6,553
3.7.00	12.25	113	5,311
3.10.00	12.00	116	3,752
3.14.00	12.25	104	4,783
3.18.00	12.25	101	3,057
3.21.00	12.50	96	2,736
3.25.00	12.50	102	2,768
3.27.00	11.50	99	3,278
3.30.00	12.00	93	3,948
4.3.00	13.25	115	2,717
4.6.00	13.25	107	2,314
4.11.00	12.75	103	2,718
4.15.00	12.50	114	3,077
4.19.00	13.25	110	3,449
4.26.00	12.75	111	4,113
4.30.00	13.00	108	6,222
5.2.00	13.00	110	3,689
5.4.00	13.00	95	2,917
5.7.00	3.75	85	2,056
5.13.00	13.00	100	2,391
5.16.00	13.00	88	2,097
5.21.00	13.25	85	2,319
5.23.00	13.25	78	2,067
5.27.00	12.50	77	2,454
5.30.00	13.00	72	2,268
6.3.00	12.75	73	2,351
6.6.00	13.25	76	2,312
6.9.00	12.25	73	2,469
6.14.00	12.25	75	2,979
6.19.00	12.00	77	3,244
6.26.00	10.00	73	3,006
6.28.00	11.25	80	3,816
6.30.00	13.00	80	4,430
7.4.00	12.00	79	3,990
7.8.00	12.75	88	4,129
7.12.00	13.00	89	3,999
7.16.00	12.25	92	3,926
7.19.00	12.00	94	4,093

Date	Field work hours	Total species	Number of birds
7.23.00	13.25	103	4,795
7.26.00	12.00	84	2,749
7.30.00	11.75	90	5,228
8.2.00	12.00	84	1,849
8.6.00	12.50	87	3,969
8.9.00	12.50	87	2,753
8.13.00	12.50	89	2,834

Total days = 104 Total hours = 1,206.75

Table D which follows deals with all the species seen during the first five 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	1,660	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, 2003 and to August 14, 2012. When the same high count occurred on more than one date only the first is given. I will be including this double table in Reports 1 to 5.

Species	Highest count to 8.14.03	Date of high count to 8.14.03	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	828	3.25.01	7,800	2.22.04
Anhinga	68	9.3.00	873	7.2.10
American Bittern	17	3.26.03	105	12.30.09
Least Bittern	17	5.12.03	76	7.9.08
Gray Heron			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 8.14.03	Date of high count to 8.14.03	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	16	6.12.02	28	4.24.11
White Ibis	1,370	6.23.03	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	6	7.19.03	1,660	2.5.10
Fulvous Whistling-Duck	366	8.10.99	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 8.14.03	Date of high count to 8.14.03	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	3,300	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	3,650	3.12.03	34,000	1.4.06
Osprey	57	4.24.03	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
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	21	8.7.02	45	8.25.06
Red-shouldered Hawk	28	1.7.00	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	28	10.26.99	38	11.5.03
Merlin	3	10.8.99	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
Northern Bobwhite	69	7.4.03	105	6.1.08
Yellow Rail	1	3.9.03	1	3.9.03

Species	Highest count to 8.14.03	Date of high count to 8.14.03	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
King Rail	14	1.9.03	523	8.23.06
Virginia Rail	3	1.5.03	9	2.16.05
Sora	109	12.30.02	415	11.28.08
Purple Gallinule	58	4.21.03	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	104	11.25.01	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 8.14.03	Date of high count to 8.14.03	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	898	12.28.98	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	4,600	12.21.02	18,000	2.8.05
Herring Gull	88	2.3.99	88	2.3.99
Thayer's Gull			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	5	4.7.02	103	10.31.07
Arctic Tern	2	5.23.02	3	10.31.07
Forster's Tern	500	9.2.98	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 8.14.03	Date of high count to 8.14.03	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	2	10.20.02	6	2.6.05
Barn Owl	10	2.7.01	25	12.22.06
Eastern Screech-Owl	2	12.20.98	3	2.1.09
Great Horned Owl	4	8.27.00	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
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	13	6.4.03	16	5.23.04
Eastern Whip-poor-will	3	9.13.00	7	3.15.09
Chimney Swift	1,510	10.2.99	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	1	12.16.98	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	19	9.19.00	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 8.14.03	Date of high count to 8.14.03	Highest Count to 8.14.12	Date of high count to 8.14.12
Acadian Flycatcher	2	9.11.02	4	9.10.03
Alder Flycatcher			1	9.14.03
Willow Flycatcher	1	7.27.99	1	7.27.99
Least Flycatcher	8	12.2.02	23	12.19.07
Eastern Phoebe	257	11.5.00	416	10.26.03
Vermillion Flycatcher	2	3.4.02	2	3.4.02
Ash-throated Flycatcher	19	1.20.02	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	1	12.4.99	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	5	3.31.02	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	27	10.5.00	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	4	12.2.02	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	46	10.5.00	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	1,935	6.19.99	2,850	6.20.04
Tree Swallow	7,120	3.9.03	71,000	3.10.06
Northern Rough-winged Swallow	7	4.17.99	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	1	3.18.01	14	10.28.05
Barn Swallow	2,200	4.17.99	9,300	8.22.08
Carolina Chickadee	1	11.9.99	7	5.3.09
Tufted Titmouse	6	7.2.03	16	9.15.10
Brown-headed Nuthatch			1	12.17.03

Species	Highest count to 8.14.03	Date of high count to 8.14.03	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	96	10.5.00	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	1	10.6.99	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	3,100	3.2.03	240,000	12.29.06
Gray Catbird	270	10.13.02	713	10.17.08
Northern Mockingbird	102	7.6.03	126	10.8.06
Brown Thrasher	23	10.7.01	74	10.8.08
European Starling	860	7.8.02	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	7	9.19.00	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	119	8.28.02	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 8.14.03	Date of high count to 8.14.03	Highest Count to 8.14.12	Date of high count to 8.14.12
Yellow-throated Warbler	2	9.19.00	8	9.26.07
Pine Warbler	6	10.29.99	24	12.9.11
Prairie Warbler	39	9.9.01	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	18	5.1.02	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	34	8.16.00	98	8.27.10
Kentucky Warbler	1	4.14.99	1	4.14.99
Common Yellowthroat	321	10.2.02	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
Yellow-breasted Chat	30	6.11.03	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	19	1.7.03	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 8.14.03	Date of high count to 8.14.03	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
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	39	7.4.00	72	10.1.06
Lazuli Bunting	1	1.7.02	1	1.7.02
Indigo Bunting	281	10.16.02	840	10.26.07
Painted Bunting	9	5.9.02	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	27,000	8.13.03	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	960	11.17.02	117,000	7.17.05
Boat-tailed Grackle	5,510	8.13.03	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	5	12.11.99	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 320 species to August 14, 2003 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, 2003	320
Additional species pre-survey	7
Grand Total	327
Less exotics	8
Acceptable Total	319
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, Bird Migration a Second Florida Study and Bird Migration a Third Florida Study.

APPENDIX B

Field Descriptions

White-faced Whistling-Duck (*Dendrocygna viduata*)

On arriving at the Sand Farm Cattail Marsh on May 7, 2000 I found a group of three Fulvous Whistling-Ducks with them was another duck which I did not recognize. It was clearly a whistling-duck but it was only when I returned home that I was able to identify it. The forehead, face and chin were white. The rear crown and nape were black. The neck was chestnut with a totally black belly. Flanks were white with narrow black barring. Upperparts were a pale brown. A dog caused the birds to take flight and leave before I noted bill/leg colors. I then left to go to the Dry Tortugas so I do not know if this bird stayed.

Bewick's Wren (*Thryomanes bewickii*)

I was at the western end of the line of trees that goes to the west from Lust Road gate on February 25, 2000 when I heard an unfamiliar grating call from the vicinity of a scrub filled ditch. I was able to get some very good views of this bird which had been bathing. This was clearly a relative of the Carolina Wren but it was much drabber. Most striking was the very long white supercilium. The upperparts were a reddish brown however the wings were unmarked. The sides of the neck and the underparts were gray. The tail was also different being long, a bit paler with white tips to the outer tail feathers. I saw this bird again on March 14 when it had again come to that spot to bathe.

Bicknell's Thrush (*Catharus bicknelli*)

This was the craziest of sightings. I was on the northern border on May 27 when a catharus thrush dropped out of the cover onto the grass track in front of me. It was a bit of a mixture when it came to the plumage. There was no marked eye ring just the trace of a pale

border; similar to a Gray-cheeked Thrush. The sides of the face were browner rather than gray which seemed to exclude the Gray-cheeked Thrush. The upperparts were a muted brown and the tail had (reminiscent of a Hermit Thrush) a clear reddish tinge. The breast was heavily spotted with black, this spotting was somewhat hidden on the flanks. Legs were pale and the bill had yellow lower and dark upper mandibles. I did not hear it call and it flew back into the cover; I could not find it again.

APPENDIX C

The Breeding Birds of Zellwood

I carried out a survey of the breeding birds in each of the six years (1999 to 2004). 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. I have decided to put this paper in each of the first six reports.

The Species

Pied-billed Grebe

There was a 300 acre lake at the Sand Farm up to November, 2000 when it was drained. This same area was allowed to flood naturally during the winter of 2001/2002 and by July, 2002 a significant cattail marsh had formed with areas of open water. This is the only breeding site for this species, there were five pairs in 1999 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 the 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 other three years. In 2004 there was a pair at the Sand Farm Cattail Marsh, young 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, and there were five pairs in 1999 with two pairs in 2004.

Limpkin

It is likely that this species nests in the area but breeding has not been proved.

Killdeer

Habitat is the deciding factor for this species. Initially there was the Sod Farm with its very short grass but this ceased operation in the summer of 2002. At that time they removed all the turf creating many shallow, mud lined ponds. With the Sod Farm in use up to six pairs a year seen through to 2001 after operations ceased in 2002 there were 11 pairs but none could be found in 2003 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 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 2 to 4 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 8 to 13 pairs with 16 pairs in 2004.

Chuck-will's-widow

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

Red-bellied Woodpecker

This is another "pattern" species as step 1 involved 27 pairs in 1999 and 39 pairs in 2000 with for step 2 a total of 58 pairs in 2001 and 56 pairs in 2002. With step 3 the population climbed to 76 pairs in 2003 with 94 pairs in 2004. The count in 2004 is so much higher perhaps there is yet another element encouraging a larger population.

Downy Woodpecker

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

Northern Flicker

This is also a pattern species with five pairs in 1999 and 2000 (step 1) with 10 to 12 pairs from 2001 to 2003 (step 2). In 2004 there were 18 pairs which 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

This is puzzlement in that I have not been able to prove breeding even by the sight of fledged young.

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. Singing males located but no females found. Most of these males were on territory in locations that I could not get close to so it is possible that they bred.

Yellow-breasted Chat

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

Eastern Towhee

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

Northern Cardinal

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

Blue Grosbeak

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

Indigo Bunting

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

Painted Bunting

This is another pattern species but it has not progressed to step 3 (not even by 2010 when this is being written). I have not knowingly seen females, just adult or immature males on territory. For step 1 there were eight in 1999 with nine in 2000. Step 2 involved 19 in 2001, 20

in 2002, 19 in 2003 and 22 in 2004. I have not found one out in the fields. This is not a breeding species but it is included because its behavior is the same.

Dickcissel

Whilst the Yellow-breasted Chat was not known to nest in Central Florida this species is not meant to nest in Florida. Females are hard to locate so counts are of males on territory. Nests have been found, females and fledged young also noted. There were 13 males on territory in 1999 with eight in 2000, four in 2003 and four in 2004. With this exceptional species I am including even later records. In 2005 there were at least 143 males on territory with 11 females and later two fledged young. When not singing this species it is very hard to locate making it difficult to locate any adults or their young. Later in 2006 there were 14 males. In 2010 I am beginning to think of it as a resident, what more can I say. Zellwood always surprises and this is certainly an unexpected series of events.

Red-winged Blackbird

The number of pairs appears to be totally dependent on the height and type of vegetation. If it grass there are no pairs in contrast if the fields are full of woody plants with taller plants interspersed then there will be many pairs of Red-winged Blackbirds. The worst year was 1999 with 545 pairs and the best year was 2003 with 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 (2010) 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				
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

SPECIES	1999	2000	2001	2002	2003	2004
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
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

SPECIES	1999	2000	2001	2002	2003	2004
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	1	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, 2003. I am however only detailing the records for the years 1999 to 2003.

Species	1999	2000	2001	2002	2003
Pipevine Swallowtail	2.9.99		5.27.01		
Polydamus Swallowtail	2.9.99	3.7.00	2.18.01	3.14.02	2.23.03
Zebra Swallowtail	3.19.99		6.10.01	4.24.02	3.24.03
Black Swallowtail	1.27.99	2.8.00	2.14.01	2.3.02	2.2.03
Giant Swallowtail	3.13.99	3.3.00	2.21.01	2.20.02	3.2.03
Eastern Tiger Swallowtail	2.9.99	2.16.00	2.21.01	2.20.02	1.2.03
Spicebush Swallowtail	3.23.99	3.7.00	2.28.01	3.6.02	3.24.03
Palamedes Swallowtail		9.10.00	3.11.01	3.27.02	6.16.03
Checkered White	1.1.99	1.1.00	1.14.01	2.3.02	3.19.03
Cabbage White	2.3.99	1.1.00	4.8.01	3.10.02	3.5.03
Great Southern White	1.1.99	1.11.00	2.28.01	2.6.02	2.15.03
Orange Sulphur		9.21.00	2.21.01	5.30.02	6.16.03
Southern Dogface	1.12.99		8.22.01	8.14.02	6.11.03
Cloudless Sulphur	1.7.99	1.1.00	2.7.01	1.16.02	2.15.03
Orange-barred Sulphur	5.4.99	4.6.00			
Large Orange Sulphur					5.29.03
Barred Yellow	3.19.99	1.4.00	2.25.01	1.20.02	1.22.03

Species	1999	2000	2001	2002	2003
Little Yellow	2.9.99	1.11.00	5.4.01	1.24.02	2.23.03
Sleepy Orange	2.3.99	1.1.00	2.14.01	2.3.02	1.30.03
Dainty Sulphur	3.18.99	1.1.00	4.6.01	2.24.02	3.5.03
Great Purple Hairstreak				5.6.02	5.15.03
Banded Hairstreak				5.30.02	
White M Hairstreak	2.3.99	1.18.00	12.21.01	5.1.02	
Gray Hairstreak		4.19.00	5.20.01	1.27.02	5.15.03
Red-banded Hairstreak		8.30.00	3.27.01		
Cassius Blue	1.29.99	3.25.00			
Ceraunus Blue			5.8.01	4.17.02	
American Snout	3.16.99	3.30.00	2.18.01	3.6.02	2.19.03
Gulf Fritillary	1.10.99	1.1.00	1.14.01	1.7.02	1.2.03
Zebra	1.27.99	1.1.00	9.23.01	1.16.02	1.5.03
Variegated Fritillary		4.6.00	5.27.01	5.9.02	4.27.03
Phaon Crescent		3.30.00	7.29.01	6.2.02	5.7.03
Pearl Crescent	8.13.99	1.14.00	2.21.01	1.24.02	
Question Mark	4.6.99	3.14.00	5.6.01	3.17.02	4.21.03
American Lady	2.9.99	1.11.00	2.25.01	2.6.02	3.5.03
Painted Lady	1.11.99	1.1.00	1.24.01	1.7.02	1.11.03
Red Admiral	1.1.99	1.1.00	1.1.01	1.7.02	1.11.03
Common Buckeye	1.11.99	1.1.00	2.7.01	2.3.02	1.5.03
White Peacock	1.1.99	1.1.00	6.10.01	3.17.02	4.21.03
Red-spotted Purple	4.14.99				
Viceroy	3.16.99	1.7.00	2.28.01	1.24.02	1.9.03
Hackberry Emperor		5.30.00	4.4.01	4.10.02	6.11.03
Tawny Emperor	4.9.99	3.27.00	4.6.01	4.7.02	4.13.03
Carolina Satyr	3.18.99	1.4.00	2.28.01	7.25.02	4.24.03
Monarch	1.11.99	1.1.00	3.11.01	1.16.02	1.2.03
Queen	1.12.99	1.1.00	2.28.01	2.3.02	1.5.03
Silver-spotted Skipper	3.30.99	3.7.00	3.11.01	3.24.02	8.20.03
Long-tailed Skipper	2.9.99	1.4.00	3.22.01	4.7.02	4.24.03
Dorantes Skipper	8.20.99		8.22.01	2.3.02	5.26.03
Southern Cloudywing		5.13.00			
Confused Cloudywing	4.14.99		2.28.01		
Juvenal's Duskywing		5.4.00			
Horace's Duskywing	2.9.99	4.30.00	5.4.01	4.10.02	4.24.03
Zarucco Duskywing			4.22.01		
Common Checkered-Skipper		2.11.00	2.21.01	2.17.02	2.23.03
Tropical Checkered-Skipper	4.1.99	1.1.00	2.7.01	2.3.02	1.30.03

Species	1999	2000	2001	2002	2003
Swarthy Skipper			7.11.01		
Clouded Skipper	5.1.99	1.11.00	2.28.01	6.16.02	4.27.03
Southern Skipperling	5.29.99	2.23.00	5.2.01	2.3.02	4.24.03
Fiery Skipper	5.1.99	1.1.00	3.22.01	1.24.02	3.26.03
Whirlabout	3.30.99	1.1.00	7.4.01	6.10.02	
Southern Broken-Dash					5.21.03
Northern Broken-Dash		6.30.00			
Sachem	1.29.99	5.2.00		5.30.02	3.24.03
Dun Skipper				7.3.02	
Eufalia Skipper		4.26.00		7.31.02	
Twin-spot Skipper	5.29.99	1.7.00	4.29.01	5.12.02	
Brazilian Skipper					8.27.03

There were 68 species recorded from August 15, 1998 to December 31, 2003

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, 2003. Here I detail the first dates for the years 1999 to 2003.

Species	1999	2000	2001	2002	2003
Ebony Jewelwing	6.14.99				
Common Spreadwing		4.30.00			
Variable Dancer		5.30.00	5.8.01	6.10.02	6.1.03
Familiar Bluet	5.14.99	3.18.00		5.20.02	
Purple Bluet	4.14.99				
Atlantic Bluet	5.4.99	1.4.00			5.18.03
Florida Bluet		3.21.00	2.25.01		5.29.03
Vesper Bluet			3.25.01		
Citrine Forktail	3.23.99	2.16.00	4.16.01	2.3.02	2.23.03
Fragile Forktail	2.10.99	1.1.00	2.11.01	1.24.02	2.19.03
Rambur's Forktail	3.23.99	1.11.00	2.21.01	1.24.02	3.5.03
Southern Sprite	5.10.99	5.2.00		4.21.02	5.29.03
Duckweed Firetail		4.19.00	4.8.01	5.1.02	5.7.03
Comet Darner	2.19.99				9.10.03
Common Green Darner	1.1.99	1.1.00	1.17.01	1.3.02	1.2.03
Blue-faced Darner	7.4.99	3.7.00	5.4.01		
Regal Darner	3.18.99	4.15.00	3.27.01	3.19.02	4.13.03
Swamp Darner	5.1.99	3.7.00	3.22.01	3.24.02	3.24.03

Species	1999	2000	2001	2002	2003
Twilight Darner	4.1.99	1.21.00	6.10.01	1.20.02	5.4.03
Cyrano Darner	4.23.99	8.6.00	7.29.01		3.29.03
Phantom Darner		1.1.00	8.29.01	8.11.02	
Two-striped Forceptail	5.1.99	5.16.00	4.16.01	5.15.02	5.15.03
Gray-green Clubtail	3.23.99	5.2.00	3.22.01		5.12.03
Cypress Clubtail	4.1.99			3.10.02	
Dragonhunter			7.27.01		
Prince Baskettail	3.23.99	3.18.00	3.22.01	3.19.02	3.24.03
Sepia Baskettail	5.14.99	3.18.00	7.29.01		5.4.03
Florida Baskettail	2.10.99	1.18.00		1.27.02	1.11.03
Four-spotted Pennant	4.20.99	3.18.00	4.16.01	3.31.02	4.13.03
Amanda's Pennant		7.4.00			
Halloween Pennant	4.20.99	3.21.00	5.6.01	7.3.02	3.24.03
Banded Pennant		6.3.00	5.8.01		6.26.03
Faded Pennant		3.10.00		7.3.02	6.1.03
Scarlet Skimmer	1.1.99	1.1.00	7.18.01	3.24.02	4.24.03
Pin-tailed Pondhawk		3.25.00	4.19.01	5.6.02	3.12.03
Eastern Pondhawk	1.29.99	2.29.00	1.17.01	1.24.02	3.2.03
Little Blue Dragonlet	6.22.99	3.18.00	5.4.01	4.28.02	4.6.03
Blue Corporal		3.3.00			
Golden-winged Skimmer	4.20.99	4.6.00	4.8.01	4.10.02	4.27.03
Bar-winged Skimmer					4.24.03
Slaty Skimmer	3.25.99	4.19.00	4.6.01	4.14.02	4.24.03
Needham's Skimmer			5.20.01	4.17.02	
Great Blue Skimmer		8.27.00	6.7.01	6.10.02	6.11.03
Marl Pennant			5.20.01		
Hyacinth Glider	2.17.99	3.14.00	3.11.01	3.22.02	3.12.03
Roseate Skimmer	1.1.99	1.1.00	1.28.01	1.24.02	3.24.03
Blue Dasher	2.10.99	2.29.00	2.25.01	2.3.02	3.5.03
Wandering Glider	5.1.99	1.1.00	4.2.01	3.22.02	3.9.03
Spot-winged Glider	4.9.99	8.27.00	5.24.01	9.29.02	5.26.03
Eastern Amberwing	2.10.99	1.18.00	2.21.01	3.19.02	3.12.03
Carolina Saddlebags	1.29.99	2.23.00	2.11.01	2.10.02	1.2.03
Black Saddlebags	1.11.99	3.27.00	4.2.01	3.6.02	2.26.03
Red Saddlebags	4.9.99		5.20.01	7.17.02	4.16.03

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, 2003. I have only detailed those seen in the years 1999 to 2003.

Species	1999	2000	2001	2002	2003
Southern Toad				3.17.02	1.30.03
Greenhouse Frog	5.10.99			3.24.02	2.15.03
Southern Cricket Frog	5.10.99		8.5.01	8.11.02	5.29.03
Spring Peeper					1.2.03
Green Treefrog				3.14.02	2.23.03
Barking Treefrog	4.6.99	7.23.00	4.6.01	4.24.02	3.9.03
Squirrel Treefrog	5.10.99		2.28.01	4.28.02	2.26.03
Cope's Gray Treefrog				3.14.02	1.2.03
Southern Chorus Frog			6.20.01		2.15.03
Ornate Chorus Frog			2.11.01		2.26.03
Little Grass Frog	6.29.99	6.30.00	2.14.01	2.3.02	2.9.03
Eastern Narrow-mouthed Frog	4.23.99	5.2.00	5.27.01	4.28.02	4.27.03
Bull Frog	4.23.99	4.6.00	4.11.01	3.24.02	3.5.03
Pig Frog	3.19.99	3.21.00	2.25.01	3.10.02	1.5.03
Bronze Frog	5.25.99		4.11.01		4.6.03
Southern Leopard Frog	4.23.99	1.1.00	1.17.01	1.7.02	1.2.03
American Alligator	1.1.99	1.1.00	1.4.01	1.3.02	1.2.03
Common Snapping Turtle	5.7.99	4.15.00	2.18.01	2.17.02	2.15.03
Stinkpot			5.8.01		

Species	1999	2000	2001	2002	2003
Loggerhead Musk Turtle	11.3.99				
Striped Mud Turtle	10.29.99	3.10.00	1.24.01	3.10.02	
Box Turtle	6.19.99	5.2.00			
Florida Cooter	1.27.99	1.1.00	1.17.01	2.17.02	2.19.03
Florida Redbelly Turtle	1.1.99	1.1.00	1.7.01	1.10.02	1.7.03
Chicken Turtle	1.19.99	2.25.00	1.14.01	3.22.02	3.19.03
Gopher Tortoise		7.30.00	7.4.01		7.4.03
Florida Softshell	1.1.99	1.4.00	1.14.01	1.20.02	1.2.03
Green Anole	3.16.99	2.11.00	2.11.01	1.24.02	1.2.03
Brown Anole	3.13.99	2.11.00	2.14.01	2.3.02	1.19.03
Six-lined Racerunner	5.18.99	3.3.00	4.6.01	3.17.02	
Ground Skink		4.15.00			
Broad-headed Skink	4.26.99		2.25.01		
South-eastern Five-lined Skink	3.30.99	6.6.00		3.17.02	4.24.03
Mole Skink	3.25.99	7.23.00			
Eastern Glass Lizard			8.2.01		3.19.03
Island Glass Lizard	6.19.99				
Florida Green Water Snake			2.7.01	3.24.02	
Brown Water Snake	1.27.99				5.4.03
Banded Water Snake	2.10.99	1.1.00	2.11.01	2.17.02	3.12.03
Brown Snake					4.2.03
Striped Crawfish Snake	11.12.99	7.19.00			
Garter Snake		6.14.00	8.29.01	4.28.02	5.4.03
Ribbon Snake	10.8.99	1.14.00	8.16.01	3.24.02	4.30.03
Racer	5.25.99	3.30.00	3.25.01	3.17.02	2.12.03
Rough Green Snake		10.9.00	5.6.01		
Corn Snake	7.12.99	5.7.00	4.11.01	3.17.02	5.7.03
Rat Snake	4.23.99	3.27.00	4.11.01	3.17.02	3.12.03
Cottonmouth	6.22.99	3.25.00		6.2.02	9.10.03
Eastern Diamondback					3.9.03

There were 16 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, 2003. I have only detailed those seen in the years 1999 to 2003.

Species	1999	2000	2001	2002	2003
Virginia Opossum	4.26.99	2.21.00	1.1.01	1.24.02	1.2.03
Southern Short-tailed Shrew	8.27.99	2.29.00	7.15.01		1.2.03
Nine-banded Armadillo	3.18.99	12.6.00		5.30.02	4.30.03
Eastern Cottontail	4.26.99	1.14.00	1.1.01	1.24.02	1.2.03
Marsh Rabbit	5.22.99	2.29.00	1.1.01	1.7.02	1.2.03
Gray Squirrel	1.7.99	1.11.00	3.11.01	2.6.02	1.5.03
Southern Flying Squirrel	6.25.99	3.14.00	1.14.01	9.22.02	1.9.03
Marsh Rice Rat	9.8.99	4.11.00			
Eastern Harvest Mouse				7.3.02	
Cotton Mouse	7.6.99	5.16.00			
Hispid Cotton Rat	2.19.99	1.1.00	2.7.01	1.20.02	1.2.03
Round-tailed Muskrat				9.22.02	4.27.03
Norway Rat	4.17.99	5.21.00	8.22.01		
House Mouse		10.20.00			
Coyote	12.30.99	1.21.00	3.11.01		1.19.03
Red Fox	3.18.99	1.7.00	1.21.01	1.13.02	2.26.03
Gray Fox	5.18.99	2.11.00	3.18.01		4.27.03
Raccoon	1.29.99	1.1.00	1.4.01	1.7.02	1.5.03

Species	1999	2000	2001	2002	2003
Long-tailed Weasel				5.23.02	
Spotted Skunk	3.18.99				
River Otter	1.1.99	1.7.00	1.1.01	1.10.02	1.2.03
Bobcat	3.16.99	5.21.00	1.1.01	1.3.02	1.11.03
Florida Panther					5.15.03

A total of 23 species have been seen since August 15, 1998.