



The 5th Zellwood Bird Report

August 15, 2002 to August 14, 2003

By

Harry Robinson

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Bird Usage of Lake Apopka North Shore Restoration Area

Specifically

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

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INTRODUCTION

This is the fifth 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, 2002 to August 14, 2003. The survey is ongoing as at August, 2013. At the end of this survey year a total of 505 surveys had been completed involving at least 6,247 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 1,367 hours were spent on fieldwork over 105 visits. This year there were no breaks in the coverage. Surveys were normally conducted on Wednesdays and Sundays.

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

During the year Lake Apopka was the only permanent water. The Sand Farm Cattail Marsh was fully developed creating a new and exciting habitat. The Sod Farm was closing and as the farmers removed all the sod this created a habitat of bare earth with from the fall of 2002 to the spring of 2003 extensive areas of shallow water.

I believe that the western half of Potter's Farm was not mowed this year creating a maturing habitat. The rest of Unit One was mowed two to three time during the year. The only other exception is likely to have been an area at the eastern end of the McDonald Canal.

Unit Two was mowed at least once west of Laughlin Road and Pole Road; a large area to the east of Pole Road and north of Lust Road was not mowed or roller-chopped this year. There was also an area on the southern border that was untouched.

Most of the previous farm fields in Unit One and Two were reflective of dry prairie, dry shrub, or transitional shrub habitats. Dry prairie is dominated by grass species and dry shrub habitat in this area was dominated by salt bush (*Baccharis halimifolia*). The transitional shrub habitat on the property included primarily salt bush and elderberry (*Sambucus simpsonii*).

The habitat along the border varied from scrub to woodland along the northern and eastern borders. To the west excluding the Sand Farm there is the Lake Level Canal and Lake Apopka. The most important areas of woodland were: the wood between Lust and Hooper Farms Road, the wood that stretches from the Workshops to the eastern end of Interceptor Road and the wood between the Lake Level Canal and Lake Apopka. This was a very important area with its mixture of woodland and water.

In all I surveyed some 10,000 acres, this total includes 2,800 acres of Unit One, 6,000 acres of Unit Two and 1,200 acres of the Sand Farm. The 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.

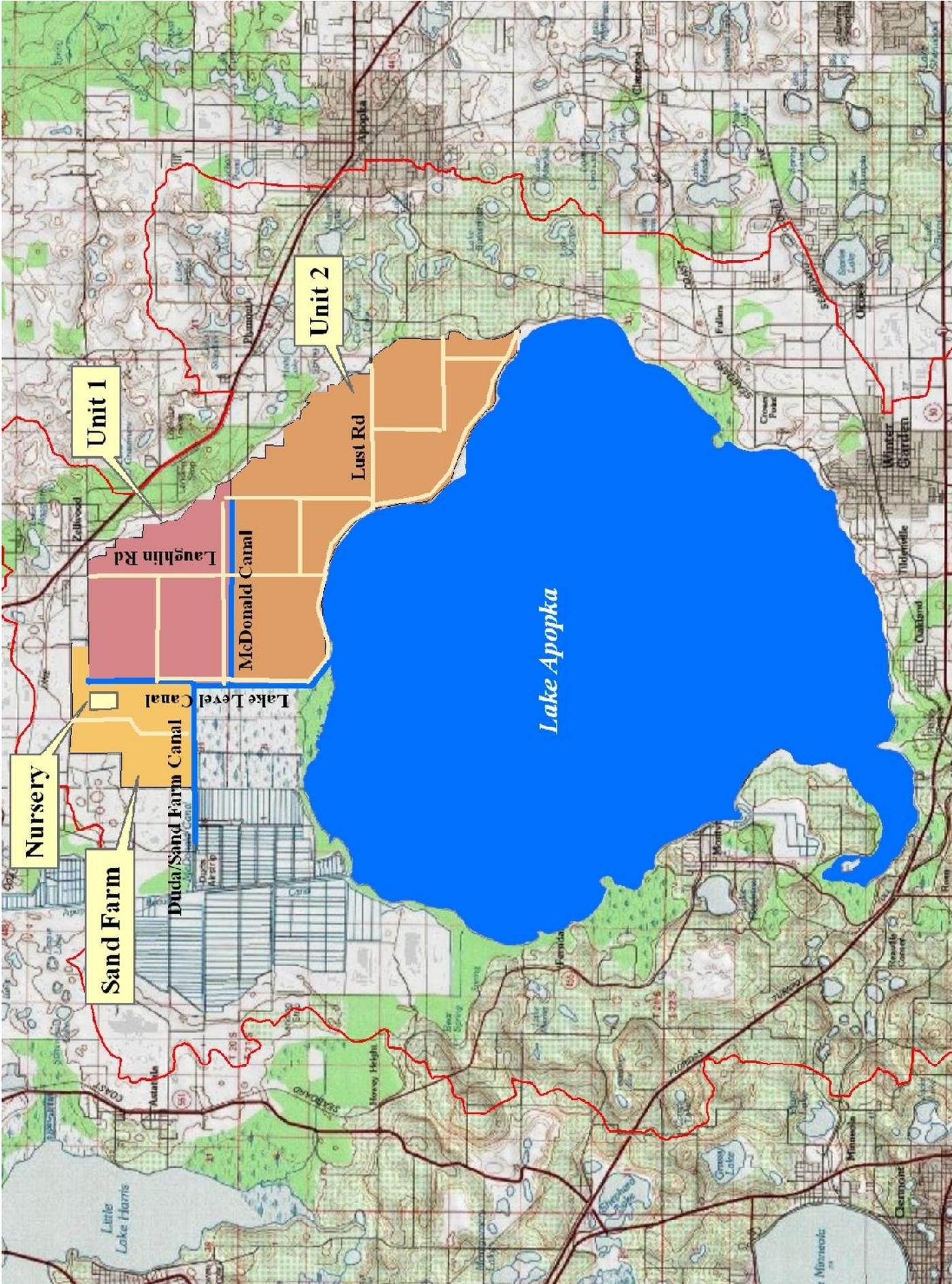
The aim of this report is to record what I saw during the twelve months. I concentrate on the basic unit an influx (this is defined in both of the five year analyses) and I try to show you its shape and duration. The actual pattern of migration at Zellwood is very different from the generalized ideas 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 5th of six such surveys. The counts for all six 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 five years and have provided details of the first date on which I observed each species in each calendar year.

There is also a bird list of all the bird species seen during the 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

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

Once again Kacy Ray has come to my rescue by adding the spreadsheet and pivot table to this report. Her work for the American Bird Conservancy gives her little time for projects such as this. Kacy your help is as always much appreciated.

Rachel Gerker has come to my aid and helped in the preparation of this document for the Orange Audubon Society's web site, thanks Rachel.

Front Cover: The photograph of the Ring-necked Pheasant was taken by Jim Peterson. Whilst this was an exotic it was one of the finds of the year. Thanks Jim for your permission to use this photograph.

Frontispiece: The two pictures of the Eurasian Kestrel were taken by Harold Weatherman, this bird tended to keep its distance. Thanks Harold.

THE SURVEY ROUTE

I would arrive at Laughlin Road gate in the dark and drive south to Interceptor Road; I then turned to the west until I reached Potter's Farm Road at which point I drove north to Canal Road. It was from here that I started the morning walk after the initial dispersal from the various roosts; I would walk to the east along the northern border to Laughlin Road. I then walked south to the road leading to the workshops. At this point I returned by walking back through the middle of this block of fields west to Potter's Farm Road and Canal Road.

Next I drove south down Canal Road to the Sand Farm Bridge. There was no road down the side of the canal but one could walk to the west to the end of the sheet of water. Having checked the lake I would drive south to the wood between the canal and Lake Apopka and work that area. I then worked my way south down the side of Lake Apopka. That was easier said than done as in the early years these were rutted grass tracks, one had to travel very slowly.

At the southern border there were a number of tracks along slithers of water that I would try to work. After this I would check Hooper Farms Road and Lust Road before heading north to the Workshops where I would end the day.

From time to time I would vary the route by covering the Workshops area earlier in the day or by checking the Sand Farm Cattail Marsh before doing the morning walk.

AN ANNOTATED CHECKLIST OF THE BIRDS OF

ZELLWOOD

AUGUST 15, 2002 TO AUGUST 14, 2003

This checklist covers the 5th year of the survey. I hope in the future to make printed reports for years one to four. 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 105 surveys and spent 1,367 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, 2002 to August 14, 2003 but the fall passage and any post-breeding gatherings do not recognize such dates. I am therefore providing records from earlier in 2002 where this helps to provide a better picture. The same situation could arise in August, 2003 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*)

Present in very low numbers, during the Breeding Bird Survey a single pair located at the Sand Farm Cattail Marsh. There was one young present from June 23. Early fall records: *there were singles on July 3, July 8 and July 28 with three on July 31, then one seen on August 11.* For this year there were no records for the early fall passage. For the main fall passage there were two on September 26 with singles on October 13 and October 16. Later there were singles on October 28 and November 5 with three on November 9, then two seen to November 24 with one on November 29. That was the main fall passage. For the winter passage there were four on November 30 with two on December 2. There were three on December 8 with two on December 14 and singles to December 28. There were two on December 30 with singles to January 11. That completed the winter passage. For the early spring passage there were two on January 15 with one on January 19. There were two on January 22 and January 26 with four on January 30, then three seen on February 2 with two to February 12 and singles to February 19. There were two on February 23 with one on February 26. That ended the early spring passage. For the late spring passage there were two on March 2 with one on March 5. There were two on March 29 with three on April 2, then four seen on April 13 and April 16 with singles to May 4. That closed the late spring passage. For the summer passage there were two on May 7 with singles to May 15. There were two on May 18 with singles to June 16. There were two on June 23 with three on June 29 and July 9, then two seen on July 13 with one on July 19. That ended the summer passage. For the early fall passage there were two from July 27 to August 13.

Eared Grebe (*Podiceps nigricollis*)

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

American White Pelican (*Pelecanus erythrorhynchos*)

A common passage migrant from March to late April; lower numbers were seen to early September and again from late November to February. Early fall records: *there were 180 on June 12 with 640 on June 16 and 770 on June 23, then 280 seen on June 26 with 190 on June 30, 125 on July 3 and 90 on July 8. There were 145 on July 10 with 23 on July 14, 16 on July 17 and six on July 21. There were 14 on July 25 with 19 on July 28, 24 on July 31, 28 on August 4 and 41 on August 7, then 35 seen on August 14 with 17 on August 18, 12 on August 25 and one on August 28.* There were also three on September 2 and September 4. That was the extent of the early fall passage. There were no further sightings until late November. For the winter passage there were 60 on November 21 with 56 on November 24, ten on December 2 and four on

December 11. There were 30 on December 21 with one on December 26. There were 15 on December 30 with 35 on January 2, then four seen on January 5 with one on January 7. That completed the winter passage. For the spring passage there were 18 on January 9 with 36 on January 11, then 21 seen on January 15 with three on January 22 and one on January 30. At this point a major spring passage started. There were three on February 2 with five on February 12, 25 on February 15, 34 on February 23, 64 on February 26, 75 on March 5, 85 on March 9, 136 on March 12 and 246 on March 19, then 167 seen on March 24. There were 200 on March 26 with 740 on March 29, then 440 seen on April 2 with 190 on April 6, 165 on April 11 and 55 on April 13. There were 211 on April 16 with 197 on April 21, 155 on April 24, 33 on April 27 and 16 on April 30. There were 26 on May 4 with 56 on May 7 and 192 on May 12, then six seen on May 15. That was the end of a single spring passage. There were no later records.

Brown Pelican (*Pelecanus occidentalis*)

An irregular late spring visitor to Lake Apopka; there were two adults and an immature on March 24 with singles adults on March 29, April 11, April 13, April 24 and May 7. There was also an immature on May 12 and May 15.

Double-crested Cormorant (*Phalacrocorax auritus*)

A winter visitor and spring passage migrant; numbers were low through the summer and the fall passages. Early fall records: *there were 18 on June 26 and June 30 with 19 on July 3, 22 on July 8 and 23 on July 14, then 13 seen on July 17. There were 15 on July 21 and July 25 with 20 on July 28, then 12 seen on July 31 with 11 to August 7. There were 20 on August 11 with 12 on August 14, 11 on August 18, four to August 25 and three on August 28. There were seven on September 2 with ten on September 4, then nine seen on September 8 with four to September 15 and three on September 18. That closed the early fall passage which in reality was a continuation of the summer passage. For the fall passage there were four on September 22 with seven on September 26 and 36 on September 29, then five seen on October 2 with three on October 6. During this influx a total of 71 flew to the south on September 26. There were three on October 9 with seven on October 16, 12 to October 23, 16 on October 28, 52 on November 5 and 55 on November 9, then 37 seen on November 17. During this influx 55 flew to the south on October 16 with six likewise on November 9. That closed the fall passage. For the winter passage there were 48 on November 21 with 75 on November 24, 118 to November 30, 133 on December 2 and 178 on December 8, then 128 seen on December 11. There were 148 on December 14 with 204 on December 16 and 265 on December 26, then 198 seen on December 28. There were 264 on December 30 with 308 on January 2, then 229 seen on*

January 7 with 200 on January 11 and 190 on January 15. That completed the winter passage. For the early spring passage there were 233 on January 19 with 219 on January 26 and 198 on January 30. There were 244 on February 2 with 218 on February 5, 214 on February 9, 151 on February 12, 107 on February 15 and 23 on February 19. There were 83 on February 23 with 186 on February 26, then 137 seen on March 2. That concluded the early spring passage. For the late spring passage there were 163 on March 5 with 159 on March 12, 145 on March 16 and 77 on March 19. There were 82 on March 24 with 125 on March 26, then 89 seen on April 2 with 80 on April 6 and 68 on April 11. There were 96 on April 13 with 83 on April 21, 35 on April 24, 21 on April 30 and 15 on May 4. That ended the late spring passage. During the spring passages the following were seen flying to the north; these counts are not included in the totals given above. There were six on February 5 with 31 on March 2, 54 on March 24, three on March 26, 20 on March 29, 21 on April 11, 69 on April 13, 24 on April 21, 16 on April 27, 16 on April 30 and four on May 4. For the summer passage there were 21 on May 7 with nine on May 12 and seven on May 15. There were nine on May 18 and May 21 with 11 on May 26, 12 on May 29 and 18 on June 1, then two seen on June 4. There were five on June 8 with 11 on June 11, then seven seen on June 16 with four to June 23. It surprises me that there were actual signs of passage during the summer passage. That is also the end of the summer passage. For the early fall passage there were six on June 26 with seven to July 2, eight on July 4, nine on July 6, ten to July 13 and 12 on July 19, then ten seen on July 21 with five on July 23. There were eight on July 25 with nine on July 27, then eight seen on August 5 with four to August 13. An adult was seen on April 11 and April 13 which showed the sparse white ear tufts of the California race *P.a.albociliatus*.

Anhinga (*Anhinga anhinga*)

Seen in very low numbers all year; counts were slightly higher from late November to early December. Early fall records: *there were five on June 12 with six on June 16, eight to June 26, ten on June 30 and 18 on July 8, then 15 seen on July 10 with 12 on July 14 and seven on July 17. There were 13 on July 21 with 12 on July 28, nine on July 31 and seven on August 4. There were 14 on August 7 and August 11 with 13 on August 18, ten on August 21 and seven on August 25. There were ten on August 28 with 12 on September 2, then nine seen on September 8 with seven on September 11. There were ten on September 15 with 16 on September 22, then ten seen on September 26 with nine on September 29. That was the early fall passage. For the main fall passage there were 12 on October 2 with ten on October 9 and two on October 13. There were ten on October 16 with 19 on October 20, then 16 seen on October 28 with 15 on November 5. There were 22 on November 9 with 36 on November 21, then 13 seen on November 24. That closed the main fall passage. For the winter passage there were 19 on*

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

American Bittern (*Botaurus lentiginosus*)

Present for most of the year at the Sand Farm Cattail Marsh; there was a significant late spring passage and one summered at the marsh. For the early fall passage there were singles on August 25, August 28 and September 2 with two on September 4 and four on September 8, then two seen on September 11. There were three on September 15 with five on September 18 and ten on September 22, then eight seen on September 26 with six on September 29 and three on October 2. That was the early fall passage. Exceptionally counts now lower for the late fall passage there were three from October 6 to October 13 with four on October 16, then two seen to October 23. There were five on October 28 and November 5 with four on November 9. Later there were two on November 17 with three on November 21, then two seen to December 2. That closed the late fall passage. Numbers were no higher for the winter passage there were three on December 8 with four on December 14, then three seen on December 16 with two to December 26 and one on December 28. There were two on December 30 with singles to January 5. That completed the winter passage. For the early spring passage there were four on January 7 with three on January 9. Later there were singles on January 19 and January 22. There

were two from January 26 to February 2 with three on February 5, then singles seen to February 12. There were two on February 15 and February 19 with six on February 26, then five seen on March 2. That concluded the early spring passage. For the main spring passage there were 11 on March 5 with ten on March 9 and five on March 12. There were nine on March 16 with 16 on March 19 and 17 on March 26, then 16 seen on March 29 with 15 on April 2, ten on April 6, four on April 13, two on April 21 and singles to April 27. The count of 17 was the highest count for Zellwood but the highest count is now (2013) that of 105 on December 30, 2009. That ended the main spring passage. For the summer passage there were singles at the Sand Farm Cattail Marsh on June 11, June 23, June 26 and July 13. I kept a record of those heard "singing"; there were four on March 5, four on March 16, six on March 19, four on March 24, five on March 26, six on March 29, six on April 2 and four on April 6.

Least Bittern (*Ixobrychus exilis*)

There were records for every month of the year but it was really a summer visitor. During the Breeding Bird Survey a total of 15 pairs located; these were at the Sand Farm Cattail Marsh and along the shore of Lake Apopka. Early fall records: *there were three on June 19 and June 23 with four on June 30, then singles seen to July 10. There were two on July 14 with six on July 17, then four seen to July 25 with three on July 28, two to August 7 and one on August 11. There were five on August 14* with two on August 18 and singles to August 25. There were two on August 28 and September 2 with one on September 15. There were two on September 18 and September 22 with one on September 26. That was the early fall passage. For the late fall passage there were two on September 29 with singles to October 9. There were three on October 13 with two to October 23 and singles to November 5. There were singles from November 21 to November 30. That closed the late fall passage. For the winter passage there were two on December 8 with singles later on December 16, December 21 and January 9. That completed the winter passage; for most years there were no winter sightings. For the early spring passage there were singles on January 22 and February 9 that was it. For the main spring passage there was one on March 2 with three on March 5, then two seen on March 9. There were three on March 12 and March 26 with two to April 2 and singles to April 13. There were two on April 16 with three on April 24, then two seen to April 30. That ended the main spring passage. For the summer passage there were three on May 4 with eight on May 7 and 17 on May 12, then five seen on May 18 with three on May 21 and two on May 26. The count of 17 was the highest count for Zellwood but the highest count is now (2013) that of 76 on July 9, 2008. There were three on May 29 and June 1 with four on June 4 and six on June 8, then four seen on June 16 with one on June 18. There were two on June 23 with seven on June 26 and

June 29, then five seen to July 19 with three to July 25 and two to August 10. That was the end of the summer passage.

Great Blue Heron (*Ardea herodias*)

A resident that was seen in small numbers through the year; there was no evidence that they bred in the survey area. Early fall records: *there were 26 on July 14 with 39 on July 17 and July 21, then 21 seen on July 25 with 14 on July 28. There were 28 on July 31 with 25 on August 7, 22 on August 11, 18 to August 18 and 12 on August 21. There were 24 on August 25 with 17 on September 2 and 13 on September 4. There were 14 on September 8 with 24 to September 18 and 25 on September 22, then 20 seen on September 29 with 14 on October 2. That was the early fall passage. For the main fall passage there were 19 on October 6 with 11 on October 9 and six on October 13. There were 15 on October 16 with 17 on October 20, 18 on October 28, 21 on November 5 and 24 on November 9, then nine seen on November 17. That was the early close of the main fall passage. For the winter passage there were 22 on November 21 with 34 on November 24, then 28 seen on November 29 with 23 on November 30, 22 on December 2, 17 on December 8, 14 on December 11 and 12 on December 14. There were 20 on December 16 with 28 on December 21, then 21 seen on December 28 with 19 to January 5 and 18 on January 7. That completed the winter passage. For the early spring passage there were 19 on January 9 with 22 on January 11 and 28 on January 15, then 22 seen on January 19 with 21 on January 22. There were 24 on January 26 with 19 on January 30. There were 22 on February 2 with 23 on February 5 and February 9, then 22 seen on February 15 with 14 on February 19. There were 31 on February 23 with 18 on February 26, 17 on March 2 and 13 on March 5. That concluded the early spring passage. For the main spring passage there were 18 on March 9 with 20 on March 12 and 30 on March 19, then 21 seen on March 26 with 12 on March 29 and 11 on April 2. There were 21 on April 6 with 33 on April 13 and 36 on April 21, then 28 seen on April 24 with 22 to May 4, 18 on May 7 and seven on May 12. That ended the main spring passage. For the summer passage there were 12 on May 15 with 16 on May 18, then 14 seen on May 21 with seven on May 26. There were 12 on May 29 with 20 on June 1, then 14 seen to June 11 with nine on June 16. There were 16 on June 18 and June 23 with 27 on June 29, then 20 seen on July 2 with ten on July 4. That closed the summer passage. For the early fall passage there were 14 on July 6 with 16 on July 9, then 13 seen on July 13 with eight on July 19 and five on July 21. There were seven on July 23 with 15 on July 25, then nine seen on July 27. There were ten on July 30 with 17 on August 5, then 13 seen on August 8 with 12 on August 10 and seven on August 13.*

Great White Heron (*Ardea occidentalis*)

This was a vagrant. For the summer passage there was an immature standing on Laughlin Road surrounded by Cattle Egrets on June 1, it left to the west.

Great Egret (*Ardea alba*)

Present all year in low numbers; there was just the suggestion of a post-breeding gathering. Early fall records: *for the post-breeding gathering there were 31 on May 30 with 51 on June 2, 63 on June 5 and 119 on June 10, then 91 seen on June 12 with 51 on June 19, 36 on June 23, 33 on June 30 and 17 on July 3. There were 38 on July 8 with 55 on July 10, then 20 seen on July 14 with 13 on July 17. That was the end of the post-breeding gathering. For the early fall passage there were 22 on July 21 with ten on July 25. There were 13 on July 28 with 19 on July 31, 21 on August 7 and 26 on August 14, then 21 seen on August 21 with 12 on August 25, 11 on August 28 and seven on September 2. There were 14 on September 4 with 27 on September 8, then 14 seen on September 15 with nine on September 18. There were 16 on September 22 and September 26 with 13 on September 29 and 11 on October 2. That was the early fall passage. For the late fall passage there were 42 on October 6 with 91 on October 9, then three seen on October 13. There were six on October 16 with eight on October 20, nine to November 9 and 12 on November 21, then eight seen on November 24 with four on November 29. That closed the late fall passage. For the winter passage there were five on November 30 with 25 on December 2, then four seen on December 8. There were 21 on December 11 with 22 on December 14 and 24 on December 16, then nine seen on December 21 with five on December 26. There were nine on December 28 with 12 on December 30 and 15 on January 2, then ten seen on January 5 with nine on January 7. That completed the winter passage. For the early spring passage there were 29 on January 9 with 14 on January 11 and 11 on January 15. There were 14 on January 19 with 17 on January 22 and 19 on January 30, then 11 seen on February 5 with eight on February 9. There were 23 on February 12 with 44 on February 19, then 14 seen on February 23. That concluded the early spring passage. For the main spring passage there were 17 on February 26 with 19 on March 2, then 18 seen on March 5 with 13 on March 9. There were 28 on March 12 with 40 on March 19, then four seen on March 24. There were 26 on March 26 with 51 on March 29, then 13 seen on April 2. There were 22 on April 6 with 39 on April 11, then 13 seen on April 13. There were 14 on April 16 with 39 on April 21, then ten seen on April 24. That ended the main spring passage. For the summer passage there were 26 on April 27 with 39 on April 30, then 11 seen on May 4. There were 18 on May 7 with 39 on May 12, then seven seen to May 18. There were 24 on May 21 with four on May 26. There were seven on May 29 with 20 on June 1 and 45 on June 8, then 22 seen on June 11 with 14 on June 16. That finished the summer passage so for the post-breeding gathering there were 19 on June*

18 with 61 on June 23, then 23 seen on June 26. There were 48 on June 29 with 64 on July 2, then 45 seen on July 4 with 41 on July 9, 38 on July 19, 37 on July 23, 20 to July 27, ten on July 30 and five on August 5. That was the post-breeding gathering. For the early fall passage there were 29 on August 8 with 37 on August 10, *then nine seen on August 20 with six on August 24.*

Snowy Egret (*Egretta thula*)

Seen in low numbers all year with the exception of the early fall when there appeared to be a minor post-breeding gathering. Early fall records: *for the post-breeding gathering there were 109 on May 27 with 148 on June 2, 315 on June 10 and 322 on June 12, then 174 seen on June 19 with 95 on June 23, 63 on June 26, 51 on June 30 and 45 on July 3. That influx lasted for over a month. There were 67 on July 8 with 122 on July 10, then 85 seen on July 14 with 65 on July 17, 49 on July 21 and 17 on July 25. There were 135 on July 28 with 217 on August 4, then 96 seen on August 7. There were 99 on August 11 with 121 on August 14, then 67 seen on August 18 with 64 on August 21, 52 on August 25 and 24 on August 28.* That was the end of the post-breeding gathering so for the balance of the early fall passage there were 28 on September 2 with 34 on September 4 and 42 on September 8, then 12 seen on September 11 with nine on September 15. There were 20 on September 18 with 24 on September 26, then 15 seen on September 29 with 12 on October 2 and eight on October 6. That was the early fall passage. Counts were now the lowest of the year. For the late fall passage there were 18 on October 9 with 22 on October 13, then 16 seen on October 16 with three on October 20. There were four on October 23 with eight on October 28 and 13 on November 5, then two seen on November 9 with one on November 17. There were 17 on November 21 with five to November 29 and two on November 30. That closed the late fall passage. The counts were now higher again. For the winter passage there were five on December 2 with eight on December 11 and 80 on December 14, then 34 seen to December 21 with 23 on December 26 and nine on December 28. There were 12 on December 30 with 32 on January 2, then 14 seen on January 5. That completed the winter passage. For the early spring passage there were 20 on January 7 with 29 on January 9, then 21 seen on January 15 with ten on January 19. There were 11 on January 22 with 16 on January 26, then seven seen to February 2. There were 16 on February 5 with 30 on February 12 and 37 on February 19, then 21 seen on February 23 with 12 on February 26. That concluded the early spring passage. For the main spring passage there were 30 on March 2 with 33 on March 9 and 45 on March 12, then 43 seen on March 19 with nine on March 24. There were 46 on March 26 with 77 on March 29, then 19 seen on April 6 with 17 on April 11. There were 19 on April 13 and April 16 with 23 on April 21 and 33 on April 27, then 22 seen on April 30 with 12 on May 4. That was the end of the main spring passage. For the summer passage there were 15 on May 7 with 32 on May 12, then seven seen on May 15.

There were 21 on May 18 with 22 on May 21, then two seen on May 26. There were 17 on May 29 with 21 on June 1 and 51 on June 8, then 14 seen on June 11. That finished the summer passage. For the post-breeding gathering there were 26 on June 16 with 46 on June 18 and 110 on June 23, then 76 seen on June 29 with 50 on July 2 and 44 on July 4. There were 51 on July 6 with 46 on July 9 and 33 on July 13. That ended the post-breeding gathering. For the early fall passage there were 72 on July 19 with 51 on July 21, 45 on July 23, 38 on July 25, 19 on July 27 and six on July 30. There were 18 on August 5 with 55 on August 8, then 48 seen on August 10 with 32 on August 24 and 27 on August 27.

Little Blue Heron (*Egretta caerulea*)

Seen in low numbers through the year; there was the suggestion of a post-breeding gathering in July and August. Early fall records: *there were 16 on June 26 with 20 on June 30 and 26 on July 3, then 16 seen on July 10 with 14 on July 17 and 13 to July 25. There were 30 on July 28 with ten on July 31. There were 11 on August 4 with 20 to August 11 and 38 on August 14,* then 21 seen on August 18 with 17 on August 25 and five on August 28. There were eight on September 2 with 12 on September 4 and 58 on September 8, then 13 seen on September 11 with 11 on September 15. There were 16 on September 18 and September 26 with 11 on September 29. That was the early fall passage. For the late fall passage there were 17 on October 2 with 20 on October 6 and 41 on October 9, then 22 seen on October 16 with 14 on October 20, eight on October 23 and five on October 28. There were eight on November 5 with 11 on November 9, 12 on November 17 and 20 on November 21, then 18 seen to November 29 with ten on November 30. That closed the late fall passage. For the winter passage there were 11 on December 2 with 13 on December 8 and 24 on December 14, then 16 seen on December 16 with 12 on December 21 and seven on December 26. There were nine on December 28 with 12 on December 30 and 18 on January 2, then 11 seen on January 5 with ten on January 7. That completed the winter passage. For the early spring passage there were 15 on January 9 with 23 on January 11, then ten seen on January 15. There were 15 on January 19 with 18 on January 22, then ten seen to January 30. There were 18 on February 2 with 12 on February 5, nine on February 9 and seven on February 12. There were 19 on February 15 with 16 on February 19, 14 on February 23, 12 on March 2 and nine on March 5. That concluded the early spring passage. For the late spring passage there were 16 on March 9 with 15 on March 12 and five on March 16. There were ten on March 19 with 22 on March 26, then 15 seen on March 29 with 11 on April 2. There were 12 on April 6 with 16 on April 11, then nine seen on April 16 with eight on April 21 and four on April 24. That closed the late spring passage. For the summer passage there were eight on April 27 with nine on April 30, ten on May 4 and 26 on May 12, then 21 seen on May 18 with 15 on May 21. There were 22 on May 26 and May 29 with 29 on June 1,

then 21 seen on June 8 with 14 on June 11 and 13 on June 16. There were 26 on June 18 and June 23 with 45 on June 26 and 55 on June 29, then 42 seen on July 4 with 38 on July 9 and 32 on July 13. That ended the summer passage. For the post-breeding gathering there were 79 on July 19 with 58 on July 21, 42 on July 25, 29 on July 27, 27 to August 8, 26 on August 10 and 18 on August 13. *There were 29 on August 20 with 35 on August 27 and 63 on September 1, then 57 seen on September 7 with 34 on September 10, 28 on September 14 and 20 on September 16. That finished the post-breeding gathering.*

Tricolored Heron (*Egretta tricolor*)

This was the least common of these herons but there was a post-breeding gathering. Early fall records: *for the post-breeding gathering there were 15 on May 27 with 25 on June 2, 34 to June 10 and 45 on June 16, then 34 seen on June 19 with 28 on June 26, 24 on July 3 and 14 on July 8. There were 27 on July 10 with 22 on July 17 and 21 on July 21. There were 29 on July 25 with 21 on July 31, 16 on August 4 and seven on August 7. There were eight on August 11 with 20 on August 14, then 14 seen on August 21 with 11 on August 25 and five on August 28. That finished the post-breeding gathering. For the balance of the early fall passage there were eight on September 2 with ten on September 4 and 13 on September 8, then nine seen on September 15 with eight on September 22 and three to October 2. That was the early fall passage. For the late fall passage there were seven on October 6 with five on October 9 and two on October 13. There were eight on October 16 with nine on October 20, then six seen on October 28 with five on November 5 and four on November 9. There were five on November 17 with nine on November 21 and ten on November 24, then five seen on November 29 with four on November 30 and one on December 2. That closed the late fall passage. For the winter passage there were four on December 8 with ten on December 14, then seven seen to December 26 with six on December 28. There were eight on December 30 with seven on January 2 and five on January 5. That completed the winter passage. For the early spring passage there were 11 on January 7 with 12 on January 9, then six seen on January 11 with five on January 15. There were seven on January 19 with four on January 22 and three on January 26. There were four on January 30 with seven on February 2 and ten on February 5, then five seen to February 12 with four on February 15. There were eight on February 19 with seven on February 23, five on February 26 and two on March 2. That concluded the early spring passage. For the late spring passage there were six on March 5 with five on March 9, three on March 12 and two on March 16. There were six on March 19 with two on March 24. There were four on March 26 with five on March 29 and eight on April 2, then six seen to April 11 with five on April 13. There were eight on April 16 and April 21 with three on April 24. There were six on April 27 with nine on April 30, then five seen on May 4 with two on May 7. That ended the late spring*

passage. For the summer passage there were 17 on May 12 with 12 on May 18, ten on May 21, five on May 26 and four on May 29. The summer passage ran to June 23 after which it was hijacked by the start of the post-breeding gathering. There were seven on June 1 with ten on June 8, 11 on June 16, 14 on June 18, 15 on June 23, 35 on June 29, 44 on July 4 and 64 on July 6, then 31 seen on July 9 with 27 on July 13. There were 93 on July 19 with 83 on July 21, 48 on July 23, 28 on July 25, 26 on July 30 and 23 on August 5. There were 33 on August 8 with 14 on August 10, 13 on August 13 *and 11 on August 20*. That finished the post-breeding gathering.

Cattle Egret (*Bubulcus ibis*)

A common species all year long; there was a strong fall passage. Early fall records: *for the post-breeding gathering there were 455 on May 30 with 460 on June 22 and 850 on June 10, then 670 seen on June 12 with 390 on June 16. There were 685 on June 19 with 1,090 on June 26, then 860 seen on July 3 with 695 on July 8. There were 1,050 on July 10 with 695 on July 14, 475 on July 17, 230 on July 21, 205 on July 25 and 165 on July 28. There were 935 on July 31 with 1,570 on August 4, then 1,220 seen to August 11. That was the end of the post-breeding gathering. For the early fall passage there were 1,470 on August 14 with 1,550 on August 21, then 710 seen on August 25 with 430 on August 28. There were 850 on September 2 with 1,630 on September 4, then 1,170 seen on September 8 with 430 on September 11. There were 1,450 on September 15 with 2,120 on September 18, then 1,500 seen on September 26 with 605 on September 29. That was the early fall passage. For the main fall passage there were 1,280 on October 2 with 1,490 on October 9 and 5,375 on October 13, then 1,840 seen on October 16 with 1,035 on October 23 and 205 on October 28. The count of 5,375 was the highest count for Zellwood but the highest count is now (2013) that of 6,400 on September 16, 2004. There were 275 on November 5 with 440 on November 9 and 2,530 on November 17, then 650 seen on November 21 with 420 on November 24, 126 on November 29 and 16 on November 30. That closed the main fall passage. For the winter passage there were 111 on December 2 with 410 on December 8, 580 on December 11 and 3,450 on December 14, then 905 seen on December 16 with 415 on December 21, 50 on December 28 and 47 on December 30. There were 82 on January 2 with 230 on January 5, then 46 seen on January 7 with 42 on January 9. That completed the winter passage. Numbers were now lower. For the early spring passage there were 148 on January 11 with 620 on January 15, then 280 seen on January 22 with 95 on January 26, 80 on February 2 and 64 on February 5. There were 102 on February 9 with 195 on February 12 and 260 on February 15, then 100 seen on February 19 with 27 on February 23. There were 203 on February 26 with 20 on March 2. That concluded the early spring passage. For the main spring passage there were 177 on March 5 with 205 on March 9, then 203 seen on March 12 with 155 on March 16 and 17 on March 19. There were 140 on March 24 with 280 on*

March 26 and 380 on April 2, then 215 seen on April 11 with 175 on April 16 and 62 on April 21. That ended the main spring passage. For the summer passage there were 66 on April 24 with 114 on April 27 and 300 on April 30, then 71 seen on May 4 with 68 on May 7. There were 150 on May 12 with 275 on May 15, 310 on May 21, 350 on May 29 and 430 on June 1, then 39 seen on June 4. That was the end of the summer passage so for the post-breeding gathering there were 186 on June 8 with 636 on June 11, 800 on June 16, 910 on June 23 and 1,345 on June 26, then 1,125 seen on June 29 with 890 on July 4, 750 on July 6 and 605 on July 9. There were 1,410 on July 13 with 1,700 on July 19, then 830 seen on July 21 with 430 on July 23 and 295 on July 25. There were 610 on July 27 with 655 on August 5 and 1,020 on August 8, then 340 seen on August 10. There were 545 on August 13 *with 1,045 on August 20 and 1,330 on August 24, then 850 seen to September 1 with 280 on September 3. That finished the post-breeding gathering.*

Green Heron (*Butorides virescens*)

A summer visitor which was also present in much smaller numbers from August to March; there was a major roost by the Sand Farm Bridge in the early fall during the post-breeding gathering. During the Breeding Bird Survey a total of 43 pairs located, the first fledged young were seen on May 4. Early fall records: *there were 26 on July 3 with 17 on July 8 and 13 on July 10. There were 16 on July 14 with 17 on July 17 and 20 on July 21, then 19 seen on July 28 with 13 on July 31 and 11 on August 4. There were 23 on August 7 with 12 to August 18 and eight to August 25. There were 14 on August 28 with 12 on September 2, five on September 8 and three on September 11. There were seven on September 15 with eight on September 22, then three seen on September 29 with two on October 2. That was the early fall passage. For the late fall passage there were three on October 6 and October 9 with two to October 16. There were four on October 20 with one on October 23. There were three on October 28 and November 5 with four on November 9 and five on November 21, then four seen to November 29. That closed the late fall passage. For the winter passage there were six on December 2 with five on December 11 and four on December 14. There were five on December 16 with nine on December 21, then six seen on December 26 with five on December 28. There were seven on December 30 with ten on January 2, then six seen on January 5 with four on January 7. That completed the winter passage. For the early spring passage there were eight on January 9 with six on January 11 and three to January 19. There were four from January 22 to January 30 with seven on February 2, then five seen on February 5 with four to February 12. There were eight on February 15 with four on February 19. That concluded the early spring passage. For the summer passage (this species nests so early) there were five on February 23 and February 26 with six on March 2 and March 5, then four seen on March 9. There were six on March 12 with*

13 on March 16 and 18 on March 19, then nine seen on March 24. There were ten on March 26 with 11 on March 29, 13 to April 6 and 19 on April 13, then 13 seen on April 16. There were 15 on April 21 with 17 on April 24, 19 on April 27 and 20 on May 4, then 14 seen to May 12. That was the end of the summer passage. For the post-breeding gathering there were 21 on May 15 with 41 on May 21, then 37 seen to June 1 with 34 on June 4. There were 67 on June 8 with 45 on June 16 and 29 on June 18. There were 84 on June 23 with 109 on June 29, then 73 seen on July 4 with 50 on July 6, 44 on July 9 and 42 on July 13. The count of 109 was the highest count for Zellwood but the highest count is now (2013) that of 242 on August 23, 2008. There were 59 on July 19 with 66 on July 21 and 71 on July 23, then 32 seen on July 25 with 27 to July 30, 17 on August 5, 14 on August 10 and 11 on August 13. Exceptionally there was a late brood of three on August 5.

In the early fall during the post-breeding gathering there was a roost by the Sand Farm Bridge the following were the numbers seen or heard leaving this roost at first light. There were 61 on June 29 with 55 on July 4, 40 on July 6, 31 on July 9 and 28 on July 13. There were 54 on July 19 with 57 on July 21 and 67 on July 23, then 29 seen on July 25 with 22 to July 30, 11 on August 5 and five on August 8. There were eight on August 10 with 11 on August 13. These totals are included in the figures given earlier.

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

Seen from the winter to the early fall; there were few records for the late fall passage. Once again there was no evidence of breeding. Early fall records: *there were eight on June 16 with ten on June 26, then six seen on July 3 with five on July 8, three on July 21 and singles to August 14.* For this year there was one on August 21 with three on August 25, then one seen on September 4. There were also two on September 15. The early fall passage was really over by August 25. For the late fall passage there were singles on October 9, October 16, October 20, November 5 and November 9. That closed the late fall passage. For the winter passage there were two on November 21 and November 24 with nine on November 30, then two seen on December 2 with singles to December 11. There were four on December 14 with five on December 16, six on December 26 and seven on December 30, then five seen on January 5 with four on January 7 and one on January 9. That completed the winter passage. For the early spring passage there were two on January 11 and January 22 with three on January 30, then one seen on February 2. There were two on February 5 with three on February 9 and February 15, then two seen on February 26 with one on March 2. That concluded the early spring passage. For the late spring passage there were nine on March 5 with six on March 12, five on March 19, two on March 24 and singles to April 2. There were three on April 6 with two to April 16 and singles to April 24. There were three on April 27 with two on May 4 and singles to May

15. That ended the late spring passage. For the summer passage there were three on May 18 with singles to May 26. There were three on May 29 with two on June 1 and one to June 11. There were four on June 18 with five on June 26, then two seen on June 29. That ended the summer passage. For the early fall passage there were three on July 2 with seven on July 4 and eight on July 9, then one seen on July 13. There were three on July 19 with four on July 21 and seven on July 23, then singles seen to July 30. There were two on August 5 with three on August 8, then singles seen to August 13.

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

Basically a post-breeding visitor this year with very limited sightings during the early fall and the spring passages. Early fall records: *for the post-breeding gathering there were 16 on June 12 with 12 on June 16, nine on June 19, six on June 23, three on June 26 and two on June 30. There were five on July 3 with two to July 25 and singles to August 4. That closed the post-breeding gathering.* For the early fall passage there were three on August 25 with one later on September 11. That was the extent of the early fall passage. There were no further sightings until the spring. For the late spring passage there were singles on March 9 and April 16. For the summer passage there were two on May 4 with one on May 7. There were also two on May 29. Later there was one on June 11 with two on June 16. That closed the summer passage. For the post-breeding gathering there was one on June 26 with two on July 2, then one seen on July 4. There were two on July 19 with one on July 23. There were two on July 25 and July 27 with one on July 30. There were two on August 5 and August 8 with one on August 10. Finally for the post-breeding gathering there were two on August 13 *with one on August 20.*

White Ibis (*Eudocimus albus*)

Seen in small numbers through the year with a slightly stronger winter passage; there was also a major one day influx in late June. Early fall records: *there were 55 on June 23 with 56 on June 26, 77 on June 30 and 157 on July 3, then 18 seen on July 8. There were 21 on July 10 with 83 on July 14, then 20 seen on July 21 with 16 on July 25. There were 295 on July 28 with 73 on July 31, 65 on August 4, 45 on August 7, 24 on August 14, eight on August 21 and singles to August 28. There were five on September 2 with six on September 8 and September 11, then singles seen to September 18. There were 47 on September 22 with seven on September 26 and two on September 29. That was the end of the early fall passage. For the late fall passage there were 38 on October 2 with three on October 9 and one on October 13. There were two on October 16 with 36 on October 20, then eight seen on October 23. Later there were 62 on November 17 with 22 on November 21 and one on November 24. There were 35 on November*

30 with 17 on December 2. That closed the late fall passage. For the winter passage there were 30 on December 8 with 110 on December 11 and 670 on December 14, then 250 seen on December 16 with 248 on December 21, 18 on December 26 and seven on December 28. There were 97 on December 30 with 177 on January 2 and 178 on January 5, then 88 seen on January 9 with 36 on January 11 and 20 on January 15. That completed the winter passage. For the early spring passage there were 91 on January 19 with 60 on January 22 and one on January 26. There were 45 on January 30 with 87 on February 2, then seven seen on February 5. There were 28 on February 9 with 43 on February 12 and 188 on February 15, then 48 seen on February 23 with 26 on February 26 and 22 on March 2. That concluded the early spring passage. For the main spring passage there were 39 on March 5 with 95 on March 9 and 263 on March 16, then 22 seen on March 19. There were 110 on March 24 with 133 on March 26 and 160 on April 2, then 33 seen on April 6. There were 54 on April 11 with 203 on April 13, then 89 seen on April 16 with nine on April 21. That ended the main spring passage. For the summer passage there were ten on April 24 with 28 on April 27, then five seen on April 30. There were seven on May 4 with 44 on May 7 and 67 on May 12, then 18 seen on May 15 with 11 on May 18. There were 51 on May 21 with 61 on May 29, then 37 seen on June 1 with 18 on June 4. There were 72 on June 8 with 40 on June 11. There were 56 on June 16 with 92 on June 18 and 1,370 on June 23, then 220 seen on June 29 with 180 on July 2, 110 on July 4, 96 on July 6 and 47 on July 9. The count of 1,370 was the highest count for Zellwood, but the highest count is now (2013) that of 11,210 on June 17, 2011; how times have changed. That was the end of the summer passage. For the early fall passage there were 56 on July 13 with 190 on July 19, then 95 seen on July 21 with 42 on July 25 and 17 to July 30. There were 21 on August 5 with 80 on August 8, 117 on August 10 and 545 on August 20, then 67 seen on August 24 with 36 on August 27.

Glossy Ibis (*Plegadis falcinellus*)

For much of the year seen in small numbers; there was a stronger winter passage and a short-lived post-breeding gathering. Early fall records: *for the post-breeding gathering there were 13 on July 10 with 17 on July 14 and 22 on July 17, then 16 seen on July 21 with 13 on July 25. There were 22 on July 28 with 69 on July 31 and 215 on August 4, then 190 seen on August 7 with 152 on August 11, 42 on August 14, eight on August 21 and three on August 25.* That ended the post-breeding gathering. For the remnant early fall passage there were four on August 28 with 29 on September 4 and 48 on September 8, then eight seen on September 15 with four on September 18 and two to September 26. That was the early fall passage. For the main fall passage there were 41 on September 29 with 26 on October 2, 24 on October 6 and five on October 9. There were 81 on October 13 with 32 on October 20, eight on October 23 and three on October 28. There were 22 on November 5 with 36 on November 17, then two

seen on November 21. That closed the main fall passage. For the winter passage there were 42 on November 30 with 105 on December 2, 474 on December 11 and 750 on December 14, then 650 seen on December 16 with 174 on December 21 and ten on December 26. There were 29 on December 28 with 72 on December 30, 1,230 on January 2 and 1,250 on January 5, then 385 seen on January 7 with 28 on January 9. That completed the winter passage. For the early spring passage there were 45 on January 11 with 280 on January 15 and 430 on January 22, then 97 seen on January 26. There were 250 on January 30 with 560 on February 2, then 270 seen on February 9 with 220 on February 12. There were 370 on February 15 with 311 on February 23, 260 on February 26 and 20 to March 5. That concluded the early spring passage. For the late spring passage there were 197 on March 9 with 282 on March 12, then 248 seen on March 16 with 27 on March 19. There were 70 on March 24 with 85 on March 26, then 77 seen on March 29 with 75 on April 2 and 13 on April 6. There were 76 on April 11 with 50 on April 16, 11 on April 21, five on April 24 and two to April 30. That ended the late spring passage. Counts were now the lowest of the year. The low period ran from April 24 to May 29. For the summer passage there were nine on May 4 with 16 on May 7 and 42 on May 15, then six seen on May 21 with two on May 29. There were ten on June 1 with 17 on June 4 and 79 on June 8, then 56 seen on June 16 with four on June 18. There were 240 on June 23 with 117 on June 29 and nine on July 2. That was the end of the summer passage. For the post-breeding gathering there were 62 on July 4 with 162 on July 6, then 58 seen on July 9 with 41 on July 13. There were 1,380 on July 19 with 243 on July 21, 109 on July 25, 39 on July 27, 27 on July 30 and seven on August 5. The count of 1,380 was the highest count for Zellwood but the highest count is now (2013) that of 3,825 on December 1, 2004. That closed the post-breeding gathering so for the early fall passage there were 51 on August 8 with 122 on August 10 *and 450 on August 20, then 62 seen on August 24.*

White-faced Ibis (*Plegadis chihi*)

This was a vagrant. For the summer passage there were two adults in breeding plumage on the north shore of Lake Apopka near the end of the Laughlin Road extension on June 1.

Roseate Spoonbill (*Platalea ajaja*)

Whilst there were no records for this survey year there were records for 2002. *There were two on June 2 with three to June 10, four on June 12, six on June 16, nine on June 19, 26 on June 23 and 30 on June 26, then 18 seen on June 30 with eight on July 8, two on July 10 and one on August 14.* The count of 30 was the highest count for Zellwood but the highest count is now (2013) that of 139 on October 2, 2011.

Wood Stork (*Mycteria americana*)

Exceptionally scarce this year; there were a few fall and winter sightings otherwise it was a late summer visitor. Early fall records: *there was one on July 17 with three on July 31*. For this year there were two on September 22. That was the extent of the early fall passage. For the late fall passage there were two on October 13 with six on October 16, later there were 12 on November 17. That closed the late fall passage. For the winter passage there were three on December 11 with two on December 16. There were also singles on December 26 and December 30. Those were the only winter sightings. There were no records for the early spring passage. For the late spring passage the only record relates to two on April 27. For the late summer and early fall there was one on June 16 with seven on June 23, then singles seen to July 13. There were four on July 19 with three on July 21 and one on August 13. That had to be one of the worst years.

Black Vulture (*Coragyps atratus*)

A non-breeding resident; there were no large influxes this year. Early fall records: *there were 127 on July 10 with 65 on July 14 and two on July 17. There were five on July 21 with eight on July 25, 12 on July 28, 15 to August 7, 44 on August 14 and 48 on August 18, then 26 seen on August 21 with two on August 25*. There were seven on August 28 with 32 on September 4, then seven seen on September 11 with six to September 26 and one on September 29. That was the early fall passage. For the late fall passage there were five on October 2 with 18 on October 9, then four seen on October 16 with one on October 20. There were two on October 23 with three on October 28, then singles seen to November 9. There were three on November 17 with singles to November 24. That was the weakest event of the year (the late fall passage). For the winter passage there were five on November 29 with four on December 2, three on December 11 and one on December 14. There were two on December 16 with three on December 21, four on December 26 and ten on December 28, then six seen on January 2 with singles to January 7. That completed the winter passage. For the early spring passage there were 16 on January 9 with four on January 11 and singles to January 19. There were four on January 22 with two to January 30 and one on February 2. There were four on February 12 with three on February 15 and one on February 19. There were five on February 23 with 21 on February 26, then two seen on March 2 with one on March 5. That concluded the early spring passage. For the main spring passage there was one on March 9 with 13 on March 12, then one seen on March 16. There were two on March 19 with 11 on March 24, then seven seen on March 26 with two on March 29. There were 89 on April 2 with 30 on April 11, four to April 16 and three on April 21. There were 13 on April 24 with three on April 27 and one on April 30. There were seven on May 4 with two on May 7 and one on May 12. That was the end of the

main spring passage. For the summer passage there were eight on May 15 with ten on May 26, then nine seen on May 29 with five on June 1 and one on June 8. There were four on June 11 with five on June 16, seven on June 18 and eight on June 23, then seven seen on June 29 with four on July 2. That closed the summer passage. For the early fall passage there were eight on July 4 with nine on July 6, 13 on July 13, 14 on July 21 and 16 on July 25, then five seen on July 30 with three on August 5. There were four on August 8 with six on August 10 *and 23 on August 24, then nine seen on September 1 with six to September 10, five to September 24, four on September 29 and one on October 2.* That was the end of the early fall passage.

Turkey Vulture (*Cathartes aura*)

Another non-breeding resident, there were no major influxes this year. Early fall records: *there were 72 on July 3 with 87 on July 10, then 71 seen on July 14 with 63 on July 17 and 35 on July 21. There were 70 on July 25 with 64 on July 28 and 42 on July 31. There were 82 on August 4 with 106 on August 11, then 54 seen on August 14.* For this year there were 64 on August 18 with 65 on August 21, then 30 seen on August 25 with 20 on August 28. There were 53 on September 2 with 78 on September 4, then 49 seen on September 8 with 25 on September 11, 23 on September 15, 16 on September 18 and 15 on September 22. That closed the early fall passage. For the late fall passage there were 34 on September 26 with 12 on September 29, ten on October 2, eight on October 6 and six to October 13. There were eight on October 16 with nine on October 20 and 48 on October 23, then seven seen on October 28 with four on November 5. There were 18 on November 9 with nine on November 17. That was the late fall passage. For the winter passage there were 18 on November 21 and November 24 with 43 on November 29 and 104 on December 2, then 14 seen on December 8 with 12 on December 11. There were 14 on December 14 with 188 on December 16, then 41 seen on December 26 with 26 on December 28, 17 on December 30 and six on January 2. There were 23 on January 5 with 11 on January 7. That completed the winter passage. For the early spring passage there were 15 on January 9 with 43 on January 11, then 40 seen on January 15 with 15 on January 19. There were 420 on January 22 with 39 on January 26, 17 on February 2, 16 on February 5 and nine on February 12. There were 16 on February 15 with 24 on February 19 and 58 on February 23, then 20 seen on February 26 with 14 on March 2. That concluded the early spring passage. For the late spring passage there were 31 on March 5 with 45 on March 9 and 46 on March 16, then eight seen to March 26 with three on March 29. There were 18 on April 2 with nine on April 11, seven on April 16, five on April 21 and three on April 24. There were six on April 27 with nine on May 4, then five seen on May 7 with two on May 12. That ended the late spring passage. For the summer passage there were four on May 15 with seven on May 18, then one seen on May 21. There were three on May 26 with five on May 29 and nine on June 1,

then six seen on June 4. There were seven on June 8 with 16 on June 11, 18 on June 18 and 34 on June 23, then 14 seen to June 29. That was the end of the summer passage. For the early fall passage there were 23 on July 2 with 31 on July 4 and 81 on July 9, then 47 seen on July 13 with 38 on July 19 and 11 on July 21. There were 15 on July 23 with 25 on July 25, then 20 seen on July 27 with 16 on July 30. There were 25 on August 5 with 12 on August 8. There were 24 on August 10 with 51 on August 13, *then 21 seen on August 24 with 15 on August 27, 12 on September 3, six on September 7 and five on September 10.*

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

In the 2001/2002 year there was a single record, this year there were 20 sightings these were in the summer and the early fall passages. For the summer passage there was one on May 29 with five on June 1, then three seen on June 8 with two to June 23 and one on June 26. For the early fall passage there were three on June 29 and July 4 with two on July 6 and one on July 9. There were six on July 19 with four on July 21, three on July 23 and one on July 25. The count of six was the highest count for Zellwood but the highest count is now (2013) that of 1,660 on February 5, 2010. There were four on July 27 with two on July 30 and singles to August 8. There were three on August 10 with one on August 13.

Fulvous Whistling-Duck (*Dendrocygna bicolor*)

There were no sightings from November to February; otherwise seen in small numbers. Early fall records: *there were nine on July 10 with ten on July 14 and 33 on July 17, then 19 seen on July 21 with five on July 25 and two on July 28. There were 46 on July 31 with 110 on August 4, then 53 seen on August 7 with 18 on August 11. There were 23 on August 14 with 36 on August 18, then nine seen on August 21 with five on August 25 and three on August 28. There were seven on September 2 and September 4 with 14 on September 8 and 17 on September 11, then seven seen to September 18 with two on September 22. There were eight on September 26 with two on October 2. That was the early fall passage. For the late fall passage there were two on October 20 and October 28. Those were the only records for the late fall passage. There were no sightings for the winter or early spring passages. For the main spring passage there was one on March 2 with nine on March 5, ten on March 12 and 37 on March 16, then 22 seen on March 19 with nine on March 24. There were 29 on March 26 with four on March 29. There were seven on April 2 with 25 on April 6, then ten seen on April 11 with six on April 16 and five on April 21. There were ten from April 24 to May 4 with two to May 12 and one on May 15. That was the end of the main spring passage. For the summer passage there were two on May 18 and May 26 with three on May 29 and June 1, then one seen on June 4.*

There were three from June 8 to June 16 with four on June 18, five on June 23, ten on June 29, 39 on July 2 and 71 on July 6, then 61 seen on July 9 with 29 on July 19, 22 on July 21, 15 on July 25, seven on July 27 and two on July 30. That ended the summer passage. It is likely that the early fall passage really started on July 2 so for the early fall passage there were 15 on August 5 with six on August 8 and two on August 10. There were 14 on August 13 *with 15 on August 24, then two seen to September 3.*

Snow Goose (*Chen caerulescens*)

This was a rare late fall and winter passage migrant. For the late fall passage on November 24 two adult white morphs flew to the south. For the winter passage in the area there were two adult white morphs on December 2 and December 8.

Wood Duck (*Aix sponsa*)

Seen in very low numbers this year; there were no sightings from mid-September to the end of November. During the Breeding Bird Survey one pair located. Early fall records: *there were three on July 14 with two on July 21 and one on July 25. There were two on July 28 with four on July 31 and nine on August 14,* then seven seen on August 18 with two to September 15. That was the early end of the early fall passage. There were no further sightings until the winter passage. For the winter passage there were six on November 29 and December 11 with two on December 14. For the early spring passage there were three on January 7 with two to January 19. There were also two on February 5 and February 15 with four on February 19 and five on February 26, then two seen on March 2. That ended the early spring passage. For the main spring passage there were two on March 5 and March 9 with five on March 12 and eight on March 16, then seven seen on March 19 with two to March 26. There were four on March 29 with two on April 2 and one on April 6. There were five on April 11 with four on April 13 and two on April 21. There were also three on April 24. That closed the main spring passage. For the summer passage there were two on May 7 with one on May 12. There were two on May 15 with one on May 18. There were three on May 29 with two to June 23. There were four on June 29 with singles to July 13. That ended the summer passage so for the early fall passage there were seven on July 19 with four on August 5 and two on August 10.

Gadwall (*Anas strepera*)

This was a vagrant. For the early spring passage there was one on February 23.

American Wigeon (*Anas americana*)

This was a vagrant. For the late spring passage there were two on March 24 with an adult male at the Sand Farm on May 21.

American Black Duck (*Anas rubripes*)

This was a vagrant; it seems strange that there were more sightings of this species than there were of Gadwall and American Wigeon. For the fall passage there were two at the Sand Farm Cattail Marsh on October 16. For the early spring passage there was another at the Sand Farm Cattail Marsh on January 7 and January 11.

Mallard (*Anas platyrhynchos*)

Seen in low numbers except for the summer passage for which there was a single record. I include all hybrids with the Mottled Duck in the counts for this species. Early fall records: *there was one on June 19 with four on June 23, then singles seen on four dates to July 21. There were six from July 25 to July 31 with five on August 4, four on August 7 and one on August 11. There were five on August 14 with eight on August 21, then four seen on August 28 with three to September 4. There were six on September 8 with two on September 11. There were three on September 15 with four on September 18, then five seen on September 22 and September 26 with four on September 29 and three on October 2. That was the early fall passage. For the late fall passage there were four on October 6 with three to October 20 and singles on October 23 and October 28. The only record for November relates to one on November 17. Those were the only late fall sightings. For the winter passage there were five on December 11 with three on December 14 and singles to January 5. For the early spring passage there were two on January 7 with singles to January 22. There were three on January 26 with two to February 5 and singles to February 12. There were two on February 15 with three on February 19, then two seen on February 23 with one on February 26. That concluded the early spring passage. For the late spring passage there were three on March 2 with one on March 5. There were two on March 9 with three on March 12 and March 16, then two seen on March 19 with singles to March 29. There were three on April 2 with singles to May 26. That ended the*

late spring passage. The sole record for the summer passage was that of one on June 11. For the early fall passage there were two on July 4 and July 6 with three on July 19, then two seen on July 21 with singles to August 10.

Mottled Duck (*Anas fulvigula*)

After a major post-breeding gathering in 2002 numbers were lower for the rest of the year, there was only a minimal post-breeding gathering in 2003. During the Breeding Bird Survey a total of four pairs located; I did not note any broods. Early fall records: *for the post-breeding gathering there were three on June 26 and June 30 with eight on July 3, then seven seen to July 10. There were 17 on July 14 with seven on July 17. There were 11 on July 21 with 23 on July 25, 37 on July 28 and 67 on July 31, then 56 seen on August 7 with 17 on August 11. There were 56 on August 14 with 82 on August 21, then 18 seen on August 25. That finished the post-breeding gathering. For the early fall passage there were 38 on August 28 with 55 on September 2, then 54 seen on September 8 with 39 on September 11. There were 50 on September 15 with 72 on September 18 and 84 on September 22, then 67 seen on September 26 with 66 on September 28. That ended the early fall passage. For the late fall passage there were 69 on September 29 with 70 on October 6, 73 on October 16, 77 on October 20 and 87 on October 28, then 14 seen on November 5 with two on November 9. There were 19 on November 17 with two to November 24. That closed the late fall passage. For the winter passage there were four on November 30 with 19 on December 11, then 16 seen on December 14 with four on December 16 and two on December 21. There were 13 on December 26 with ten on December 28, six on December 30 and two on January 2. That completed the winter passage. For the early spring passage there were six on January 5 with 13 on January 7 and 21 on January 9, then six seen to January 15. There were ten on January 19 with 11 on January 22 and January 26, then ten seen on January 30 with eight on February 2. There were nine on February 5 with 11 on February 9, then nine seen to February 23 with six on February 26. That concluded the early spring passage. For the late spring passage there were 16 on March 2 with five on March 5. There were 12 on March 9 with 15 on March 12 and 17 on March 16, then 13 seen on March 19 with seven on March 26 and four on March 29. There were nine on April 2 with ten on April 11, then nine seen on April 13 with six to April 30, five on May 7 and two on May 12. That was the end of the late spring passage. For the summer passage there were 12 on May 15 with 11 on May 18, four on May 26 and three on May 29. There were six on June 1 and June 4 with nine on June 8, then four seen on June 11 with two on June 16. There were six on June 18 with three to June 29. That ended the summer passage. For a very weak post-breeding gathering there were 13 on July 2 with 20 on July 4, then 14 seen on July 6 with seven on July 9*

and five on July 13. There were 56 on July 19 with 14 on July 21, 12 on July 23 and two to July 30. There were three on August 5 with 19 on August 10, *then one seen on August 20.*

Blue-winged Teal (*Anas discors*)

A passage migrant; there was only the trace of a passage during the winter. Early fall record: *there were three on August 7.* For this year there were two on August 18 with four on August 28, 23 on September 4 and 68 on September 8, then 35 seen on September 11 with 18 on September 15 and six on September 18. That was the early fall passage. For the main fall passage there were 192 on September 26 with 140 on September 29, 95 on October 2, 74 on October 9 and 17 on October 13. There were 119 on October 16 with 33 on October 23 and three on October 28. There were 250 on November 5 with later one on November 17. That closed the main fall passage. For the winter passage there were two on November 29 with seven on December 11 and ten on December 14, then six seen on December 21. For the early spring passage there were eight on February 5 that was it. For the main spring passage there were nine on March 5 with 30 on March 9 and 55 on March 12, then 22 seen on March 16. This is a perfect example of why I divide the spring passage into two and for the location of the divide. There were 44 on March 19 with 210 on March 24 and 213 on March 26, then 68 seen on March 29 with 63 on April 2. There were 112 on April 6 with 82 on April 13, 21 on April 16, seven on April 21 and two on April 24. That ended the main spring passage. There were no summer sightings. For the early fall passage there were singles on July 4, July 21, July 23 and July 25 with two on July 27, four on August 13 *and 27 on August 24, then 14 seen on September 1 with three on September 3.*

Northern Shoveler (*Anas clypeata*)

An uncommon passage migrant; the majority were seen during the late fall passage. Early fall records: *there were singles on July 21 and July 25.* For this year there were singles on September 18 and September 22. That was the early fall passage. For the late fall passage there were two on five dates from September 26 to October 16. That was the late fall passage. There were no winter sightings. For the early spring passage there were two on February 23. Finally for the late spring passage there were two on March 19.

Northern Pintail (*Anas acuta*)

A rare passage migrant; unlike the last species the majority of the sightings were in the spring. For the early fall passage there were two on September 26 that was it. For the early spring passage there were three on February 12. Finally for the late spring passage there were two on March 5 and March 26.

Green-winged Teal (*Anas crecca*)

In line with the other ducks there were fewer records this year. For the early fall passage there were four on September 8 with five on September 22 and eight on September 26. For the late fall passage there were three on October 16 with four on October 20 and six on November 17. That closed the late fall passage. For the winter passage there were 12 on December 14. For the early spring passage there were five on February 9. For the main spring passage there were singles on March 5 and March 9 with two on March 12, then one seen on March 19. There were also two on March 24 and March 26. That was the main spring passage.

Ring-necked Duck (*Aythya collaris*)

Another scarce passage migrant this year; for the late fall passage there were 14 on November 5. For the winter passage there were four on December 14. For the early spring passage there was one on February 9 with 45 on February 23. Now to the only event of the year the main spring passage there were two on March 5 with five on March 9 and ten on March 12, then three seen on March 24 with singles on March 26 and March 29. Later there were singles on April 16 and April 21. That ended the main spring passage.

Greater Scaup (*Aythya marila*)

This was a vagrant. For the late fall passage there were two on November 21 with one on November 24.

Lesser Scaup (*Aythya affinis*)

A rare passage migrant and winter visitor; these ducks are not reliant on any flooded fields rather they winter on Lake Apopka or at least they normally do. Early fall records: *there*

was a male present from May 15 to July 10. What was presumably the same bird was seen again on August 7. For the late fall passage there were 17 on November 5. For the winter passage there were singles on November 29, December 8 and December 14. For the early spring passage there was one on February 23.

Common Goldeneye (*Bucephala clangula*)

This was a vagrant. For the winter passage there was a female/immature on December 30, location not noted.

Hooded Merganser (*Lophodytes cucullatus*)

A passage migrant and winter visitor; there were only small numbers seen this year. For the late fall passage there were singles on October 13, November 5, November 9 and November 21 with three on November 24, then one seen on November 29. That closed the late fall passage. For the winter passage there were five on November 30 with eight on December 2 and ten on December 16, then four seen to December 26 with three on December 28, two on December 30 and one to January 5. There were six on January 7 with singles to January 11. That completed the winter passage. For the early spring passage there were two on January 15 and January 26 with three on January 30 and eight on February 2, then seven seen on February 5 with two on February 9. There were three on February 12 with four on February 15, then two seen to February 26. That ended the early spring passage. For the late spring passage there were three on March 5, March 12 and March 16; there were no later records.

Ruddy Duck (*Oxyura jamaicensis*)

A winter visitor and spring passage migrant; numbers were for this species rather low. For the early fall passage there was one on August 18. For the main fall passage there were three on November 5 with 16 on November 9, 27 on November 21 and 60 on November 24, then ten seen on November 29 with four on November 30 and three on December 2. That closed the main fall passage. For the winter passage there were 1,450 on December 8 with 960 on December 16, 615 on December 21, 160 on December 26 and 60 on December 28. There were 2,600 on December 30 with 640 on January 5 and 160 to January 11. That completed the winter passage. For the early spring passage there were ten on January 26 with 830 on January 30, then 12 seen on February 2. There were also 22 on February 23. That ended the early spring passage. For the main spring passage there were 3,100 on March 5 with 3,650 on March 12,

then 870 seen on March 26 with 340 on March 29. The count of 3,650 was the highest count for Zellwood but the highest count is now (2013) that of 34,000 on January 4, 2006; hence my comment about the numbers being low this year. There were 1,295 on April 2 with 233 on April 6, 187 on April 13, four on April 21 and three to April 27.

Osprey (*Pandion haliaetus*)

This was a non-breeding resident with the greatest numbers being seen in April and May. Early fall records: *for the post-breeding gathering there were 11 on June 12 with 14 on June 16, 22 on June 19, 24 on June 23 and 31 on June 26, then 22 seen on July 3 with 19 to July 10. There were 34 on July 14 with 25 on July 17 and 15 on July 21. There were 27 on July 25 with 22 on July 31 and 16 on August 4. There were 23 on August 7 with 30 on August 11, then 16 seen on August 14 with 14 on August 18 and eight to August 25. That was the post-breeding gathering. For the balance of the early fall passage there were 16 on August 28 with eight on September 2, seven on September 8, five on September 11 and four to September 18. There were eight on September 22 with nine on September 26, then five seen on September 29. That was the early fall passage. For the late fall passage there were seven on October 2 with nine on October 6, then five seen on October 9 with three on October 13. There were five on October 16 with seven on October 20, then three seen on October 23. There were four on October 28 with nine on November 5, then eight seen on November 9 with four on November 17. There were nine on November 21 with eight on November 24 and six on November 29. That closed the late fall passage. For the winter passage there were 14 on November 30 with 12 on December 2 and ten on December 8. There were 22 on December 11 with 14 on December 14 and 12 on December 16. There were 19 on December 21 with nine on December 26. There were 11 on December 28 with 13 on December 30, then seven seen on January 2. There were eight on January 5 with 14 on January 7, then nine seen on January 9. That completed the winter passage. For the early spring passage there were ten on January 11 and January 15 with 19 on January 19, then 15 seen on January 22 with 14 on January 26, eight on January 30 and six on February 2. There were 12 on February 5 with 13 on February 9 and 14 on February 12, then 13 seen on February 15 with nine on February 19 and eight on February 23. That concluded the early spring passage. For the main spring passage there were ten on February 26 with 17 on March 2, then 13 seen on March 9 with 11 on March 12 and nine on March 16. There were 12 on March 19 with 13 on March 24, then eight seen on March 26. Now we come to the main event of the year. There were 11 on March 29 with 21 on April 2, 22 on April 6, 43 on April 11, 49 on April 13, 56 on April 16 and 57 on April 24, then 43 seen on April 30 with 30 on May 4 and 13 on May 7. That event lasted for over a month. The count of 57 was the highest count for Zellwood. The count has risen annually to reach a high count of 213 on July 14, 2013.*

That was also the end of the main spring passage. For the summer passage there were 34 on May 12 with 20 on May 15 and 13 on May 18. There were 21 on May 21 with 24 on May 29, then 22 seen on June 1 with 21 on June 4 and ten on June 8. There were 23 on June 11 with 18 on June 18 and ten on June 23. There were 17 on June 26 with 21 on June 29, then 16 seen on July 2 with nine on July 4. That ended the summer passage. For the post-breeding gathering there were 20 on July 6 with nine on July 13, eight on July 19 and seven on July 21. There were 11 on July 23 with 18 on July 25, then seven seen on July 27 with six on July 30. There were nine on August 5 with ten on August 10, *then seven seen on August 20 with three on August 27 and two on September 1. The post-breeding gathering became an important event from the 2003-2004 year.*

Swallow-tailed Kite (*Elanoides forficatus*)

In 2002 the post-breeding gathering was very weak with a markedly stronger event in 2003; only small numbers seen during the spring and the summer. Early fall records: *for the post-breeding gathering there were two on June 23 with 41 on June 26, then 39 seen on July 3 with four on July 8. There were 35 on July 10 with 81 on July 14, then 32 seen on July 17 with 13 on July 21 and 12 on July 25. There were 13 on July 28 with 14 on July 31 and 43 on August 4, then 11 seen to August 11. There were 14 on August 14 with two on August 21. There were no further sightings until the spring. For the spring passage there were singles on March 29, April 6 and April 21. For the summer passage there were three on May 4 with six on May 15, 13 on May 26 and 24 on June 1, then two seen on June 8. There were 23 on June 11 with 27 on June 16, then four seen on June 18. That closed the summer passage. For the post-breeding gathering there were 18 on June 23 with 21 on June 26, 106 on July 2, 148 on July 6, 211 on July 9, 303 on July 19, 413 on July 21 and 556 on July 25, then 415 seen on July 27 with 243 on July 30, 202 on August 5, 41 on August 8 and 36 on August 10. That influx lasted seven weeks. The count of 556 was the highest count for Zellwood but the highest count is now (2013) that of 1,642 on August 3, 2012. Whilst the high count varies considerably year on year this species does appear to be present in greater numbers now (2013). There were 90 on August 13 *with 78 on August 20, four on September 1, three on September 3 and one on September 7.**

Snail Kite (*Rostrhamus sociabilis*)

This was a vagrant. Early fall record: *an immature flew to the north on August 14, 2002.* There were no sightings during this survey year.

Bald Eagle (*Haliaeetus leucocephalus*)

Seen in very low numbers this year; during the Breeding Bird Survey a pair located at the Sand Farm they raised one young. Early fall records: *there were two from June 30 to July 17 with three on July 25, then two seen on July 28 with singles to August 11. There were two on August 14 with later two on August 28 and September 2. There were four on September 4 with three to September 11 and two on September 15. There were three on September 18 with four on September 22, then three seen to September 28 with two on September 29. That was the early fall passage. For the main fall passage there were four on October 2 with three to October 9 and two on October 13. There were four on October 16 with one on October 20. There were two on October 23 with three to November 9, seven on November 17 and ten on November 21, then six seen to November 30 with three on December 2. That closed the main fall passage. For the winter passage there were four on December 8 with five on December 11 and December 16, then two seen on December 21. There were three from December 26 to December 30 with four on January 2, then two seen on January 5. That completed the winter passage so for the early spring passage there were five on January 7 with eight on January 9, then six seen on January 11 with five on January 15. There were six on January 19 and January 22 with eight on January 26, then five seen on January 30 with three on February 2 and two on February 5. There were five on February 9 with seven on February 12, then six seen on February 15 with three on February 19. There were six on February 23 with seven on February 26 and eight on March 2, then four seen on March 5. That concluded the early spring passage. For the main spring passage there were seven on March 9 with ten on March 16, then eight seen on March 19 with seven on March 24, six to March 29, five on April 2 and four on April 6. There were six on April 11 with five to April 16. There were seven on April 21 with four on April 24. There were five on April 27 with six on April 30, then four seen to May 12 with two to May 18. That was the end of the main spring passage. For the summer passage there were three on May 21 with two to May 29 and one on June 1. There were five on June 4 with three on June 8, two on June 18 and singles to July 2. There were two on July 4 with singles to July 13. There were two on July 19 with singles to August 13.*

Northern Harrier (*Circus cyaneus*)

Seen from September to early May with the greatest numbers being seen during the early spring passage; numbers were much lower than the numbers present in later years when there was a regime of mowing and roller-chopping over a greater area. Early fall record: *there was an adult female on August 4. For this year there were two on September 4 with three on September 8 and four on September 11, then one seen on September 15. There were three on September 18 with four on September 22, then five seen on September 26 and September 29*

with four to October 6. That was the early fall passage. For the main fall passage there were six on October 9 with seven on October 16, eight on October 20, ten to November 5 and 17 on November 17, then 11 seen on November 21. There were 14 on November 24 with 23 on November 29, then 12 seen on November 30 with 11 on December 2. That closed the main fall passage. For the winter passage there were 15 on December 8 with 21 on December 11, then 14 seen on December 14 with 11 on December 16. There were 17 on December 21 with eight on December 26 and seven on December 28. There were eight on December 30 with 11 on January 2, then ten seen on January 7 with eight on January 9. That completed the winter passage. For the early spring passage there were nine on January 11 and January 15 with 21 on January 19, then 18 seen on January 26 with seven to February 2. There were 23 from February 5 to February 15 with 31 on February 19 and 36 on February 23, then 26 seen on February 26 with 18 on March 2, ten on March 5 and five on March 9. That concluded the early spring passage. For the late spring passage there were 17 on March 12 with 18 on March 16 and 28 on March 19, then 15 seen to March 26 with 11 on April 2, ten to April 11, seven on April 16, six on April 24, four on April 27, two on April 30 and singles on May 4 and May 7. That ended the late spring passage. There were no summer sightings. For the early fall passage there was an adult female on August 10.

Sharp-shinned Hawk (*Accipiter striatus*)

An uncommon passage migrant and winter visitor; as sometimes happens there were some exceptionally early fall sightings this year. For the late fall passage there were singles on September 28, September 29, October 9, October 13 and October 16 with two on October 20 and October 23, then singles seen to November 5. There were three on November 9 with singles to November 24. That closed the late fall passage. For the winter passage there were three on November 29 and December 8 with singles to December 16. There were two on December 21 with one on December 26. There were two on December 28 and December 30 with singles to January 11. That completed the winter passage. For the early spring passage there were three on January 15 with one on January 19. There were two on January 22 with three on January 26 and January 30, then one seen on February 2. There were three on February 5 and February 12 with two on February 15 and singles to February 23. There were two on February 26 with singles to March 5. That ended the early spring passage. For the late spring passage there were two on March 9 with singles to March 24. There were two on March 26 with three on April 2, then singles seen on April 6 and April 16. That finished the late spring passage. As I mentioned earlier there were some early fall records this year: there was an immature male at the Sand Farm on July 27. Later there were singles (not aged/sexed) on August 5 and August 13.

Cooper's Hawk (*Accipiter cooperii*)

Present all year in small numbers; there was only a minor post-breeding gathering this year. During the Breeding Bird Survey a total of two pairs located. Early fall records: *for the post-breeding gathering there were two from June 26 to July 8 with three to July 17, four to July 28, 14 on July 31 and 21 on August 7, then eight seen on August 11 with seven on August 14, six on August 21 and two on August 25.* The count of 21 was the highest count for Zellwood but the highest count is now (2013) that of 45 on August 25, 2006. That was the post-breeding gathering. For the early fall passage there were three on August 28 with four on September 2 and September 8, then one seen on September 11. There were two on September 15 and September 18 with three on September 22 and September 26, then two seen on September 29. That was the early fall passage. For the late fall passage there were three on October 2 with singles to October 13. There were two on October 16 with three on October 20, then two seen on October 28 with one on November 5. There were three on November 9 with two on November 21 and one on November 24. That closed the late fall passage. For the winter passage there were two from November 29 to December 16 with one on December 21. There were two on December 26 and December 28 with three on December 30, then two seen on January 2 with one on January 5. That completed the winter passage. For the early spring passage there were three on January 7 and January 9 with two to January 15. There were three from January 19 to January 26 with four from January 30 to February 12, then two seen on February 19 with one on February 23. That concluded the early spring passage. For the late spring passage there were two on February 26 and March 2 with three on March 9 and four on March 16, then two seen to March 24 with one on March 26. There were three on March 29 with two to April 16 and singles to May 4. That ended the late spring passage. There were no further sightings until June 1. For the summer passage there were singles on June 1 and June 4 with two on June 16, then singles seen to June 29. There were also two on July 2 with one on July 9. That was the end of the summer passage. For the post-breeding gathering there were two on July 13 with three on July 19 and five on July 23, then three seen on July 25 with two on July 27. There were eight on July 30 with six on August 5. There were seven on August 8 with 12 on August 10, then eight seen on August 13 *with five on August 24 and two on August 27.*

Red-shouldered Hawk (*Buteo lineatus*)

Numbers were low from August to December but they were significantly lower again for the rest of the survey year. During the Breeding Bird Survey a total of four pairs located. Early fall records: *there were three on June 26 and June 30 with six to July 10 and eight on July 14, then seven seen to July 25 with five on July 28. There were nine from July 31 to August 11 with 17 on August 14, then ten seen on August 18.* There were 13 on August 21 with 15 on August

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

Broad-winged Hawk (*Buteo platypterus*)

This was a vagrant. For the early fall passage there was an immature on the northern border on August 18. More normally for the late fall passage there was an immature on the northern border on October 2. For the following years early fall passage there was an immature by Lake Apopka to the north of the Lust Road pump house on August 5. Such very early fall records are not unknown as it seems some juveniles wander south after fledging.

Short-tailed Hawk (*Buteo brachyurus*)

This was a vagrant. There was an adult dark morph being harried by an adult Red-tailed Hawk between Lust and Hooper Farms Roads on July 30; an early fall record.

Swainson's Hawk (*Buteo swainsoni*)

This was a vagrant. For the late fall passage there was a juvenile light morph at the Sand Farm on November 17.

Red-tailed Hawk (*Buteo jamaicensis*)

This was a resident in the wooded borders; during the Breeding Bird Survey a total of eight pairs located. Early fall records: *there were four on June 23 and June 26 with six to July 8 and eight on July 10, then five seen on July 14 with four on July 17. There were six on July 21 and July 25 with seven on July 28, 11 on July 31 and 15 on August 7, then eight seen on August 11. There were ten on August 14 with 15 from August 18 to August 28, then 12 seen on September 2. There were 13 on September 4 with 15 on September 8, then six seen on September 11. There were eight on September 15 with ten to September 22, then eight seen on September 26. That was the end of the early fall passage. For the late fall passage there were 11 on September 29 with nine on October 6 and eight to October 13. There were nine on October 16 with 12 from October 23 to November 5, then nine seen on November 9. There were 12 on November 17 with 15 on November 21 and 21 on November 24, then 16 seen on November 29. That closed the late fall passage. For the winter passage there were 17 on November 30 with 21 on December 2, 22 on December 11 and 32 on December 16, then 18 seen on December 26 with nine on December 28. There were 19 on December 30 with 20 on January 5, then 16 seen on January 9 with 14 on January 11. That completed the winter passage. For the early spring passage there were 19 on January 15 with 20 on January 19 and 24 on January 26, then 17 seen on February 2 with ten on February 5 and eight on February 9. There were 12 on February 12 with 25 on February 15 and February 19, then 21 seen on February 23 with nine on February 26. That concluded the early spring passage. For the late spring passage there were 12 on March 2 with 14 on March 5, then ten seen on March 9. There were 11 on March 12 with 13 on March 16 and March 24, then ten seen to April 13 with six on April 16 and four on April 21. There were 11 on April 24 with nine on April 27 and seven to May 4. That was the end of the late spring passage. For the summer passage there were eight on May 7 with seven to May 15. There were eight on May 18 with seven on May 21, six to May 29, five on June 4 and three on June 8. There were six on June 11 with four on June 16 and one on June 18. That ended the*

summer passage. For the early fall passage there were six on June 23 and June 26 with seven to July 2, eight to July 9 and nine on July 19, then six seen on July 21. There were seven from July 23 to July 30 with ten on August 5, 11 on August 8 and 18 on August 10, *then 12 seen to August 24 with ten to September 1 and four on September 3.*

Eurasian Kestrel (*Falco tinnunculus*)

This was a vagrant: There was a female by Lust Road on February 26; it was seen by Airport Road through to March 23. This is the first record for Zellwood, the first record for the State of Florida and the first record for the south-eastern United States...There is a description in Appendix B and photographs (front and back views) in the front of this book.

American Kestrel (*Falco sparverius*)

A quite common passage migrant and winter visitor; numbers were highest in the late fall and early winter. Early fall record: *there was an immature on July 10; location not noted.* For this year there was a male on September 8 with singles (not aged) on September 11, September 15, September 18, September 22, September 26 and September 28. That was the early fall passage. For the main fall passage there were three on September 29 with four to October 6, nine to October 13, 13 on October 16, 15 on October 20 and 21 on October 23, then 19 seen on November 5 with 18 on November 9 and 14 on November 17. There were 15 on November 21 with 27 on November 24, then 21 seen on November 29 with 16 on November 30 and 14 on December 2. That closed the main fall passage. For the winter passage there were 20 on December 8 with 19 on December 14, 15 on December 21 and 13 on December 26. There were 18 on December 28 with 16 on December 30, 15 on January 2 and nine on January 5. That completed the winter passage. For the early spring passage there were 11 on January 7 with 12 on January 9, 16 on January 11, 17 on January 19 and 21 on January 26, then 15 seen to February 5 with nine on February 9. There were 12 on February 12 with 14 on February 15, then 11 seen to February 23 with ten on February 26 and eight to March 5. That concluded the early spring passage. For the late spring passage there were 11 on March 9 with 12 on March 16 and 14 on March 24, then seven seen on March 29 with six on April 2, five to April 13 and two on April 16. That was the late spring passage. There were no summer sightings. For the early fall passage there was one at the Sand Farm on August 13.

Merlin (*Falco columbarius*)

This was an uncommon passage migrant and winter visitor. For the early fall passage there were two on September 18 with singles on September 22, September 26, October 2 and October 6. For the late fall passage there were two on October 9 with singles on October 13, October 20 and October 23. There were two on October 28 with one on November 21. That closed the late fall passage. For the winter passage there were singles on November 29 and December 2. Later there were two on December 16. That was the extent of the winter passage. For the early spring passage there were singles on January 9 and January 11. There was one on January 19 and January 22. There was one on February 9. There was also one on February 23 and February 26. That completed the early spring passage. For the late spring passage there were singles on March 2 and March 9 with another on March 24. Finally there were three on April 11.

Peregrine Falcon (*Falco peregrinus*)

This was a very uncommon passage migrant, there were no winter records. For the early fall passage there was one on September 22 with two on September 26, then one seen on October 2. For the late fall passage there were singles on October 16 and October 28. For the early spring passage there was one on January 26.

Ring-necked Pheasant (*Phasianus colchicus*)

An exotic that had to have escaped from some collection. *There was an adult male by Laughlin Road from May 6 to July 8.* It continued to be seen through this year from August 21 to April 30; it was seen by Pole Road extension on February 12. Where ever it came from this was one of the highlights of the year. See the photo on the front cover.

Northern Bobwhite (*Colinus virginianus*)

A common resident; during the Breeding Bird Survey a total of 125 pairs located; the first young (ten) were seen on July 25. Early fall records: *there were 12 on June 30 with 16 on July 3 and 27 on July 8, then 22 seen on July 10 with 21 on July 17, 17 to July 25, 16 on July 31, 12 on August 4 and nine on August 7. There were 17 on August 11 with ten on August 14 and six to August 21.* There were seven on August 25 with three to September 2 and two on September 4. There were eight on September 8 with three on September 11 and two on September 15.

There were five on September 18 with three on September 22 and one on September 29. That was the early fall passage. For the late fall passage there were four on October 2 with two on October 6 and one on October 9. There were five on October 13 with one on October 16. There were three on October 20 and October 28 with 19 on November 5, then three seen on November 9 with singles to November 24. That closed the late fall passage. For the winter passage there were four on November 30 and December 2 with two on December 8 and one on December 11. There were two on December 16 with ten on December 30, then two seen to January 9 with one on January 11. That completed the winter passage. There were no influxes for the early spring passage just singles in the area from January 19 to March 2. For the main spring passage there were singles on March 12 and March 16 with two on March 24, three on March 26 and 11 on March 29, then seven seen on April 6 with six on April 11. There were 11 on April 13 with 18 on April 21 and 21 on April 24, then 13 seen on April 27 with 11 on April 30. That ended the main spring passage. For the summer passage there were 17 on May 4 with 15 on May 7 and 14 on May 12. There were 24 on May 15 with 41 on May 18 and 55 on May 21, then 37 seen on May 26 with 22 on May 29. There were 25 on June 1 with 34 on June 4, then 30 seen on June 11 with 27 on June 18 and 15 on June 23. That was the end of the summer passage. For the early fall passage there were 40 on June 26 with 60 on July 2 and 69 on July 4, then 51 seen on July 6 with 46 on July 9, 45 on July 13, 37 on July 19, 24 on July 21 and 22 on July 23. There were 40 on July 25 with 25 on July 27 and 21 on July 30. There were 31 on August 5 with 15 on August 10 and eight on August 13.

Yellow Rail (*Coturnicops noveboracensis*)

This was a vagrant. I flushed one from the grass by the Lake Level Canal on March 9. There is a description in Appendix B.

Black Rail (*Laterallus jamaicensis*)

This was a vagrant. There was one calling by Pole Road extension on June 4.

King Rail (*Rallus elegans*)

Seen throughout the year but in very low numbers, there were no spectacular post-breeding gatherings for the early years. During the Breeding Bird Survey a total of 14 pairs located; the first broods were seen on June 23 (one) and July 23 (three). Early fall records: *there was one on June 30 with two on July 3 and four on July 8, then three seen on July 10 with two to*

July 21 and singles to August 14. For this year there were two on August 25 with singles to September 11. There were two on September 15 and September 22 with one on September 26. That was the early fall passage. For the main fall passage there were two on September 29 and October 6 with four on October 9 and five to October 20, then six seen on October 23 and November 5 with four on November 9 and one on November 17. There were seven on November 21 with four on November 29 and two to December 2. That closed the main fall passage. For the winter passage there were singles on December 8, December 11 and December 16 with two on December 21, then singles seen to December 28. There were eight on December 30 with seven on January 2, six on January 5 and two on January 7. That completed the winter passage. For the early spring passage there were 14 on January 9 with 12 on January 11, ten on January 15 and two on January 19. There were seven on January 22 with eight on January 26 and January 30, then five seen on February 2 with four on February 5 and one on February 9. There were two on February 12 with eight on February 15, then six seen on February 19 with five to February 26 and three on March 2. That concluded the early spring passage. For the late spring passage there were six on March 5 with singles to March 12. There were four on March 16 with three on March 19 and one on March 26. Later there were singles on April 13 and April 16 with two on April 24, then singles seen to May 4. That was the end of the late spring passage. For the summer passage there were two on May 7 and May 12 with three on May 18, then singles seen on three dates to June 11. There were four on June 16 with seven on June 23 and July 2, then five seen on July 13 with two to July 21. There were six on July 23 with four to July 27. That closed the summer passage. For the early fall passage there were six on July 30 and August 5 with eight from August 8 to August 13, *11 to August 27, 15 on September 1, 17 on September 3, 18 from September 10 to September 16 and 26 on September 19, then 22 seen on September 24 with 13 on September 29.* A single influx covered the early fall passage; it lasted for two months.

Virginia Rail (*Rallus limicola*)

An uncommon passage migrant and winter visitor; they tended to be seen along the canals or the shore of Lake Apopka rather than out in the Sand Farm Cattail Marsh. For the fall passage there was one by the Lake Level Canal on September 22 with one at the Sand Farm from October 6 to October 20. There was one by Lake Apopka to the north of the Lust Road pump house on October 23. There were also singles at the Sand Farm on October 28 and November 9. Finally for the fall passage there were two by Lake Apopka to the south of the Hooper Farms Road extension on November 24 with one there on November 29 and December 2. That closed the fall passage. For the winter passage there were singles at the Sand Farm on December 11, December 16, December 21, December 28, December 30 and January 2 with two

on January 5, then one seen on January 9. Perhaps just two birds involved in the above sightings. There was also one by the McDonald Canal on December 16, December 28, January 2, January 7 and January 11. Finally for the winter passage there was one by Lake Apopka to the south of the Hooper Farms Road extension on January 5. There were a total of three seen on January 5; this was the highest count for Zellwood but the highest count is now (2013) that of nine on February 16, 2005. For the early spring passage there were singles at the Sand Farm on January 15, January 19, January 22, January 26, February 2 and February 15. That was the early spring passage. For the late spring passage there was one at the Sand Farm on March 5 with one by the Lake Level Canal on March 26. The records from the "Sand Farm" could have come from the Duda/Sand Farm Canal, the Lake Level Canal as it runs by the Sand Farm or the edge of the cattail marsh.

Sora (Porzana carolina)

A common passage migrant and winter visitor; the greatest numbers were seen during the winter and the early spring passages. For the fall passage there were singles on August 28, September 15 and September 18 with three on September 22, five on September 29, six on October 2, 16 to October 13 and 22 on October 20, then eight seen on October 23. There were 14 on October 28 with 28 on November 5, then 15 seen on November 9. The fall passage came to an early end at this point. For the winter passage there were 16 on November 17 with 22 on November 21, 42 on November 24, 53 on November 29, 66 on November 30 and 102 on December 2, then 58 seen on December 8 with 51 on December 11 and 42 on December 14. There were 55 on December 16 with 48 on December 21. There were 50 on December 26 with 57 on December 28 and 109 on December 30, then 98 seen on January 2 with 77 on January 5 and 71 on January 7. The count of 109 was the highest count for Zellwood but there were 27 higher counts this year than the previous high count for Zellwood which was only that of 39 on October 14, 2001. The highest count is now (2013) that of 415 on November 28, 2008. That was also the end of the winter passage. For the early spring passage there were 90 on January 9 with 76 on January 15 and 35 on January 19. There were 49 on January 22 with 61 on January 26, 62 on January 30 and 65 on February 2, then 61 seen on February 5 with 45 on February 12, 41 on February 15, 37 to February 23, 36 on February 26 and 27 on March 2. That month long decline really did mark the end of the early spring passage. For the late spring passage there were 43 on March 5 with 21 on March 9. There were 30 on March 12 with 32 on March 16, then 22 seen on March 19 with 21 on March 24, 18 on March 26 and ten on March 29. There were 20 on April 2 with nine on April 6. There were 13 on April 11 with 21 on April 13, then 14 seen on April 16 with two on April 21 and one on April 24. There were also two on April 27 with one on May 7. That completed the late spring passage.

Purple Gallinule (*Porphyrio martinica*)

A summer visitor with up to three a day seen during the winter; during the Breeding Bird Survey a total of 51 pairs Located, the first brood (of five) was seen on July 6. Early fall records: *there were 38 on June 12 with 36 on June 19, 35 on June 23, 20 on June 26, 17 on June 30, 12 on July 3, nine on July 8, six on July 10, five on July 14 and four on July 17. That decline lasted over 1 ½ months; it showed the gradual departure of the summer visitors. This species does not have a post-breeding gathering. To continue for the early fall passage there were five on July 21 with six from July 28 to August 7, then three seen on August 11. There were five on August 14 with six on August 18, then three seen to August 28 with one on September 2. There were four on September 4 with one on September 8. That was the end of all passage. From September 8 to January 19 there were one to two a day seen with three on September 29, October 20 and December 8. For the remainder of the early spring passage there were two on January 22 with three to January 30 and four on February 2, then two seen to February 12. There were six on February 15 with seven on February 23, eight on February 26 and ten on March 2, then five seen on March 5 with four on March 9. That concluded the early spring passage. For the main spring passage there were ten on March 12 with eight on March 16 and three on March 19. There were eight on March 24 and March 26 with ten to April 6, 13 on April 11, 18 on April 13 and 58 on April 21, then 45 seen on April 27 with 39 on April 30. There were 56 on May 4 with 38 on May 7. There were 55 on May 12 with 57 on May 15, then 31 seen to May 26 with 21 on May 29. That was the end of the main spring passage. The problem is this species will have been breeding locally whilst others were still migrating north. For the summer passage there were 32 on June 1 with 26 on June 4, 18 on June 8, 17 on June 11 and 16 on June 16. There were 23 on June 18 with 27 on June 23 and 44 on June 29, then 26 seen on July 2 with 24 on July 4. There were 28 on July 6 with 16 on July 9. There were 18 on July 13 with 20 on July 19, then 19 seen on July 23 with 17 on July 27, 14 on July 30, 12 on August 5, 11 on August 10, nine on August 13, *eight on August 24, five on August 27 and four on September 1. That again was probably the end of the summer passage as this species just drifts away.**

Common Gallinule (*Gallinula galeata*)

A common resident with higher numbers from October to March; there was the beginnings of a post-breeding gathering. During the Breeding Bird Survey a total of 214 pairs located. The earliest brood in 2003 was that of five on April 11 and the latest was also that of five on August 13. For the following survey year there was a brood of two on October 2, 2003. Early fall records: *there were 49 on July 10 with 101 on July 14, then 60 seen on July 17 with 53 on July 21, 52 on July 28 and 48 on July 31. There were 57 on August 4 with 90 on August 7, then 70 seen on August 11 with 63 on August 18 and 59 on August 21. There were 73 on August 25*

with 95 on August 28, then 82 seen on September 4 with 70 on September 8. There were 103 on September 11 with 88 on September 18 and 38 on September 22. That was the early fall passage. For the main fall passage there were 57 on September 26 with 80 on September 29 and 114 on October 6, then 106 seen on October 9 with 101 on October 13 and 84 on October 16. There were 109 on October 20 with 115 on October 23, then 89 seen on October 28 with 75 to November 17 and 62 on November 21. That closed the main fall passage. For the winter passage there were 119 on November 24 with 120 on November 30, 133 on December 2 and 200 on December 8, then 170 seen on December 14 with 136 on December 16, 127 on December 21 and 115 on December 26. There were 120 on December 28 with 150 to January 2 and 170 on January 5, then 130 seen on January 7. That completed the winter passage. For the early spring passage there were 170 on January 9 with 173 on January 11, then 149 seen on January 15 with 115 on January 19. There were 130 on January 22 with 175 on January 26, then 157 seen on January 30 with 125 on February 2. There were 185 on February 5 and February 12 with 130 on February 15 and 100 on February 19. That concluded the early spring passage. For the late spring passage there were 135 on February 23 with 190 on March 2, then 90 seen on March 5. There were 130 on March 9 with 135 on March 12 and March 16, then 100 seen on March 24 with 90 on March 26, 75 on March 29, 70 to April 6 and 67 on April 11. There were 85 on April 13 with 90 on April 21, then 70 seen on April 27 with 50 on April 30. That ended the late spring passage. For the summer passage there were 90 on May 4 with 70 on May 7 and 55 on May 12. There were 65 on May 15 and May 18 with 90 on May 21 and May 26, then 60 seen on June 1 with 46 on June 4. There were 65 on June 8 with 75 on June 11 and 135 on June 16, then 125 seen on June 18 with 116 on June 23. There were 120 on June 26 with 150 on June 29, then 115 seen on July 2 with 80 on July 4. That was the summer passage. For the post-breeding gathering there were 135 on July 6 with 155 on July 13, then 130 seen on July 19 with 110 on July 21. There were 185 on July 23 with 115 on July 25. There were 160 on July 27 with 185 on July 30, then 170 seen on August 5 with 135 to August 10. There were 140 on August 13 *with 160 on August 20, 250 on August 27, 280 on September 3 and 335 on September 7, then 240 seen on September 14 with 90 on September 16. That was the extent of the post-breeding gathering.*

American Coot (*Fulica americana*)

With the limited areas of open water the numbers were very low this year; the majority were seen from November to early April. Early fall record: *there was one on July 3*. For this year there was one on September 8 with two on September 18. That was the early fall passage so for the late fall passage there were three on October 16 with two on November 9. That was the end of the fall passage. For the winter passage there was one on November 24 with two to

November 30 and three on December 2, then singles seen to December 26. There were four from December 28 to January 7 with two on January 9 and one on January 11. That completed the winter passage. For the early spring passage there were three on January 15 with two on January 19 and singles to February 15. There were three on February 23 with two to March 2 and one on March 5. That ended the early spring passage. For the main spring passage there was one on March 9 with seven on March 12, then four seen on March 16 with three on March 19. There were five on March 24 with singles to April 11. There were 12 on April 13 with two on April 16. That closed the main spring passage. There were no summer records. For the early fall passage there were singles on June 26, June 29, July 2, July 4, July 6 and July 9. To put this all into perspective the two highest counts for Zellwood were those of 16,720 on November 18, 1998 and 24,900 on November 7, 2010.

Limpkin (*Aramus guarauna*)

They were seen in very small numbers from August to early April; there were no later records. There was no evidence that they bred in the survey area even though they were seen on occasions during the winter breeding season. Early fall records: *there were singles on June 23, and July 10 with two on July 14, then one seen on July 17.* For this year there were singles on August 18, August 28, September 8 and September 11 with two to September 18 and three on September 22, then one seen on September 26. That was the early fall passage. For the main fall passage there were three on September 29 and October 2 with two to October 16 and one on October 20. There were three on October 28 with two on November 5 and one on November 9. There were two on November 17 with three on November 21, then two seen on November 24 with singles to December 2. That closed the main fall passage. For the winter passage there was one on December 21 with two on December 26 and January 5, then singles seen to January 11. That completed the winter passage. For the early spring passage there were singles on January 22, January 26, January 30, and February 2. Later there was one on February 23. That ended the early spring passage. For the main spring passage there were two on March 5 with three on March 12, then singles seen to April 6. There were no later records.

Sandhill Crane (*Grus canadensis*)

An uncommon passage migrant; there were very few sightings of birds off passage this year. Early fall record: *there were two (one an immature) on June 30.* For the fall passage flying to the south there was one on November 17 with 19 on November 21, 82 on November 24, 78 on November 29, five on November 30, 69 on December 2, 26 on December 11, 11 on December 14 and six on January 5. In the area there was one on January 7. That completed the

fall passage. For this species we go straight from the fall to the spring passages. Flying to the north there were 33 on February 15 with 12 on February 26. Those were the only records for the early spring passage. For the late spring passage there were singles in the area on March 5 and March 12 with later two on May 21.

Black-bellied Plover (*Pluvialis squatarola*)

With the lack of suitable habitat this was a very uncommon passage migrant this year. Early fall records: *there was one on August 7 with three on August 11*. For this year there were singles on August 18 and September 4. That was the extent of the early fall passage. There were no late fall or winter sightings. For the early spring passage there was one on January 19 with two on January 30 and February 2, then five seen on February 5 with three on February 9 and one on February 12. There were no later records.

American Golden-Plover (*Pluvialis dominica*)

This was a vagrant. For the early spring passage there was one on January 19; I did not note location.

Semipalmated Plover (*Charadrius semipalmatus*)

An uncommon fall passage migrant; there were only two spring sightings. Early fall records: *there were two on July 28 with seven on August 4, then four seen on August 7. There were ten on August 11* with two on August 18 and August 21. There were 14 on August 25 with one on September 11. That completed the early fall passage. For the late fall passage there were singles on October 6 and October 9 that was it. Finally for the late spring passage there were singles on May 4 and May 7.

Killdeer (*Charadrius vociferus*)

Present all year in small numbers; there was a significant winter passage followed by a major early spring passage. No pairs known to have nested this year. Early fall records: *there were 13 on June 26 with 40 on June 30 and 60 on July 3, then eight seen on July 8. There were 15 on July 10 with 28 on July 14 and 71 on July 17, then 56 seen on July 21 with 32 on July 25, 29 on July 28 and 27 on July 31. There were 39 on August 4 with 59 on August 7, then 41 seen on*

August 14 with 30 on August 18, 28 on August 21, 22 on August 25, 14 to September 4, 13 on September 8 and ten on September 11. That decline lasted a month. There were 12 on September 15 with 18 on September 18 and 33 on September 22, then eight seen on September 28 with six on September 29 and three on October 2. That was the early fall passage. For the main fall passage there were seven on October 6 with ten on October 9, then nine seen on October 13 with six on October 20 and five on October 23. There were six on October 28 with 16 on November 5, 48 to November 17 and 103 on November 24, then 50 seen on November 29 with nine on November 30. That closed the main fall passage. For the winter passage there were 26 on December 2 with 123 on December 11, 575 on December 14 and 710 on December 16, then 176 seen on December 21 with 84 on December 26. There were 266 on December 28 with 82 on December 30, 20 on January 2 and nine on January 5. That completed the winter passage. For the early spring passage there were 61 on January 7 with 174 on January 9, 383 on January 11 and 1,760 on January 19, then 1,205 seen on January 22 with 1,000 on January 26. There were 1,025 on January 30 with 1,085 on February 2 and 1,935 on February 9, then 950 seen on February 12 with 550 on February 15, 480 on February 19, 65 on February 23 and 25 on February 26. The count of 1,935 was the highest count for Zellwood but the highest count is now (2013) that of 2,815 on January 2, 2009. There were eight counts this year higher than the old high count of 756 on January 1, 1999. That was also the end of the early spring passage. For the late spring passage there were 28 on March 2 with 155 on March 5, then five seen to March 12. That was really the end of all passage. There were 12 on March 16 with ten on March 24, five to April 2 and three on April 6. There were six on April 11 and April 13 with five to April 21. There were nine on April 24 with six on April 27 and four on April 30. That ended the late spring passage so for the summer passage there were eight on May 4 with nine on May 12, then eight seen on May 18 with four on May 21 and two to May 29. There were seven on June 1 with five on June 8, two to June 16 and singles to June 26. There were two on June 29 with singles to July 4. That finished the summer passage. For the early fall passage there were two on July 6 with singles to August 13. On November 9 there was one with a single broad breast band at the Sand Farm not the two smudged ones of a juvenile.

Black-necked Stilt (*Himantopus mexicanus*)

A common passage migrant; whilst numbers were present for most of the summer only one pair located during the Breeding Bird Survey. Early fall records: *there were 40 on May 23 with 52 on May 27, 68 on May 30, 73 on June 2, 86 on June 5 and 195 on June 10, then 130 seen on June 12 with 43 on June 16, 40 on June 23, 34 on June 30, 32 on July 3, 31 on July 14, 28 on July 21 and 22 on July 25. That decline lasted 1 ½ months. I do not know how to describe that exceptional influx. In any case for the early fall passage there were 32 on July 28 with 53 on*

August 4, then 13 seen on August 11 with 12 on August 18, four to August 25 and two to September 8. Finally for the early fall passage there were two on September 22. There were no further sightings until the main spring passage in the following year. For this passage there were singles on February 26, March 2, March 5 and March 9 with two to March 24, three on March 26 and 23 on March 29, then seven seen on April 2. There were 13 on April 6 with 17 on April 11, 31 on April 13 and 41 on April 16, then 33 seen on April 21 with 28 on April 27, 24 on April 30, 20 on May 4, 19 on May 7, 14 to May 18, nine on May 21 and seven on May 26. That ended the main spring passage. For the summer passage there were 13 on May 29 with 15 on June 1 and 16 on June 8, then six seen on June 16 with two on June 18. There were 14 on June 23 with 20 on June 26 and 25 on July 4, then 16 seen on July 6 with eight on July 9. There were 28 on July 19 with 29 on July 21, then four seen on July 30. That finished the summer passage.

American Avocet (*Recurvirostra americana*)

This was an occasional visitor. For the summer passage in 2002 *there was one on May 23 with two on May 27, then one seen to June 23. For the early fall passage there was one at the Sand Farm on July 21.* For this year there was one at the Sand Farm from September 8 to September 26. That closed the early fall passage. There were no later sightings.

Greater Yellowlegs (*Tringa melanoleuca*)

Present in very small numbers for every month bar June; early fall records: *there were four on July 10 with five on July 14 and ten on July 28, then five seen on August 4 with one on August 7. There were two on August 11 with four on August 14 and five on August 18, then two seen to August 25. There were nine on August 28 with singles to September 4. There were two on September 8 with one on September 11. There were two on September 15 and September 18 with three on September 22 and September 26, then one seen on September 29. That was the early fall passage. For the main fall passage there were three on October 2 and October 6 with singles to October 16. There were three on October 20 with 19 on October 23, then six seen on October 28 with two on November 5. That was the extent of the main fall passage. For the winter passage there were five on December 11 with eight on December 14, then three seen on December 16. There were also two from January 2 to January 9. That completed the winter passage. For the early spring passage there were three from January 11 to January 19 with six on January 22, then four seen on February 2 with two on February 5. There were seven on February 9 with 15 to February 23 and 21 on February 26, then 13 seen on March 2 with ten on March 5. That concluded the early spring passage. For the late spring passage there were 11 on March 9 with five on March 12 and one on March 16. There were four on March 24 and*

March 29 with three on April 2, two on April 6 and one on April 11. There were three on April 13 with singles to April 24. There were two on April 27 with four on April 30, then two seen on May 7. That was the end of the late spring passage. There were no summer records. For the early fall passage there were singles on July 6 and July 19 with two on July 25.

Lesser Yellowlegs (*Tringa flavipes*)

A passage migrant and winter visitor; the greatest numbers were seen during the spring passage. Early fall records: *there were 11 on July 10 with 15 on July 14 and 23 on July 25, then 16 seen on July 28 with 12 on July 31. There were 53 on August 4 with seven on August 7. There were 12 on August 11 with 24 on August 14 and 35 on August 18, then 20 seen on August 21 with 11 on August 25 and five on August 28. There were eight on September 2 with ten on September 4 and 18 on September 8, then 13 seen on September 11 with nine on September 15 and eight on September 18. There were 18 on September 22 with 12 on September 26 and ten on September 28. That was the early fall passage. For the late fall passage there were 25 on September 29 with 32 on October 2, then 16 seen on October 9 with six on October 13. There were nine on October 16 with 23 on October 20 and 41 on October 28. There were no further sightings until three seen on November 21. That closed the late fall passage. For the winter passage there was one on November 30 with later 42 on December 11 and 61 on December 14, then five seen on December 16. There were also singles on December 30 and January 5. That completed the winter passage. For the early spring passage there were two on January 7 with three on January 9 and ten on January 11, then four seen on January 15. There were eight on January 19 with 14 on January 22, then eight seen on January 26 with six on January 30 and four to February 5. There were six on February 9 with 17 on February 12, then 11 seen on February 15. There were 14 on February 19 with 22 on February 23 and 121 on February 26, then 25 seen on March 2. That concluded the early spring passage. For the late spring passage there were 60 on March 5 with 94 on March 12, then five seen to March 24 with four on March 29 and two on April 2. There were four on April 11 with 14 on April 13, then one seen on April 16. There were two on April 21 with seven on April 24, then four seen to April 30 with two on May 4 and one on May 7. That ended the late spring passage. There were no summer sightings. For the early fall passage there was one on July 9 with two on July 19, then one seen on July 23.*

Solitary Sandpiper (*Tringa solitaria*)

A fall passage migrant, there was a lighter passage in the spring. Early fall records: *there was one on July 17 with four on July 25, then singles seen to July 31. There were two on August 4 with singles to August 14.* For this year there were singles from August 18 to August 25 with

two to September 2, four on September 4 and five on September 11, then three seen on September 15 with two on September 22 and singles to September 28. That was the early fall passage. For the late fall passage there were two on September 29, October 6 and October 9. That closed the late fall passage. There were no further sightings until the spring. For the spring passage there was one on April 21 with six on April 24, then two seen on five dates to May 12. That was the spring passage. For the early fall passage there were singles on July 19, July 21, July 23 and July 30.

Spotted Sandpiper (*Actitis macularius*)

This was normally a spring passage migrant with a minor passage in the fall; this year the events were reversed as the fall passage was the stronger event. Early fall records: *there were singles on July 25, July 28 and July 31 with two on August 4, August 7 and August 11.* For this year there was one on August 21 with three on August 25 and five on August 28, then three seen on September 2 with singles on September 4, September 11 and September 22. That closed the early fall passage. For the spring passage there were singles on April 24 and April 30 with four on May 4, then one seen on May 15. For the early fall passage there were singles on August 5 and August 8.

Upland Sandpiper (*Bartramia longicauda*)

This was a vagrant. For the early fall passage there was one on September 22. For the early fall passage in the following year there were singles on August 8 and August 13.

Semipalmated Sandpiper (*Calidris pusilla*)

There was a strong fall passage with a minor spring passage, the pattern should be reversed. Early fall records: *there were eight on July 21 with five on July 28 and four on July 31. There were eight on August 4 with 12 on August 7 and 22 on August 11,* then 16 seen on August 18 with 12 on August 21. There were 41 on August 25 with 16 on August 28. There were 36 on September 2 with 95 on September 4, then 31 seen on September 8 with ten on September 11, three on September 15 and two on September 18. There were four on September 22 with singles on September 26 and September 29. That was the early fall passage. For the late fall passage there was one on October 20. For the late spring passage there were six on May 7 with 13 on May 15, then five seen to May 21. That closed the late spring passage. For the early fall passage there were three on July 19 with five on July 25, then three seen on July 27.

Western Sandpiper (*Calidris mauri*)

There was a light fall passage with a single record for the late spring passage. Early fall records: *there were singles on July 14, July 17 and July 21 with two on July 25 and July 28, then singles seen on July 31, August 4 and August 7. There were eight on August 11 with 21 on August 18, then 15 seen on August 21 with 14 on August 25 and four on August 28. There were eight on September 2 with 11 on September 4 and 19 on September 8, then 12 seen on September 11 with six on September 15 and three on September 18. There were six on September 22 with singles on September 29 and October 2. That was the end of the early fall passage. There were no sightings for the late fall, winter or early spring passages. For the late spring passage there were two on May 7. For the early fall passage there was one on July 9 with two on July 19, then three seen on July 23 and July 25 with one on July 27.*

Least Sandpiper (*Calidris minutilla*)

A common passage migrant in both the fall and the spring; numbers were lower during the winter. Early fall records: *there were four on July 10 with seven on July 14, then two seen on July 17. There were six on July 21 with 48 on July 25, then 30 seen on July 28 with 23 on July 31. There were 34 on August 4 with 96 on August 11, then 84 seen on August 18 with 45 on August 21. There were 320 on August 25 with 11 on August 28. There were 32 on September 2 with 52 on September 4 and 310 on September 8, then 45 seen on September 11. There were 205 on September 15 with 210 on September 18, then 130 seen on September 22 with 49 on September 26. That was the early fall passage. For the main fall passage there were 63 on September 28 with 185 on September 29 and 350 on October 6, then 340 seen on October 9 with 156 on October 13 and ten on October 16. There were 160 on October 20 with 180 on October 23 and 251 on October 28, then 116 seen on November 5 with 67 on November 9, 39 on November 17, 17 on November 21 and 11 on November 24. That closed the main fall passage. For the winter passage there were three on December 11 and December 14 with 12 on December 16, 43 on December 21 and 60 on December 26, then 41 seen on December 30 with one on January 5. That completed the winter passage. For the early spring passage there were nine on January 7 with 24 on January 9, 27 on January 11 and 40 on January 15, then two seen on January 19. There were 22 on January 22 with 39 on January 26, then 22 seen on January 30 with 11 on February 5, nine on February 9, five on February 12 and two on February 15. There were 23 on February 19 with 14 on February 23. That concluded the early spring passage. For the main spring passage there were 33 on February 26 with 126 on March 2, then 115 seen on March 5 with 52 on March 9. There were 265 on March 12 with 105 on March 16, 74 on March 19 and two on March 24. There were 22 on March 26 with 44 on April 2, then six seen on April 6 with three on April 13 and one on April 16. There were two on April 21 with*

three on April 24, eight to April 30, 15 on May 4 and 20 on May 7, then eight seen on May 15. That ended the main spring passage. There were no summer sightings. For the early fall passage there were two on July 9 with five on July 13 and 20 on July 19, then four seen on July 25 with two on August 5 and one on August 10.

White-rumped Sandpiper (*Calidris fuscicollis*)

This was an uncommon fall passage migrant with a single record for the spring passage; that pattern should be reversed. For the early fall passage there were singles on September 4 and September 8 with two on September 11 and September 15, then singles seen on September 18, September 22 and September 26. That closed the early fall passage. For the late spring passage there was one on May 12.

Pectoral Sandpiper (*Calidris melanotos*)

A fall passage migrant in low numbers; there were only two records for the spring passage. Early fall records: *there were two on July 14 and July 17 with six on July 25 and 21 on July 28, then four seen on July 31. There were seven on August 4 with eight on August 11, 12 on August 14 and 14 on August 18, then four seen on August 21. There were nine on August 25 with 17 on September 2, then 16 seen on September 4 with 13 on September 8, nine on September 11 and five on September 15. There were six on September 18 with 12 on September 22, 23 on September 26 and 27 on September 28, then 22 seen on October 2 with 12 on October 6, eight on October 9, seven on October 16, four on October 20 and one on October 28. That closed the fall passage. For the late spring passage there was one on February 26 with 12 on March 26. For the early fall passage there were three on July 19 with two on July 23.*

Sharp-tailed Sandpiper (*Calidris acuminata*)

This was a vagrant. There was a juvenile on September 26 in the flooded fields of what had been the Sod Farm; it was next to Interceptor Road. Whilst this is a first record for the survey it is the second record for Zellwood as there was one on August 12, 1973 and August 13, 1973. There is a description in Appendix B.

Dunlin (*Calidris alpina*)

An uncommon late fall, winter and early spring passage migrant. For the late fall passage there were singles on October 2 and October 16 with three to October 28 and seven on November 5, then six seen on November 9 with two to November 24. That was the extent of the late fall passage. For the winter passage there were eight on December 14 and December 16 with one on December 21. There were two on December 28 with four on December 30. That completed the winter passage. For the early spring passage there were eight on January 7 with 16 on January 9, then four seen to January 19 with three on January 26.

Stilt Sandpiper (*Calidris himantopus*)

There was a quite strong fall passage with a much smaller passage in the spring. Early fall records: *there were 14 on July 25 with six on July 28 and five on July 31. There were 17 on August 4 with three on August 11 and one on August 14.* For this year there were ten on August 18 with 14 on August 21, then seven seen on August 25 with two on August 28. There were five on September 4 with eight on September 11, then six seen on September 15. There were seven on September 18 with ten on September 22, 14 on September 26 and 24 on September 28, then 11 seen on September 29 with five on October 2. That was the early fall passage. For the late fall passage there were 22 on October 6 with ten on October 9 and six on October 13. There were 26 on October 16 with four on October 20, three on October 28 and one on November 9. That closed the late fall passage. There were no winter records. For the early spring passage there were two from January 7 to January 19 with five on January 22, then singles seen to January 30. Finally for the early spring passage there were singles on February 23 and March 2. There were no late spring sightings. For the early fall passage there were six on July 23.

Buff-breasted Sandpiper (*Tryngites subruficollis*)

This was a vagrant. Early fall record: *there was one on August 4.* For this year there was one at the Sand Farm on September 15. Those were the early fall sightings.

Short-billed Dowitcher (*Limnodromus griseus*)

An uncommon fall passage migrant; there were just two records for the spring passage. Early fall records: *there was an adult in breeding plumage on July 28 with one not aged on*

August 4. There were three on August 11 with four on August 18 and 19 on August 21, then four seen on August 25 with two to September 2. There were eight on September 4 with seven on September 8 and two on September 11. Later there was one on September 26 with three on September 28 and September 29. That was the end of the early fall passage. For the late fall passage there were two on October 28 that was it. Finally for the late spring passage there were six on April 13 with later 18 on May 15.

Long-billed Dowitcher (*Limnodromus scolopaceus*)

An uncommon passage migrant and winter visitor; there was again a sighting of an adult in breeding plumage in the early fall. Early fall record: *there was an adult in breeding plumage on July 28.* For this year there was an adult in breeding plumage on August 25. For the regular fall passage there were four in winter plumage on September 22 (plumage not noted after this) and September 29 with nine on October 6, ten on October 9 and 11 on October 13, then six seen on October 20 with one on October 23. There were also 14 on October 28. That was the end of the fall passage. For the winter passage there were seven on December 11 with 32 on December 14 and 117 on December 16. There were no further sightings until the late spring passage. For that passage there was one on March 12 with four on April 6.

Wilson's Snipe (*Gallinago delicata*)

A quite common passage migrant and winter visitor; the greatest numbers were seen during the spring passage. For the early fall passage there were three on September 4 with nine on September 11, then four seen on September 18 with two on September 22. There were 14 on September 26 with seven on September 28. That was the early fall passage. For the main fall passage there were 12 on September 29 with 33 on October 6, then ten seen on October 9. There were 18 on October 13 with 42 on October 16, then eight seen on October 20. There were 11 on October 23 and October 28 with 25 on November 5 and 44 on November 9, then 42 seen on November 21 with 26 on November 24 and 19 on November 29. That closed the main fall passage. For the winter passage there were 24 on November 30 with 82 on December 8, then 33 seen on December 14 with 20 on December 21 and 15 on December 26. There were 42 on December 28 with 26 on December 30 and six on January 2. There were 93 on January 5 with 51 on January 7, 38 on January 9 and 29 on January 11. That completed the winter passage. For the early spring passage there were 61 on January 15 with 88 on January 19, then 51 seen to January 26. There were 67 on January 30 with 116 on February 2, then 108 seen on February 9 with 88 on February 12 and 79 on February 15. There were 126 on February 19 with 17 on February 23. That concluded the early spring passage. For the late spring passage there

were 21 on February 26 with 42 on March 2, then 27 seen on March 5 with nine on March 9. There were 123 on March 12 with 74 on March 16, 18 on March 19 and three on March 24. There were 25 on March 26 with four on April 2. There were five on April 6 with six on April 11, then singles seen on April 13, April 21 and April 27. Finally for the late spring passage there were two on April 30.

American Woodcock (*Scolopax minor*)

A rare winter visitor; all the sightings were from the Sand Farm Bridge, if I had started each morning at Canal Road the numbers might have been much higher. For the winter passage there were singles on November 24, December 2, December 14, December 21, January 2 and January 9.

Wilson's Phalarope (*Phalaropus tricolor*)

This was a vagrant. For the early fall passage there was an adult and an immature on August 25; I did not note their location.

Laughing Gull (*Larus atricilla*)

There was a minor spring passage of adults in breeding plumage flying to the east over Lake Apopka; there were a scattering of records for the rest of the year. Early fall records: *there were two on June 23 and June 26 with one on July 3. There was a juvenile on July 10 and an adult on July 31. There was also one (not aged) on August 4.* Those were the early fall passage sightings. For the late fall passage there was one on November 17 with two on November 21. For the winter passage there was one on December 11 with two on December 28. That completed the winter passage. There was one on February 26; this could be either an early spring or a main spring record. In any case for the main spring passage there were two on March 29 and April 2. Flying to the east in breeding plumage there was one on April 6 with 19 on April 16, then seven seen on April 21. On April 21 there was also one in first-summer plumage flying to the east. There were eight adults in breeding plumage in the area on April 24. Flying to the east there were single adults in breeding plumage on April 27 and April 30. That was the end of the main spring passage and of birds flying to the east. For the summer passage there were on May 12 four adults in breeding plumage with 14 in first-summer plumage. There were two adults in breeding plumage on May 15 and May 18 with three on May 26. There were five adults in breeding plumage and five in first-summer plumage on May 29. Not aged were six

on June 1 and one on June 8. Finally there was one in first-summer plumage on June 18. That closed the summer passage. There were no early fall sightings.

Bonaparte's Gull (*Larus philadelphia*)

This is always a late arrival; this year there was a light winter passage with a stronger spring passage. For the winter passage there were 14 on November 29 with 22 on November 30 and December 2, then six seen on December 8 with four on December 11. There were six on December 14 and December 16 with three to December 28. There were 85 on December 30 with 13 on January 2. That completed the winter passage. For the early spring passage there were 185 on January 5 and January 7 with 104 on January 11, 50 on January 19, 30 on January 26, 14 on January 30 and three on February 2. There were 63 on February 5 with 49 on February 12, 31 on February 15, two to February 26 and one to March 5. That closed the early spring passage. For the late spring passage there were four on March 19 with one on March 26. There were 43 on April 2 with 12 on April 6 and two to April 13. There were also four on April 16 with two on April 21.

Ring-billed Gull (*Larus delawarensis*)

A very common winter visitor (from mid-December) and early spring passage migrant (to late January); there were much smaller numbers for the fall and the rest of the spring passage. For the late fall passage there were 17 on November 5 with 13 on November 17 and four on November 21. There were 57 on November 24 with 27 on November 29 and 15 on November 30. That was the extent of the late fall passage. For the winter passage there were 27 on December 2 with 165 on December 8, 460 on December 11, 1,250 on December 14 and 4,600 on December 21, then 1,245 seen on December 28 with 1,210 on December 30 and 660 on January 2. The count of 4,600 was the highest count for Zellwood but the highest count is now (2013) that of 18,000 on February 8, 2005. That completed the winter passage. For the early spring passage there were 3,650 on January 5 with 1,200 on January 7, 510 on January 11, 270 on January 15 and 170 on January 19. There were 182 on January 22 with 410 on January 26, then 160 seen on February 2 with 29 on February 5 and 20 on February 9. There were 830 on February 12 with six on February 15 and two on February 19. There were three on February 23 with five on February 26 and 15 on March 2, then two seen on March 5. That concluded the early spring passage. For the late spring passage there were 16 on March 9 with five to March 16. There were nine on March 19 with 16 on March 24, 27 on March 29, 35 on April 6, 66 on April 13 and 69 on April 16, then 14 seen on April 21 with 13 on April 24, eight on April 27 and two to May 4. There were 12 on May 7 with three on May 12. That ended the late spring

passage. On April 16 they were all in first-summer plumage. For the early fall passage there was an adult on July 13.

Herring Gull (*Larus argentatus*)

An exceptionally scarce winter visitor and early spring passage migrant, in later years it was a much commoner species. Early fall record: *there was one in first-summer plumage on June 23*. For the winter passage there were four on November 29 with singles on December 2 and December 8. There were two on December 11 with later two on December 21, December 28 and December 30, then one seen on January 2. There were also three on January 5 with two on January 7. That completed the winter passage. For the early spring passage there were four on January 11 with singles on January 19 and January 26. That closed the early spring passage. For the late spring passage there was an immature on April 11.

Lesser Black-backed Gull (*Larus fuscus*)

This was a vagrant. There was one in first-winter plumage at Lake Apopka on December 30, January 5 and January 11; that was a winter record.

Gull-billed Tern (*Geochelidon nilotica*)

This was a vagrant. Early fall record: *for the summer passage in 2002 there was an adult on June 23*. For the spring passage in 2003 there was one on April 21.

Caspian Tern (*Hydroprogne caspia*)

This was an uncommon winter visitor and spring passage migrant; there was the suggestion of non-breeding birds summering. Early fall records: *there was one on July 14*. For this year there was a single early fall record; there was one on August 28. There were no records for the late fall passage. For the winter passage there were two on November 29. Later there was one on December 21 with two on December 26, four on December 28 and five on January 5, then two seen on January 7 with one on January 11. That completed the winter passage. For the early spring passage there were two on January 15 with later singles on February 2, February 5 and February 12. That was the extent of the early spring passage. For the main spring passage there were two on February 26 with ten on March 2, then eight seen

on March 9 with four on March 16 and two on March 19. There were three on March 24 and March 26 with five on March 29 and eight on April 2, then two seen on April 6. There were five on April 11 with 11 on April 16 and April 21, then six seen on April 24 with three on April 27 and singles to May 4. Finally for the main spring passage there were three on May 12. The last records I am treating as non-breeding summer visitors so for the summer passage there were two on June 1 with singles on June 8 and June 23.

Royal Tern (*Thalasseus maxima*)

This was a vagrant. Early fall record: *there was an adult in winter plumage on July 10.* For this year and the spring passage there was an adult on March 29.

Sandwich Tern (*Thalasseus sandvicensis*)

This was also a vagrant. Early fall record: *there was one in first-summer plumage on June 23 (there had been one in first-summer plumage on June 12).* There were no sightings for this year.

Common Tern (*Sterna hirundo*)

This was a vagrant. For the late spring passage there was an adult in winter plumage on March 2 and March 9.

Arctic Tern (*Sterna paradisaea*)

Another vagrant; for the summer passage there was an adult in breeding plumage on June 8; this was after a strong west coast sea breeze front.

Forster's Tern (*Sterna forsteri*)

A passage migrant and winter visitor; there was only one sizeable flock this year. Early fall records: *there were two to July 14 (not aged) with an adult in breeding plumage on July 17. There was one not aged on July 31 with two on August 11.* For this year there was one on September 18 with three on September 22. That was the extent of the early fall passage. For

the late fall passage there were 12 on November 9 with two on November 17. It is likely that the next influx belonged in the winter passage so for the winter passage there were seven on November 21 with 94 on November 24 and 141 on November 29, then 42 seen on December 2 with 24 on December 11 and 15 on December 14. There were 25 on December 16 with 13 on December 26, 11 to December 30, ten on January 2, seven to January 11, four on January 15 and two on January 19. That was a late running winter influx; an early spring influx was missing. For the early spring passage there were six on January 22 with four on January 30 and two on February 2. There were seven on February 5 with five on February 12, two on February 15 and one on February 19. There were seven on February 23 with three on February 26. That concluded the early spring passage. For the main spring passage there were four on March 2 with 17 on March 5, then three seen on March 9 with two on March 12. There were eight on March 16 with 14 on March 24, 21 on March 26, 36 on April 2 and 63 on April 6, then two seen on April 11. There were 13 on April 13 with 21 on April 16, then 18 seen on April 21 with seven on April 24, three on April 27 and one on April 30. Later there was one on May 12. That was the main spring passage. There were no further sightings for this survey year.

Least Tern (*Sternula antillarum*)

This had near vagrant status this year. Early fall records: *there were two on June 23 with five on June 26, eight to July 8 and 16 on July 10, then six seen on July 21 with three to July 28 and one on July 31.* There were no further records until the spring. For the spring passage there were two on March 24 with two later on April 30. For the summer passage there was one on June 16 that was it.

Black Tern (*Chlidonias niger*)

This was a vagrant this year. Early fall records: *there were was one in first-summer plumage on June 16 and June 23. There were five in breeding plumage with one in first-summer plumage on July 31, then seven seen in breeding plumage with two in first-summer plumage on August 7.* For the early fall passage this year there were 14 on September 15. For the spring passage there was one on April 16 that was it.

Black Skimmer (*Rynchops niger*)

This was a vagrant. For the early spring passage there were singles on January 7 and January 15. For the late spring passage there was one on April 27.

Rock Pigeon (*Columba livia*)

A spring passage migrant which seems a strange thing to say, there was a trace of passage in the summer and the early fall. Early fall records: *there were four on July 3 with five on July 10, then one seen on August 4.* There were no further sightings until the early spring passage. For the early spring passage there were two on January 26 with singles on February 5 and February 9. For the main spring passage there were singles on March 2 and March 5 with later two on March 26. There were seven on April 16 with two to April 27. There were four on April 30 and May 12. That was the end of the main spring passage. For the summer passage there were singles on May 26 and June 16. For the early fall passage there were two on July 30.

Eurasian Collared-Dove (*Streptopelia decaocto*)

A resident; there was little to suggest passage. During the Breeding Bird Survey a single pair located on the northern border. Early fall records: *there was one on July 3 with two on July 8 and nine on July 10, then two seen to July 17. There were eight on July 21 with one on July 25. There were two on July 28 with one on July 31. That may have been a minor post-breeding gathering so for the balance of the early fall passage there were two on August 4 and August 11 with one on August 14.* For this year there were no influxes to the end of the survey year. There were one to two present all year with higher counts of: three on September 18, three on September 26, three on October 23, four on November 5, three on November 21, three on December 8, four on December 16, five on December 21, four on May 4, three on May 18 and five on June 11.

White-winged Dove (*Zenaida asiatica*)

A summer visitor with a minor early fall passage; during the Breeding Bird Survey three pairs located out in the fields in a line of willows just to the south of Hoghead Road. Breeding not proved but these birds were reluctant to leave these trees on a number of visits. Early fall records: *there was one on June 30 with two on July 3, seven on July 8 and eight on July 14, then two seen on July 17 with one on July 21. There were three on July 31 with singles to August 7. There were two on August 11 with later 15 on August 25, then one seen on August 28.* There were also two on September 2 and September 4. That completed the early fall passage. There was no late fall passage but very exceptionally there was a winter record. For the winter passage there were six on December 28. There were also no records for the early spring passage. For the late spring passage there were two on March 26 with one on April 11. There were six on April 30 with two on May 12 and one on May 18. That ended the late spring

passage. For the summer passage there were singles on May 29 and June 1 with seven on June 11 and eight on June 16, then two seen to June 29. That closed the summer passage. For the early fall passage there were five on July 4 with three on July 19, two to August 8 and one on August 13.

Mourning Dove (*Zenaida macroura*)

A common resident; there was only a minor post breeding gathering this year. During the Breeding Bird Survey a total of 22 pairs located. Early fall records: *for the post breeding gathering there were 120 on May 23 with 133 on May 27, 227 on May 30 and 620 on June 2, then 310 seen on June 5 with 36 on June 10. There were 275 on June 12 with 765 on June 16 and 824 on June 23, then 675 seen on June 30 with 347 on July 3, 283 on July 10, 208 on July 17, 82 on July 21 and 81 on July 25. There were 84 on July 28 with 96 on July 31, 114 on August 4 and 440 on August 7, then 214 seen on August 11 with 114 on August 14 and 15 on August 18. There were 125 on August 21 with 61 on August 25, 57 on August 28 and 34 on September 2. That ended the post-breeding gathering. For the balance of the early fall passage there were 43 on September 4 with 50 on September 8, 57 on September 15 and 65 on September 18, then 40 seen on September 26 with 33 on September 29 and six on October 2. That was the early fall passage. For the late fall passage there were 30 on October 6 with 19 on October 9, 11 on October 16 and nine on October 20. There were 49 on October 23 with 63 on November 5 and 75 on November 9, then 26 seen on November 17. There were 27 on November 21 with 50 on November 24, 54 on November 29 and 160 on November 30, then 41 seen on December 2. That closed the late fall passage. For the winter passage there were 97 on December 8 with 14 on December 11. There were 87 on December 14 with 127 on December 16, then 49 seen on December 21 with 44 on December 26 and 20 on December 28. There were 34 on December 30 with 168 on January 2 and 260 on January 7, then 63 seen on January 9. That completed the winter passage. For the early spring passage there were 110 on January 11 with 157 on January 15, then 153 seen on January 19 with 96 on January 26, 88 on February 2 and 21 on February 5. There were 130 on February 9 with 19 on February 12 and 17 on February 15. There were 64 on February 19 with 65 on February 23, then 61 seen on March 2 with 45 on March 5. That concluded the early spring passage. As this species nests early the late spring passage becomes the summer passage. For the summer passage there were 49 on March 9 with 81 on March 12 and 132 on March 19, then 101 seen on March 24 with 86 on March 29, 74 on April 6, 50 to April 16, 38 on April 21 and 21 to April 27. That ended the summer passage. For the post-breeding gathering there were 27 on April 30 with 29 on May 7, 32 on May 12, 79 on May 15 and 114 on May 21, then 37 seen on May 26 with 31 on May 29 and 28 on June 1. There were 86 on June 4 with 38 on June 8. There were 50 on June 11 with 115 on June 16, 160 on June 23*

and 200 on June 29, then 189 seen on July 2 with 77 on July 4. There were 290 on July 6 with 73 on July 9. There were 270 on July 13 with 725 on July 19, then 195 seen on July 21 with 170 on July 23. There were 300 on July 25 with 340 on July 27, then 255 seen on July 30 with 135 on August 5 and 85 on August 8. There were 147 on August 10 with 155 on August 13, *then seven seen on August 20*. That was the end of the post-breeding gathering.

Common Ground-Dove (*Columbina passerina*)

A common summer visitor although present all year it was hard to find from November to mid-January; during the Breeding Bird Survey a total of 236 pairs located. Early fall records: *there were 25 on July 10 with 29 on July 14, 32 on July 17, 34 on July 21 and 51 on July 28, then 17 seen on July 31 with 15 on August 4. There were 16 on August 7 with 20 on August 11, 29 on August 14, 37 on August 18 and 42 on August 25, then 12 seen on September 2 with ten on September 8 and seven on September 11. There were 13 on September 15 and September 22 with seven on September 26. That was the early fall passage. For the late fall passage there were 18 on September 29 with 20 on October 6, then 14 seen on October 13 with ten on October 20, nine on October 23, seven on October 28, five on November 9 and three on November 17. Numbers were now much lower through to late January. There were five on November 21 with two on November 24 and singles to December 2. That closed the late fall passage. For the winter passage there were three on December 11 with two to December 16. There were three on December 21 with four on December 26, six on December 28 and seven on January 2, then six seen on January 5 with two on January 7. That completed the winter passage. For the early spring passage there were three on January 9 with eight on January 11, then four seen on January 15 with three on January 19. The counts were now higher again. There were 17 on January 22 and January 26 with 20 on January 30 and 21 on February 2, then ten seen on February 5 with nine on February 9. There were 15 on February 12 with 18 on February 15, then 17 seen on February 23 with seven on February 26 and six on March 2. That concluded the early spring passage. For the main spring passage there were ten on March 5 with 12 on March 12 and 17 on March 16, then 14 seen on March 19 with five on March 24. There were 14 on March 26 with 21 on March 29, then 18 seen on April 6 with five on April 11. There were 26 on April 13 with 34 on April 21, then 27 seen on April 24 with 25 on April 27 and 17 on April 30. That was the end of the main spring passage so for the summer passage there were 47 on May 4 with 34 on May 7. There were 37 on May 12 with 38 on May 15, 49 on May 18 and 111 on May 21, then 69 seen on May 26 with 40 on May 29 and 39 on June 1. The count of 111 is still (2013) the highest count for Zellwood. Exactly why the highest count should be in late May I do not know. There were 51 on June 4 with 53 on June 8 and 69 on June 11, then 60 seen on June 16 with 42 on June 18. There were 49 on June 23 with 54 on June 26, then 53 seen*

on July 2 with 41 on July 4. That ended the summer passage. For the early fall passage there were 55 on July 6 with 54 on July 9, 48 on July 13, 36 on July 19, 32 on July 21 and 26 on July 23. There were 51 on July 25 with 44 on July 27, 36 on July 30, 30 on August 5 and 16 on August 8. There were 33 on August 10 with 21 on August 13, *16 on August 20 and 15 on August 24.*

Cockatiel (*Nymphicus hollandicus*)

This was an exotic that could also be described as a vagrant. There was one on September 2 it was by Lake Apopka just to the south of the Lust Road pump house. On January 2 there was another flying west down Lust Road towards Lake Apopka. In Australia its natural habit is trees growing by water. Even when they escape from captivity they seem to gravitate to their natural environment.

Yellow-billed Cuckoo (*Coccyzus americanus*)

A summer visitor and a spring passage migrant; during the Breeding Bird Survey a total of 48 pairs located. Early fall records: *there were four on June 30 with 12 on July 3, then six seen on July 8 with four on July 10 and one on July 14. There were two on July 17 with three on July 21, then two seen to August 4 with singles to August 14.* For this year there were singles on August 18, August 21 and August 25. There were singles on September 18 and September 28. That was the early fall passage. For the late fall passage there were five on October 6 with three on October 13, two on October 16 and one on October 28; the latter was at the Sand Farm. That was the extent of the late fall passage; there were no further sightings until the spring passage. For the spring passage there were singles on April 16 and April 21 with two on April 24, seven on April 27 and 23 on May 4, then 13 seen on May 7 with eight on May 12 and five on May 15. The count of 23 was the highest count for Zellwood but the highest count is now (2013) that of 52 on June 8, 2006. That was also the end of the spring passage. For the summer passage there were six on May 18 with 15 on May 21, then six seen to May 29. There were nine on June 1 and June 4 with 12 on June 11, then ten seen on June 16 with five to June 29, four to July 9, three on July 13 and singles to July 23. That indicated the gradual departure of the summer visitors. For the early fall passage there were five on July 25 with two on July 27 and singles to August 5. There were two on August 10 *with one on August 24.*

Smooth-billed Ani (*Crotophaga ani*)

This was a vagrant. There was one working its way south along the side of Lake Apopka towards the Lust Road pump house on June 26; a summer record? This is the first record for Zellwood. There is a description in Appendix B.

Groove-billed Ani (*Crotophaga sulcirostris*)

This was a vagrant. For the late fall passage there were two by Lake Apopka north of the Lust Road pump house on October 20 and October 23. There cannot be too many places in Florida that have had both species of Ani in one year...

Barn Owl (*Tyto alba*)

A resident nesting in derelict buildings around the property; during the Breeding Bird Survey a total of four pairs located. With the exception of the colder months there were the influxes. Early fall records: *there were two on July 10 with three on July 14, then two seen on July 17 with one on July 21. There were two on July 25 and July 28 with four on August 4, then singles seen to August 11. There were three on August 14 and August 21 with two to August 28 and one on September 2. There were two on September 4 and September 8 with three on September 11 and five on September 15, then three seen to September 22. That was the early fall passage. For the late fall passage there were five on September 26 and September 29 with four on October 2, three to October 13 and one on October 16. There were two on October 20 with four on October 23, then two seen to November 9. There were two on November 21 and November 30 with one on December 2. That closed the late fall passage. Up to two a day then seen from December 8 to February 26 i.e. there were no winter or early spring passages. For the main spring passage there were two on March 3 with three from March 5 to March 16, then two seen on March 19 with one on March 29. There were two on April 11 with singles to April 16. There were two on April 21 with singles to April 27. That ended the main spring passage. For the summer passage there were two on April 30 and May 4 with three on May 7, then two seen on May 15 with one on May 21. There were two on May 26 with three on June 4, then two seen on June 8 with one to June 26. That closed the summer passage. For the early fall passage there were two on July 6 with three on July 13, then singles seen to July 21. there were three on July 23 and July 25 with four on July 30, five on August 5, *seven to August 20, nine on August 24 and 14 on September 1, then 12 seen on September 3 with six on September 7, four on September 10 and one on September 14. The count of 14 was the highest count for Zellwood but the highest count is now (2013) that of 25 on December 22, 2006.**

Eastern Screech-Owl (*Otus asio*)

As I do not use recordings this is a rarity but it is in reality probably quite common along the scrub/wood borders. For the early fall passage there was one on August 25. For the main fall passage there were singles on October 16, October 28, November 5 and November 24. There were no winter records. For the early spring passage there was one on January 5. For the summer passage there were singles on June 4 and June 16.

Great Horned Owl (*Bubo virginianus*)

During the Breeding Bird Survey a total of eight pairs located in the larger pieces of woodland; on a daily basis one to two seen regularly with three on June 16. Last year there were many more records with quite frequent counts of three.

Burrowing Owl (*Athene cunicularia*)

This was a vagrant. For the summer passage there was an adult by the Lust Road gate on June 18. This is the only record for Zellwood.

Barred Owl (*Strix varia*)

During the Breeding Bird Survey a total of four pairs located, this is always the rarer of the woodland owls. It seems to be the case of the Great Horned Owls hunting over the field and the Barred Owls being more restricted to the wooded borders. Only located on less than half of the visits when one to two seen there were higher counts of three on November 24, four on December 14, three on January 26 and three on January 30.

Short-eared Owl (*Asio flammeus*)

A rare passage migrant this year; there were no winter records. For the fall passage there was one on November 29. For the early spring passage there were singles on January 7, January 11 and January 19 with two on January 26, then singles seen on January 27 and February 15. I did not note their locations.

Northern Saw-whet Owl (*Aegolius acadicus*)

This was a vagrant. There was one by the Lake Level Canal on November 5. This is the first record for Zellwood. There is a description in Appendix B.

Common Nighthawk (*Chordeiles minor*)

A summer visitor with for this year only a truly massive fall flight; during the Breeding Bird Survey a total of 12 pairs located. Early fall records: *there were two from June 23 to July 3 with one on July 8. There were two on July 10 with one on July 14. There were two on July 21, July 25 and July 28 with singles on July 31 and August 4.* For this year there was one on August 25 with three on September 8 and 1,233 on September 11, then 247 seen on September 15. On September 11 the 1,233 were coming in over the northern border by Laughlin Road and working their way south feeding. This sight was on par with one of the largest counts of Swallow-tailed Kites. The count of 1,233 is still (2013) the highest count for Zellwood. There were 470 in the area (at dusk) on September 18 with 57 on September 22 and 36 on September 26. There were 173 on September 29 with 52 on October 2, 28 on October 6, 12 on October 9 and nine on October 16. To put the count of 1,233 into perspective the previous high count was that of 52 on September 9, 2001....There were no further sightings until the spring passage. For the spring passage there were two on April 21 with 12 on April 24, then four seen on April 27 with one on April 30. There were five on May 4 with two on May 7. That was the end of the spring passage. For the summer passage there were three on May 12 with six on May 15, then four seen on May 18 with two on May 21 and one on May 26. There were two on May 29 with five to June 8 and six on June 11, then singles seen to June 29. That ended the summer passage. For the early fall passage there were three on July 2 and July 4 with one on July 6. There were two on July 9 with five on July 13, then two seen on July 21 with singles to August 13.

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

A summer visitor with most pairs being found along the northern border, during the Breeding Bird Survey a total of 20 pairs located. Early fall records: *there was one on July 3 and July 21.* For this year there were singles on September 2, September 18 and September 22. That was the early fall passage. There were no further sightings until the spring passage. For the spring passage there were four on March 29 with singles to April 6. There were two on April 11 with three on April 13, then singles seen to April 21. There were four on April 24 with six on May 4, then two seen on May 12 with one on May 15. That ended the spring passage so for the summer passage there were two on May 18 with six on May 26, then singles seen to June 1.

There were 13 on June 4 with four on June 11 and singles to June 26. The count of 13 was the highest count for Zellwood but the highest count is now (2013) that of 16 on May 23, 2004. There were also two on July 4 with singles to July 9.

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

Seemingly an uncommon passage migrant and winter visitor; this species was doubtless under-recorded due to its nocturnal behavior. For the late fall passage there were singles on October 9, October 20 and October 23. For the winter passage there were singles on November 29, December 21, December 30, January 5, January 7 and January 9. For the early spring passage there were singles on January 15 and February 9. For the main spring passage there were singles on March 5, March 9, March 12 and March 16 with two on March 29, then one seen on April 13.

Chimney Swift (*Chaetura pelagica*)

A common fall passage migrant; numbers for the spring and summer passages were minimal. This species did not breed in the survey area but will have done so in the township of Zellwood. Early fall records: *there were seven on June 19 with eight on June 23, nine on June 30 and 15 on July 8, then two seen to July 14. There were three on July 17 with 14 on August 7, 20 on August 11 and 43 on August 25, then six seen on August 28.* There were 15 on September 2 with 185 on September 4, then nine seen on September 8 with eight on September 11. There were 28 on September 18 with 51 on September 22, 130 on September 26, 224 on September 29 and 250 on October 2, then 45 seen on October 9 with 34 on October 13, 33 on October 16 and three on October 23. That closed the fall passage. For the spring passage there were two on March 4 with four on April 6 and 21 on April 11, then five seen on April 13. There were 14 on April 16 with 20 on April 21, then two seen on April 24. There were five on April 27 with nine on April 30, then seven seen on May 4 with four on May 7. There were nine on May 12 with five to May 18. There were nine on May 21 with 11 on May 29, then seven seen on June 1 with four on June 4. That was the end of the spring passage. For the summer passage there were five on June 8 with ten on June 11, then four seen on June 16 with two to June 23. There were six on June 26 with 18 on June 29, then ten seen on July 2 with eight on July 4. There were 27 on July 6 with 16 on July 13 and two on July 19. There were four on July 21 with 30 on July 23, then four seen on July 25. There were five on July 27 with 16 on July 30, then nine seen on August 5. That was the summer passage. For the early fall passage there were flying to the south 865 on August 8 with 165 on August 10. There were 270 in the area on August 13 *with 34 on August 20 and five on August 24.*

Ruby-throated Hummingbird (*Archilochus colubris*)

This was a vagrant. For the early fall passage there was one on the eastern border on September 18. For the late fall passage there were two at the Sand Farm on October 13 and October 16. This count of two is still (2013) the highest count for Zellwood.

Belted Kingfisher (*Megaceryle alcyon*)

Present in small numbers from late August to the end of April; the greatest numbers were seen from mid-October to late November. Early fall records: *there were singles on July 21, July 31 and August 4 with two on August 7, then one seen on August 14.* For this year there was one on August 21 with three from August 25 to September 4, then two seen to September 11. There were three on September 15 with five on September 18, eight on September 26 and 12 on September 29, then nine seen on October 6 with eight on October 9 and six on October 13. There were 13 on October 16 with nine to October 23. There were 12 on October 28 and November 5 with 19 on November 9, then 15 seen on November 21 with ten to November 29. The count of 19 was the highest count for Zellwood but the highest count is now (2013) that of 45 on November 1, 2009. That closed the fall passage. For the winter passage there were 11 on November 30 with eight on December 2, seven on December 8 and five on December 11. There were ten on December 14 with one on December 16. There were four on December 21 and December 26 with eight on December 28, then five seen on December 30. There were six on January 2 with eight on January 5 and January 7, then six seen on January 9. That completed the winter passage. For the early spring passage there were seven on January 11 and January 15 with five to January 22. There were ten on January 26 with nine on February 2, eight on February 5 and six to February 12. There were ten on February 15 with six to February 23 and four on February 26. That ended the early spring passage. For the late spring passage there were six on March 2 and March 9 with seven on March 12 and eight on March 16, then seven seen on March 19 with four on March 24. There were five on March 26 with eight on March 29 and nine on April 2, then three seen to April 13 with two to April 24 and one on April 27. That concluded the late spring passage. For the summer passage there was one on May 15 with two on June 18.

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

This was a vagrant. Early fall record: *there was an adult on July 31, location not noted.* For this year an adult flew to the east at the Sand Farm on September 22. For the spring passage there was an adult by the Hooper Farms Road gate on March 29.

Red-bellied Woodpecker (*Melanerpes carolinus*)

A common resident in the wooded borders but they could be found throughout the area. During the Breeding Bird Survey a total of 76 pairs located. Early fall records: *there were five on June 19 with nine on June 23, ten on June 26 and 17 on July 3, then ten seen to July 10. There were 11 on July 14 with 12 on July 17 and 23 on July 21, then 12 seen on July 25. There were 13 on July 28 with 17 on July 31 and 19 on August 4, then 15 seen on August 7 with 12 to August 14.* For this year there were 18 on August 18 and August 25 with ten on August 28 and eight on September 2. There were 17 on September 4 with 12 on September 11 and ten on September 15. There were 14 on September 18 and September 26 with 16 on September 29, then 11 seen on October 2. That was the early fall passage. For the late fall passage there were 12 on October 6 with 13 on October 9 and 20 on October 13, then ten seen on October 16 with nine on October 20. There were 13 on October 23 with 16 on November 5, then 12 seen on November 9 with four on November 17. There were 13 on November 21 with 14 on November 29, then ten seen on November 30. That closed the late fall passage. For the winter passage there were 12 on December 2 with ten on December 8 and five on December 11. There were ten on December 14 with 12 on December 16, then ten seen on December 26 with eight on December 28. There were 11 on December 30 with 12 on January 2, 14 on January 5 and 20 on January 9, then eight seen on January 11. That closed the winter passage. For the early spring passage there were nine on January 15 with 11 on January 19, 13 to January 30 and 15 on February 2, then five seen on February 5 with one on February 9. There were five on February 12 with 13 on February 15, 14 to February 23 and 17 on February 26, then ten seen on March 2. That ended the early spring passage. For the main spring passage there were 16 on March 5 with 17 on March 12 and 19 on March 16, then 15 seen on March 19 with 11 on March 24 and ten to March 29. There were 14 on April 2 with 15 on April 6, 19 to April 21, 22 on April 24 and 48 on April 27, then 29 seen on May 4 with 17 on May 7 and 11 on May 12. The count of 48 was the highest count for Zellwood but the highest count is now (2013) that of 91 on October 1, 2006. This count of 48 was so very unusual in its timing; I have no idea what it represented. That was also the end of the main spring passage so for the summer passage there were 22 on May 15 with 20 on May 21 and 13 on May 26. There were 16 on May 29 with 19 on June 1 and 20 on June 4, then five seen on June 8. There were 13 on June 11 with 16 on June 16, then 14 seen to June 26. There were 19 on June 29 with 24 on July 2, then 19 seen on July 4 with 17 on July 6, 16 on July 9, 14 on July 13 and 12 on July 19. That finished the summer passage so for the early fall passage there were 14 on July 21 with 17 on July 23, then 15 seen on July 25 with 13 on July 27. There were 17 on July 30 with 15 on August 5 and eight on August 8. There were 23 on August 10 *with ten to August 20. There were 25 on August 24 with 22 on August 27, 20 on September 3 and ten on September 7.*

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

With limited access to woodland this was an uncommon passage migrant and winter visitor. For the late fall passage there was one at the Sand Farm on October 13. For the winter passage there was one by the Lake Level Canal on December 14 with one at the Sand Farm on December 16. Finally for the winter passage there was one on the eastern border on December 21 and January 7. For the early spring passage there was one by the Hooper Farms Road gate on January 27 with two on the eastern border on February 2. Finally for the late spring passage there was one by the Lake Level Canal on March 16. At this distance from these events (2012) I have no idea as to the location on the eastern border that these sightings related to.

Downy Woodpecker (*Picoides pubescens*)

A common resident in the wooded borders; they can turn up anywhere. During the Breeding Bird Survey a total of 39 pairs located. Early fall records: *there were two on June 23 with four on June 26, six on June 30 and eight on July 3, then five seen on July 8 with two on July 10. There were four on July 14 and July 17 with 11 on July 21, then six seen on July 28 with three on July 31. There were four on August 4 with ten on August 7, then seven seen on August 14.* For this year there were ten on August 18 with six on August 25, four on August 28 and one on September 2. There were four on September 4 with seven on September 8 and ten on September 15, then nine seen on September 18 with seven on September 22 and four on September 26. That was the early fall passage. For the late fall passage there were 11 on September 29 with four on October 2. There were five on October 6 with eight on October 9 and 11 on October 13, then three seen on October 16 with one on October 20. There were six on October 23 with four on October 28, three on November 5 and one on November 9. There were four on November 17 with two to November 24. That closed the late fall passage. For the winter passage there were seven on November 29 with six on December 2, four on December 11, three to December 21 and two on December 26. There were six on December 28 and December 30 with seven on January 2 and January 7, then three seen on January 9 with two on January 11. That completed the winter passage. For the early spring passage there were two on January 15 with six on January 19, then four seen on January 22. There were five on January 26 with six on January 30 and February 2, then five seen on February 5 with one on February 12. There were ten on February 15 with eight on February 23, five on February 26 and three on March 2. That ended the early spring passage. For the late spring passage there were five on March 5 with nine on March 12 and ten on March 16, then five seen on March 19 with four to March 26, two on March 29 and singles to April 6. There were two on April 11 with four on April 13 and five on April 21, then two seen on April 24. There were three on April 27 and April 30 with seven on May 4. That was the end of the late spring passage. For the summer passage

then two seen on May 7 with one on May 12. There were three on May 15 with singles to May 21. There were seven on May 26 with six on May 29 and three on June 1. There were ten on June 4 with five on June 11, four on June 16 and two to June 23. There were three on June 26 with four on June 29 and July 2, then two seen on July 6 with one on July 9. That closed the summer passage. For the early fall passage there were three from July 13 to July 23 with four on July 25, then two seen to August 8. There were six on August 10 with one on August 13.

Hairy Woodpecker (*Picoides villosus*)

This was a vagrant. For the late spring passage there was one by Canal Road on April 30. All the sightings so far have been along the northern border.

Red-cockaded Woodpecker (*Picoides borealis*)

This was a vagrant. This is perhaps one of the most unexpected “finds” ever. There was an adult in scrub by the Sand Farm Bridge at 8.00 am on June 23, it took off and flew out to the east over the fields. This was of course the first record for Zellwood. There is a description in Appendix B.

Northern Flicker (*Colaptes auratus*)

A resident in the wooded borders; there was no evidence of migration this year. During the Breeding Bird Survey a total of ten pairs located. Unlike the Red-bellied Woodpecker and the Downy Woodpecker there was no pattern of influxes. Up to three a day seen regularly through the year; there were higher counts of four on November 5, five on February 23, five on March 5, four on May 15 and five on May 29.

Pileated Woodpecker (*Dryocopus pileatus*)

A resident in the wooded borders: there was no evidence of migration. During the Breeding Bird Survey a total of eight pairs located. Again there was no pattern of influxes; during the year up to three a day seen with higher counts of four on August 18 and four on March 16.

Eastern Wood-Pewee (*Contopus virens*)

This was an uncommon fall passage migrant. For the early fall passage there were singles on August 21, August 25, August 28, September 8, September 11 and September 18. For the late fall passage there were singles on October 6, October 9 and November 9. I failed to note where these birds were seen so I have no idea how many birds were involved.

Acadian Flycatcher (*Empidonax vireescens*)

An uncommon fall passage migrant; there was also a single record for the spring passage. For the early fall passage there was one by Lake Apopka north of the Lust Road pump house on August 18 and August 21. The wooded islands that existed in 2002 no longer exist in 2012. There was one at the Sand Farm on August 25. There was one again north of the Lust Road pump house on August 28. There were singles at the Sand Farm on September 2, September 8 and September 11 with one north of the Lust Road pump house on September 11. The count of two on September 11 was the highest count for Zellwood, but the highest count is now (2013) that of four on September 10, 2003. That completed the early fall passage. Finally for the spring passage there was one on the northern border on May 4.

Least Flycatcher (*Empidonax minimus*)

A passage migrant and winter visitor, the greatest numbers were seen from early December to mid-January. For the early fall passage there was one at the Sand Farm on August 28. That was the early fall passage. For the main fall passage there was one at the Sand Farm from September 29 to October 16. There was also one by the Lust Road gate on September 29. There was one by Lake Apopka to the south of the Hooper Farms Road extension on October 16 and October 20. There were two by the Lust Road gate on October 20. At the Sand Farm there was one on November 9 with later two on November 21 and November 24, then three seen there on November 29 with two on November 30. There were two by Lake Apopka south of the Hooper Farms Road extension on November 24 and November 29 with one on November 30. That was the main fall passage. For the winter passage there were eight on December 2; there were three at the Sand Farm with three by Lake Apopka to the south of the Hooper Farms Road extension, there was one by Lake Apopka to the north of the Lust Road pump house and one by the Lust Road pump house. The count of eight was the highest count for Zellwood but the highest count is now (2013) that of 23 on December 19, 2007. There were still two at the Sand Farm on December 8 and December 11 with one on December 14. There were also singles by Lake Apopka to the south of the Hooper Farms Road extension on December 8 and December

11. At that site there were two on December 16 and December 21. There was one to the north of the Lust Road pump house on December 16. On December 21 there were singles on the northern border and by Lake Apopka at the Lust Road pump house. There were three at the Sand Farm from December 30 to January 9. There was one by Lake Apopka to the north of the Lust Road pump house on December 30 with another there on January 9. Finally for the winter passage there was one by Lake Apopka south of the Hooper Farms Road extension from January 7 to January 11. For the early spring passage there were two at the Sand Farm from January 15 to January 26. There were singles south of the Hooper Farms Road extension on January 19 and January 26. There was also one by the Lust Road gate on January 22. There were two at the Sand Farm on January 30 and February 2 with singles to February 15. There was one on the northern border on February 12. There was one by Lake Apopka to the south of the Hooper Farms Road extension on February 15 and February 19. There were two at the Sand Farm on February 19 with singles to March 2. Finally for the early spring passage there was one by the Lake Level Canal on February 26. For the late spring passage there was one by Lake Apopka to the south of the Hooper Farms Road extension on March 5. There was one by Hooper Farms Road gate on March 12. There were singles at the Sand Farm on March 16, March 26 and April 2. There was one by Lake Apopka north of the Lust Road pump house on March 29. Finally for the late spring passage there was one to the south of the Hooper Farms Road extension on April 2. The records were such that I could not identify the influxes so I have had to detail all the records. I believe that there were 14 in the fall, eight in the winter, seven in the early spring and six in the late spring; this comes to a total of 35 birds.

Eastern Phoebe (*Sayornis phoebe*)

A common fall passage migrant; there were lesser number for the winter and spring passages. For the fall passage there were six on October 6 with 34 on October 9, 35 on October 13, 89 on October 16 and 185 on October 20, then 162 seen on October 23. There were 167 on October 28 with 217 on November 5, then 201 seen on November 9 with 194 on November 21, 163 on November 24 and 103 on November 29. That closed the fall passage. For the winter passage there were 112 on November 30 with 186 on December 2, then 156 seen on December 8 with 92 on December 11 and 68 on December 14. There were 113 on December 16 with 123 on December 26, then 105 seen to January 2 with 84 on January 5 and 66 on January 7. That completed the winter passage. For the early spring passage there were 112 on January 9 with 65 on January 11. There were 79 on January 15 with 86 on January 19, then 75 seen on January 26 with 72 on January 30. There were 79 on February 2 with 64 on February 5 and 14 on February 9. There were 43 on February 12 with 72 on February 15 and 73 on February 19, then 65 seen to February 26. That ended the early spring passage. For the late spring passage there

were 70 on March 2 with 46 on March 5 and 30 on March 9. There were 39 on March 12 with 50 on March 16, then 29 seen on March 19 with five to March 26, two on March 29 and one on April 6.

Ash-throated Flycatcher (*Myiarchus cinerascens*)

This was a poor year for this western flycatcher. For the fall passage there was one by Lake Apopka to the south of Hooper Farms Road extension on November 21 and November 29. There was also one at the Sand Farm on November 24. That was the fall passage. For the winter passage there was one on the northern border on December 21. There was one at the Sand Farm from December 26 to December 30. That completed the winter passage. For the early spring passage there was one on the eastern border on February 2 and February 5. There was one by the Hooper Farms Road gate on February 5 and February 19. There was one by the Lust Road gate on February 19. Finally for the early spring passage there was one at the Sand Farm on February 26. For the late spring passage there was one by the Lake Level Canal on April 11. April records have proved to be quite regular. I believe that there were two for the fall, two for the winter, four for the early spring and one for the late spring. This comes to a total of nine birds, last year I estimated 25 birds.

Great Crested Flycatcher (*Myiarchus crinitus*)

A summer visitor; during the Breeding Bird Survey a total of 30 pairs were located. Early fall records: *there were two on June 23 with three on June 26, eight on June 30 and 18 on July 3, then eight seen on July 10 with three to July 17. There were ten on July 21 with five to July 28, four on July 31 and three on August 4. There were 11 on August 7 with two to August 21. There were three on August 28; however that was the last fall sighting. There were no further records until the spring passage. For the spring passage there were singles from March 24 to April 2 with three on April 6, and five on April 13, then ten seen on April 16 and April 24 with nine on April 27 and two on April 30. There were 11 on May 4 and May 12 with eight on May 15 and five on May 18. There were nine on May 21 with four to May 29 and two on June 1. That closed the spring passage. For the summer passage there were seven on June 4 with five on June 11 and three on June 16. There were five on June 18 with four to July 4. There were ten on July 6 with two to July 21 and singles to July 27. That completed the summer passage. For the early fall passage there were two from July 30 to August 8 with eight on August 10, then four seen on August 20 with three on August 27, two to September 7 and one on September 10. There was also one on October 5.*

Brown-crested Flycatcher (*Myiarchus tyrannulus*)

This was a vagrant. For the early spring passage there was one near the Workshops on February 12. For the late spring passage there was one by Lust Road on April 13.

Cassin's Kingbird (*Tyrannus vociferans*)

This was a vagrant, even if it was a returning winter visitor. Initially there was one by the McDonald Canal on November 9. What was almost certainly the same individual was seen by Hooper Farms Road from November 29 to April 6.

Western Kingbird (*Tyrannus verticalis*)

As I keep saying this is a problem species as whilst there was a major roost east of Hooper Farms Road only a portion of those birds came into the survey area for example on December 21 there were 11 in the area whereas there were 34 at the roost. For the late fall passage there were two on October 16 and October 20 with one on October 28. There were three on November 5 with six on November 9, then three seen on November 24. That was the late fall passage. For the winter passage there were nine on November 29 with 11 on November 30, 12 on December 2 and 22 on December 8, then 12 seen on December 11 with one on December 14. There were 16 on December 16 with 11 to December 26. There were 15 on December 28 with 27 on December 30, then 15 seen on January 2 with six on January 5. That completed the winter passage. For the early spring passage there were seven on January 7 with 15 on January 9 and 24 on January 11, then 16 seen on January 15 with ten on January 26, eight on January 30, seven on February 2 and five to February 23. That concluded the early spring passage. For the main spring passage there were 20 on February 26 with 18 on March 5 and nine on March 9. There were 23 on March 12 with 27 on March 19, 29 on March 26 and 30 on March 29, then 21 seen on April 6 with 19 to April 21, ten on April 24, nine to May 4 and five on May 7. Exceptionally there was one by Lust Road on May 26.

Eastern Kingbird (*Tyrannus tyrannus*)

A passage migrant in low numbers; whilst this species was present during the summer there was no evidence that it bred. Early fall records: *there were two on July 3 with singles on July 8, July 10, July 25 and August 4.* For this year there were five on August 21 with eight on August 25, then one seen on August 28. There were four on September 2 with five on

September 4 and 11 on September 8, then ten seen on September 11 with six on September 18. There were eight on September 22 with 30 on September 26, then 11 seen on September 29. That completed the early fall passage there were no later fall records. For the spring passage there were singles on March 24, March 26, April 2 and April 6 with two on April 16. Later there were three on May 4 with one on May 7. That completed the spring passage. For the summer passage there were two on May 26 with three on May 29, then two seen on June 1 with one on June 4. There were two on June 11 and June 16 with one on June 18. There were two on June 23 with singles on June 26, June 29 and July 6. That ended the summer passage so for the early fall passage there were two on July 9 with singles on July 13, July 19 and July 21.

Gray Kingbird (*Tyrannus dominicensis*)

This was a vagrant. For the early fall passage there was one on August 25, location not noted.

Scissor-tailed Flycatcher (*Tyrannus forficatus*)

A spring passage migrant in low numbers there were even lower numbers for the fall and winter passages. For the fall passage there was one on October 28 at the eastern end of the McDonald Canal with two there on November 5. There were three on November 9 (location not noted). For the winter passage there was one by the Hooper Farms Road gate on November 29, November 30 and December 2. There was also one by Lust Road on December 2. There was one by the Hooper Farms Road gate on December 21 with one by Lake Apopka to the south of the Hooper Farms Road extension on January 2. That completed the winter passage. For the early spring passage there were two by Laughlin Road on January 11 and January 15. I did not record locations after those records. There were three on February 15 with one on February 19. There were also two on February 26. That ended the early spring passage. For the main spring passage there were three on March 5. Later there were two on March 19 with three on March 24, then one seen on March 26. There were two on March 29 with three on April 2. Later there were two on April 21 and April 24 with one on April 27, they were by Lust Road. That was the end of the main spring passage.

Loggerhead Shrike (*Lanius ludovicianus*)

A resident, a passage migrant and winter visitor; during the Breeding Bird Survey a total of six pairs located that was the full complement of breeding pairs. Early fall records: *there were three on June 12 and June 16 with seven on June 19, then six seen on June 23 with singles to June 30. There were two on July 3 with four on July 8, five on July 10 and six on July 14, then four seen on July 17 with two on July 21. There were five on July 25 with four to August 11, three on August 14 and two on August 18. There were four on August 21 with 13 on August 25, then five seen on August 28 with three on September 2. There were six on September 4 with four on September 8 and three on September 11. There were four on September 15 with six on September 22 and September 26, then five seen on September 29 with four on October 2 and two on October 6. That was the end of the early fall passage. For the late fall passage there were eight on October 9 and October 16 with three to October 23. There were four on October 28 with six on November 9, then five seen to November 29. That closed the late fall passage. For the winter passage there were eight on November 30 with seven on December 2 and four on December 8. There were eight on December 11 with ten on December 16, then six seen on December 21 with five on December 26. There were eight on December 28 with five on January 2 and two to January 7. That completed the winter passage. For the early spring passage there were four on January 9 with five on January 11, then two seen to January 19. There were five on January 22 with four on January 30 and singles to February 15. There were two on February 19 with one on February 23. That ended the early spring passage. This was such an early nester that we now come to the summer passage. For the summer passage there were two from February 26 to March 9 with four on March 16, then three seen to March 24 with two on March 29 and one on April 2. From April 2 to June 26 there were just one to two seen daily. That was the end of the summer passage. For the early fall passage there were three on June 29 and July 4 with five on July 6, then four seen to July 19 with two on July 21 and one on July 23. There were three on July 25 and July 27 with two to August 10 and one on August 13.*

White-eyed Vireo (*Vireo griseus*)

A resident and passage migrant, the fall passage being the strongest passage; during the Breeding Bird Survey a total of 14 pairs located. Early fall records: *there were three on June 30 and July 3 with one on July 8. There were two from July 10 to July 17 with three on July 21, then singles seen to July 28. There were five on July 31 and August 4 with seven on August 11, then singles seen to August 25. There were five on August 28 with three on September 2. There were four on September 4 with eight to September 15 and 18 on September 18, then 15 seen on September 22 with two on September 26. That was the early fall passage. For the main fall passage there were 20 on September 29 with 17 on October 2 and 15 on October 6. There were*

21 on October 9 with 13 on October 13 and ten on October 16. There were 16 on October 20 with 12 on October 28, ten on November 9, eight to November 24, four on November 29 and two on November 30. That closed the main fall passage. For the winter passage there were nine on December 2 with 13 on December 8, then five seen on December 11 with one on December 14. There were two on December 16 with five on December 21, six on December 26 and eight on December 30, then six seen on January 2 with three on January 5 and one on January 7. That completed the winter passage. For the spring passage there were six on January 9 with four on January 11. There were five on January 15 with six on January 19 and January 22, then one seen on January 26. There were two on January 30 with three on February 2, then two seen on February 5 with one on February 9. There now appeared to be a real passage; there were six on February 12 with eight on February 15, ten on February 19 and 18 on February 23, then 13 seen on February 26 with 12 on March 5, nine on March 9, eight on March 12, six to March 24, five on March 26 and three on March 29. That influx really ended after March 16. There were six on April 2 with three on April 6 and two on April 11. There were three on April 13 with five from April 16 to April 27, then two seen on April 30. That was the end of what appeared to be a single spring passage. For the summer passage there were three on May 4 and May 7 with four on May 12, then two seen to May 21 with one to May 29. There were three on June 1 and June 4 with one on June 8. There were two on June 11 and June 18 with three on June 23, then four seen on June 26 and July 2 with two to July 6. That finished the summer passage so for the early fall passage there were four on July 9 and July 19 with two to August 13. There was no passage during the last month.

Bell's Vireo (*Vireo bellii*)

This was a vagrant. For the winter passage there was one at the Sand Farm on December 16.

Yellow-throated Vireo (*Vireo flavifrons*)

This was a rare passage migrant. Early fall record: *there was one on July 31*. For this year there were singles on September 2 and September 8. That was the early fall passage. For the early spring passage there was one by the Lake Level Canal on January 11. Finally for the late spring passage there was one on March 24.

Blue-headed Vireo (*Vireo solitarius*)

An uncommon passage migrant and winter visitor; the problem is not that this species is so uncommon it is that I do not have access to the interior of a piece of woodland. For the late fall passage there were singles on November 5 and November 17 with three on November 24, then one seen on November 29. For the winter passage there were two on November 30 with four on December 2, then two seen on December 8 with singles to December 16. There were three on December 21 and December 26 with two to December 30 and singles to January 5. There were two on January 7 with singles to January 11. That completed the winter passage. For the early spring passage there were singles from January 19 to February 2 with two on February 15, then singles seen on February 19 and February 26. There were no later records.

Philadelphia Vireo (*Vireo philadelphicus*)

This was a vagrant. For the late fall passage there was one on the eastern border on October 13.

Red-eyed Vireo (*Vireo olivaceus*)

An uncommon passage migrant; numbers in the fall and the spring were similar. Early fall records: *there were two on June 30 with singles on July 10 and July 14. There were three on July 17 with two on July 25 and singles to July 31. There were two on August 4 and August 11 with three on August 14*, then singles seen to September 2. There were three on September 4 with singles to September 22. That was the early fall passage. For the late fall passage there were three on September 28 and October 2 with two to October 13 and singles on October 16 and October 20. That completed the late fall passage. For the spring passage there were singles on March 12, March 24 and March 26 with two on March 29 and three on April 2, then two seen on April 6 with one on April 11. There were two on April 13, April 21 and April 24 with singles to May 4. That closed the spring passage. I am not sure how to treat the next two records; there was one in the "wood" by the Lake Level Canal on June 11 and June 16. This would appear to be a wandering individual that did not breed this year. For the early fall passage there were singles on July 30 and August 8.

Blue Jay (*Cyanocitta cristata*)

A common resident in the wooded borders; during the Breeding Bird Survey a total of 62 pairs located. In many years there is a marked fall passage but there was little evidence of such an event this year. Early fall records: *there were ten on June 30 with 11 on July 3, 13 on July 8 and 18 on July 10, then seven seen on July 14. There were nine on July 17 with 16 on July 21, then eight seen on July 25. There were ten on July 28 with 24 on July 31 and August 4, then 18 seen on August 11 with seven on August 14.* For this year there were eight on August 18 with 19 on August 21, then 18 seen on August 25 with 13 on August 28 and 11 on September 2. There were 16 on September 4 with 18 on September 8, then 17 seen to September 15. There were 31 on September 18 with 26 on September 22 and 18 on September 26. There were 34 on September 29 with 16 on October 2. That was the early fall passage. For the main fall passage there were 26 on October 6 with 30 on October 9, then 24 seen on October 13 with 19 to October 23, 14 on October 28, ten on November 9 and nine on November 17. There were 22 on November 21 with 21 on November 24, 20 on November 29 and ten on November 30. That closed the main fall passage. For the winter passage there were 12 on December 2, December 8 and December 14 with 14 to December 21 and 20 on December 28, then 14 seen on December 30 with eight on January 2. There were 20 on January 5 with 21 on January 7, then 19 seen on January 9 with eight on January 11. That completed the winter passage. For the early spring passage there were 19 on January 15 with 14 on January 22 and 11 on January 26. There were 21 on January 30 with 15 on February 2, 11 on February 5 and three on February 9. There were 11 on February 12 and February 19 with 16 on February 23 and 17 on March 2, then 13 seen on March 5 with five on March 9. That ended the early spring passage. For the late spring passage there were 14 on March 12 with 23 on March 16, then seven seen on March 19. There were nine on March 24 with 18 on March 26, then seven seen to April 2. There were 11 on April 6 with 12 on April 13 and 22 on April 16, then 15 seen on April 21. There were 17 on April 24 with 24 on April 27, then 22 seen on May 4 with ten on May 7. That concluded the late spring passage so for the summer passage there were 15 on May 12 with 23 on May 15, then 12 seen on May 18. There were 15 on May 21 with 16 on May 26 and 18 on June 1, then 15 seen on June 4 with ten on June 8. There were 11 on June 11 with 17 on June 16, then five seen on June 18. That closed the summer passage. For the early fall passage there were nine on June 23 with 19 on June 26, 28 on June 29 and 31 on July 4, then 22 seen on July 6 with 17 on July 9. There were 25 on July 13 with 19 on July 19 and 17 on July 21. There were 21 on July 23 with 25 on July 27, then 23 seen on August 5 with 18 on August 10 and 15 on August 13.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

This was a vagrant. There was one at the Sand Farm on May 4. This species breeds within five miles yet it is a vagrant. This was the second record for Zellwood there had been two by the Lust Road gate on April 17, 2002.

American Crow (*Corvus brachyrhynchos*)

Whilst there were records for every month this was at best an irregular visitor. Early fall records: *there was one on July 21*. For this year there was one on September 2. That was the extent of the early fall passage. For the main fall passage there were three on September 28 and September 29 with two on October 2 and October 6. For the winter passage there were two on November 30 with one on December 8. Later there was one on January 5. That was the winter passage. For the early spring passage there were two on January 22 with one on January 27. There were three on February 15 with two on February 19, February 23 and March 2. That completed the early spring passage. For the late spring passage there were singles on March 9, March 12 and March 16. There were two on April 2 with one on April 11. That closed the late spring passage. For the summer passage there were two on May 12 with two on June 4. Finally for the early fall passage there were six on the northern border on July 4 with later two on August 13. The count of six was the highest count for Zellwood but the highest count is now (2013) that of 38 on November 9, 2008.

Fish Crow (*Corvus ossifragus*)

Unlike the last species this one was present all year; during the Breeding Bird Survey a total of six pairs located. Unlike last year when there was a massive invasion during the early spring for this year there was only a minor event at that time. Exceptionally in the early fall there was an interesting movement to the south-east. Early fall records: *there were eight on June 19 with 42 on June 23, 77 on June 26 and 137 on July 3, then 97 seen on July 10 with seven on July 14. There were 11 on July 17 with 31 on July 21 and 76 on July 25, then ten seen on July 31 with four on August 4. There were six on August 7 with 110 flying to the east on August 11, then six seen on August 14* with singles to September 2. There were 14 on September 4 with singles to October 2. That was the end of the early fall passage. For the late fall passage there were two on October 9 and October 13 with 16 on October 20, then 15 seen on November 5 with one on November 9. Later there were 45 on November 21 with two on November 24. That closed the late fall passage. For the winter passage there were ten on November 29 with singles to December 2. There were 12 on December 8 with 42 on December 11. There were later two

on December 21 with 65 on December 26, then 60 seen on December 28 with 47 on December 30. There were 63 on January 2 with 395 on January 5, then three seen on January 7 with two to January 11. That completed the winter passage. For the early spring passage there were three on January 15 with 550 on January 19, then three seen on January 22. There were nine on January 26 with 32 on January 30 and 46 on February 2, then five seen on February 5. There were 30 on February 9 with 61 on February 12 and 78 on February 15, then 45 seen on February 19 with 19 on February 26 and five on March 2. That finished the early spring passage. For the late spring passage there were 18 on March 5 with three on March 9. There were six on March 12 and March 16 with nine on March 19, then eight seen on March 24 with six on March 26. There were 20 on March 29 with 35 on April 2, then 16 seen on April 11 with ten on April 13, nine on April 16, six on April 21 and four on April 24. There were six on April 27 with seven on April 30, then six seen on May 4 with five on May 7. That closed the late spring passage. For the summer passage there were six on May 12 with 14 on May 15, then eight seen on May 18 with five on May 21 and three on May 26. There were 21 on May 29 with eight on June 1 and three on June 4. There were four on June 8 with ten on June 11 and 20 on June 18, then six seen on June 23. There were 16 on June 26 with 21 on June 29, 26 to July 4 and 28 on July 6, then three seen on July 9. That closed the summer passage. There was now an exceptional event with tight flocks flying very rapidly to the south-east as if driven. For this early fall passage there were 110 on July 19 with 22 on July 21, 45 on July 23 and 76 on August 8; all were flying to the south-east. During this period in the area there were seven on July 13 with three on July 25. There were four on July 27 with 14 on July 30, 28 on August 5 and 39 on August 10, *then singles seen to August 27.*

Purple Martin (*Progne subis*)

A non-breeding summer visitor with a major passage in the early fall; this is one of only three years with such a fall passage. Early fall records: *there were four on May 23 with 59 on May 27, then 23 seen on May 30 with 11 on June 2. There were 83 on June 5 with 320 on June 10, then 41 seen on June 12. There were 55 on June 16 with 162 on June 19, then 44 seen on June 23 with three on June 30, two on July 10 and one on July 14. That was the main passage. Later there were singles on August 7 and August 21 with two on August 28.* Exceptionally there were two on September 11. That was the end of the early fall passage. For the spring passage there were two adult males on January 2; they were at the Sand Farm an exceptionally early record. More normally there were two on January 30 with singles on February 5 and February 12. There were four on February 15 and February 19. That closed the spring passage so for the summer passage there were two on March 5 with four on March 12, then two seen on March 16 with one on March 19. There were two on March 24 with three on March 26 and four on

April 2, then two seen on April 6. There were four on April 11 with seven on April 13, then six seen on April 16 with two to April 24 and one on April 30. There were nine on May 4 with eight to May 12. That was the end of the summer passage. For the early fall passage there were 43 on May 15 with 11 on May 18. There were 13 on May 21 with 1,440 on May 26, then 395 seen to June 4 with 370 on June 8, 320 on June 16, 180 on June 18, 155 on June 23, 54 on June 26, 28 on June 29 and two on July 2. That influx lasted over seven weeks. There were 11 on July 4 with 610 on July 6, then 15 seen on July 13 with seven on August 8 and two on August 10. *In the next survey year the only record for this fall related to three on August 20.* The peak counts for the other years with a strong passage were those of 1,935 on June 19, 1999 and 2,850 on June 20, 2004.

Tree Swallow (*Tachycineta bicolor*)

A common spring passage migrant; there were only minor numbers seen during the fall and the winter passages. Early fall record: *there were two on July 3.* For this year there were four on September 18 with three on September 22. That was the early fall passage. For the main fall passage there were four on October 2 with 12 on October 9 and 26 on October 16, then three seen to October 23 with two on November 5. There were ten on November 9 with four on November 17. There were 12 on November 21 with 14 on November 24, then one seen on November 29. That was the main fall passage. For the winter passage there were nine on December 2 with 15 on December 8 and 43 on December 11, then one seen on December 14. There were 19 on December 26 with 20 on December 30, 21 on January 2 and 58 on January 5, then three seen on January 7. That completed the winter passage. For the spring passage there were 12 on January 9 with 165 on January 11, then 68 seen on January 15 with 25 on January 19 and eight on January 22. There were 290 on January 26 with 110 on January 30 and 72 on February 2. There were 450 on February 5 with 260 on February 9 and 105 on February 12. There were 675 on February 15 with 960 on February 19, 1,160 on February 23, 3,020 on March 2 and 7,120 on March 9, then 1,635 seen on March 16 with 115 on March 19. That influx lasted six weeks and it created a single spring passage and not the normal two. The count of 7,120 was the highest count for Zellwood but the highest count is now (2013) that of 71,000 on March 10, 2006. There were 140 on March 24 with 290 on March 26 and 665 on March 29, then 360 seen on April 2 with 295 on April 11, 112 on April 13, 30 on April 21 and five on April 30. That was the spring passage. For the early fall passage there was one on July 30.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

This year it was a very uncommon passage migrant. Early fall record: *there was one on July 3*. For this year there were three on August 21 with one on August 25. Later there was one on September 11. That was the extent of the fall passage. For the spring passage there were two on April 11 and April 16 with three on April 30. Later there was one on May 15. That completed the spring passage. For the early fall passage there were two on August 10.

Bank Swallow (*Riparia riparia*)

A quite common fall passage migrant; there were just three records for the spring passage. Early fall records: *there were singles on July 25, July 28, August 11 and August 14*. For this year there were 23 flying to the south on August 21 with 23 in the area on August 25. Such coincidences do happen. There were three on August 28 with 41 on September 4, then 40 seen on September 11 with six on September 15, five on September 22, two on September 26 and one on October 2. There were three on October 6 with four on October 9. That was the extent of the fall passage. For the spring passage there was one on April 11 with two on April 16 and April 30. There were also two on June 1; I do not know to which passage that record belonged i.e. the spring or the summer passages. For the early fall passage there were singles on July 19 and July 21 with later five on August 10.

Cliff Swallow (*Petrochelidon pyrrhonota*)

An uncommon fall passage migrant; there were surprisingly two summer sightings. Early fall records: *there were three on July 17 with two on July 21*. For this year there were two on August 21 with singles on August 25 and September 2. There were two on September 18 with one on October 6. That was the early fall passage. There were no spring records. During the summer passage period there was an adult at the Barn Swallow colony at the Sand Farm Bridge on June 11 and June 16. For the early fall passage there were singles on July 2 and August 5 with three on August 8, then one seen on August 10.

Barn Swallow (*Hirundo rustica*)

A common fall passage migrant with lower numbers in the spring; during the Breeding Bird Survey a total of 34 pairs located. The first fledged young were seen on April 27. Early fall records: *there were 77 on July 8 with 126 on July 10 and 219 on July 14, then 197 seen on July*

17 with 83 on July 21, 70 on July 25, 57 on July 28, 47 on July 31 and 17 to August 4. Visible migration to the south noted from August 4 to August 21. There were 30 on August 4 with 28 on August 7. There were 66 on August 11 with 95 on August 18 and 478 on August 21. That ended the visible passage the influx continued with 830 in the area on August 25, then 167 seen on August 28 with 65 on September 2. There were 455 on September 4 with 840 on September 8, then 409 seen on September 11 with 47 on September 15 and 27 on September 18. There were 315 on September 22 with 400 on September 26, then 41 seen on October 2 with 21 on October 9 and seven to October 23. Finally for the fall passage there were nine on November 17. For the spring passage there were 17 on March 2 with 22 on March 9, 34 to March 19 and 49 on March 24 (at this point I suspect that all the locally breeding birds had arrived), then 48 seen on March 29 with 39 on April 2. If our local breeding birds have all arrived then locally we are into the summer passage. However the main spring migration had yet to get underway. So for the continuing spring passage there were 59 on April 6 with 82 on April 11, then 52 seen on April 13. There were 61 on April 16 with 68 on April 21, then 64 seen on April 24 with 47 on April 27. Now the locally bred young start joining the population but the spring passage continued there were 96 on April 30 with 68 on May 4 and 51 on May 7. There were 73 on May 12 with 54 on May 15. That was the actual end of the spring passage. So for the all comers' summer passage there were 72 on May 18 with 60 on May 26, 47 on May 29, 40 on June 1 and 22 on June 4. It is likely that the local breeding population had left by this date. There were 39 on June 8 with 85 on June 11 and 92 on June 16, then 85 seen on June 23 with 60 on June 29 and 58 on July 2. That closed the summer passage so for the early fall passage there were 62 on July 4 with 85 on July 6, 107 on July 9 and 170 on July 19, then 90 seen on July 21 with 82 on July 25 and 49 to July 30. Now the visible passage to the south started. Flying to the south there were 43 on August 5 with 330 on August 8, then 64 seen on August 10 with 50 on August 13. *There were also flying to the south 332 on August 20, 2,600 on August 24, 2,025 on August 27 and 1,300 on September 1. There was no later visible passage.*

Carolina Chickadee (*Poecile carolinensis*)

This was a vagrant. *Whilst there were no records for this year there was an early fall record of one on August 11, 2002.*

Tufted Titmouse (*Baeolophus bicolor*)

A resident in the wooded borders; during the Breeding Bird Survey a total of 16 pairs located. There was nothing to suggest passage as up to three a day seen through the year. There were higher counts of four on September 18, five on January 9, four on April 16, four on

June 11, five on June 29, six on July 2 and four on July 21. The last three higher counts relate to the young joining the adults in the woods.

Carolina Wren (*Thryothorus ludovicianus*)

A common resident with pairs breeding throughout the field system; during the Breeding Bird Survey a total of 185 pairs located. The marked increase in numbers in late April and early May related to greater activity at the start of the breeding season. Early fall records: *there were 24 on June 30 with 36 on July 3 and 40 on July 10, then 32 seen on July 14 with 18 on July 17. There were 53 on July 21 with 28 to July 28. There were 35 on July 31 with 40 on August 7, then 31 seen on August 11. There were 33 on August 14 with 38 on August 18, then 31 seen to September 2 with 26 on September 4 and 19 on September 8. There were 30 on September 11 with 34 on September 15, then 29 seen on September 18 with 24 on September 22, 23 on September 29 and six on October 2. That was the early fall passage. For the late fall passage there were 24 on October 6 with 23 on October 9, 20 on October 13, 16 to October 23, 11 on October 28 and nine on November 5. There were 13 on November 9 with six on November 17. There were 11 on November 21 with 12 on November 24, then seven seen on November 29 with six on November 30. That closed the late fall passage. For the winter passage there were 17 on December 2 with ten to December 11. There were 11 on December 14 with nine on December 16. There were ten on December 21 with 12 on December 26, 14 on December 28, 15 to January 2 and 19 on January 5, then 13 seen on January 7. That completed the winter passage. I have broken what may be a single influx at this point as it looks as if an early spring influx hijacked a winter influx. For the early spring passage there were 30 on January 9 with 22 on January 15 and 20 on January 19. There were 21 on January 22 with 23 on January 26 and January 30, then 22 seen on February 2 with 20 on February 5 and two on February 9. There were 20 on February 12 with 64 on February 15, 71 on February 23 and 83 on March 2, then 44 seen on March 5 with 29 on March 9. That ended the early spring passage. For the main spring passage there were 63 on March 12 with 59 on March 16, 56 on March 24, 55 on March 26, 47 on March 29, 36 to April 6 and 31 on April 11. That decline lasted for a whole month. It seemed very strange to me that I was hearing/seeing fewer birds as the spring progressed. Now there was a short burst of the more expected activity. There were 50 on April 13 and April 16 with 54 on April 21 and 103 on April 24, then 91 seen on April 27 with 88 on May 4, 55 on May 7 and 53 on May 12. The count of 103 is still (2013) the highest count for Zellwood. That was the main spring passage. For the summer passage there were 73 on May 15 with 53 on May 21, 35 on May 29, 34 on June 1, 28 on June 4 and 13 on June 8. There were 30 on June 11 with 26 to June 18. There were 41 on June 23 with 52 on June 29 and July 2, then 42 seen on July 4 with 38 to July 9 and 20 on July 13. That concluded the summer passage. For the early fall passage there*

were 25 on July 19 with 28 on July 21, then 27 seen on July 23 with 25 to July 27. There were 26 on July 30 with 19 on August 5 and 13 on August 8. There were 26 on August 10 *with 29 on August 20 and 37 on August 24, then 27 seen on August 27 with 13 on September 1.*

House Wren (*Troglodytes aedon*)

A common fall passage migrant; there were lesser numbers seen during the winter and spring passages. For the fall passage there were five on September 29 and October 2 with 31 on October 6, 55 on October 9, 111 on October 13, 162 on October 16 and 264 on October 20, then 257 seen on October 28 with 174 to November 9 and 63 on November 17. One influx covered the bulk of the fall passage. There were 183 on November 21 with 223 on November 24, then 113 seen on November 29 with 99 on November 30. That closed the fall passage. For the winter passage there were 219 on December 2 with 134 on December 8 and 66 on December 11. There were 69 on December 14 with 105 on December 16, then 77 seen on December 21, with 74 on December 26 and 56 on December 28. There were 105 on December 30 with 118 on January 2, then 88 seen on January 5 with 65 on January 7. That completed the winter passage. For the early spring passage there were 108 on January 9 with 72 on January 15, 51 on January 19 and 47 on January 22. There were 100 on January 26 with 84 on January 30, 75 on February 2, 43 on February 5 and four on February 9. There were 61 on February 12 with 47 on February 15. There were 52 on February 19 with 57 on February 23 and 58 on February 26, then 32 seen on March 2. That closed the early spring passage. For the late spring passage there were 52 on March 5 with 25 on March 9. There were 43 on March 12 with 62 on March 16, then 44 seen on March 19 with 35 on March 24. There were 55 on March 26 with 38 on March 29, 34 on April 2, 32 on April 6 and 23 on April 11. There were 33 on April 13 with 20 on April 16, three on April 21 and one on April 24.

Winter Wren (*Troglodytes troglodytes*)

This was a vagrant. For the early spring passage there was one at the Sand Farm on January 19. There is a description in Appendix B.

Sedge Wren (*Cistothorus platensis*)

A passage migrant and winter visitor unlike the House Wren for this species the numbers were highest (if not by much) in the spring. For the fall passage there were two on October 6 with singles to October 16. There were five on October 20 with six to October 28,

seven on November 5 and 11 on November 9, then ten seen to November 24 with seven to November 30 and five on December 2. That was the fall passage. For the winter passage there were five on December 8 and December 11 with 12 on December 16, then six seen on December 21 with two to December 28. There were six on December 30 with nine on January 2 and 13 on January 5, then ten seen on January 9 with six on January 11 and four on January 15. That completed the winter passage. For the early spring passage there were eight on January 19 with 11 on January 22 and 20 on January 26, then 11 seen on February 2 with five on February 5 and two on February 9. There were seven on February 12 with 11 on February 15, then 12 seen on February 19 and February 23 with 11 on February 26, nine on March 2 and six on March 5. That closed the early spring passage. For the late spring passage there were nine on March 9 with eight on March 12 and seven on March 16. There were eight on March 19 with 13 on March 26, then nine seen to April 2 with seven on April 6 and five on April 11. There were 12 on April 13 with eight on April 21, three to April 27 and one on April 30.

Marsh Wren (*Cistothorus palustris*)

A passage migrant and winter visitor; there were slightly higher numbers during the winter passage. Each of these migrant wrens has a different pattern of occurrence. For the fall passage there were singles on September 18 and October 6 with six on October 9, then three seen to October 16. There were four on October 20 with six on October 23, 18 on October 28 and 25 on November 9, then 15 seen on November 21 with 13 on November 24. That was the fall passage. For the winter passage there were 18 on November 29 with 21 on December 2 and 26 on December 8, then 19 seen on December 14 with 12 on December 16. There were 20 on December 21 with 17 on December 26 and 16 on December 28. There were 18 on December 30 with 25 on January 5, then 23 seen on January 9 with 14 on January 11. That completed the winter passage. For the early spring passage there were 14 on January 15 with 15 on January 22 and 16 on January 26, then 14 seen on January 30 with 13 on February 2, 11 on February 5 and four on February 9. There were 18 on February 12 with 12 on February 15 and ten on February 19. There were 14 on February 23 with nine to March 2 and eight on March 5. That ended the early spring passage. For the late spring passage there were ten on March 9 with 12 on March 16, then four seen on March 19 with two on March 24. There were 11 on March 26 with 13 on April 2, then six seen to April 13 with four on April 16. There were 16 on April 21 with 22 on April 24, then ten seen on April 27 with seven to May 4, four to May 12 and three on May 15. This is normally the last of these wrens to leave.

Ruby-crowned Kinglet (*Regulus calendula*)

A quite common passage migrant and winter visitor, numbers were highest from late November to early January. Most sightings were from the wooded borders but they could turn up in any patch of scrub. For the fall passage there were singles on seven dates from October 6 to October 28 with four on November 5, five to November 17, nine on November 21 and 23 on November 24, then 19 seen on November 29 with six on November 30. The count of 23 was the highest count for Zellwood but the highest count is now (2013) that of 67 on November 17, 2006. That was the fall passage. For the winter passage there were 11 on December 2 with eight on December 8, seven on December 11 and three on December 14. There were ten on December 16 with 11 on December 21 and 14 on December 28, then nine seen on December 30 with eight on January 2. There were nine on January 5 with 13 on January 7, then 12 seen on January 9 with five on January 11. That completed the winter passage. For the early spring passage there were six on January 15 and January 19 with eight on January 22 and January 30, then six seen on February 2 with five on February 5 and one on February 9. There were four on February 12 with seven on February 15 and February 19, then six seen on February 26 with three on March 2 and two to March 12. There were three on March 16 with singles on March 19, March 24 and March 29. I have treated this as a single spring passage.

Blue-gray Gnatcatcher (*Polioptila caerulea*)

A common fall passage migrant; there were decreasing numbers through the winter and spring passages. Early fall records: *there was one on June 23. Later there was one on July 14 with three on July 17 and four on July 31, then two seen on August 4 with one on August 7. There were three on August 11 and August 14 with two on August 18.* There were seven on August 21 and August 28 with 30 on September 4, 32 on September 11 and 49 on September 15, then 39 seen on September 18 with 36 on September 22 and 13 on September 26. That was the early fall passage. For the main fall passage there were 52 on September 29 with 60 on October 6, then 40 seen on October 13 with 39 on October 20 and 23 on October 23. There were 33 on October 28 with 44 on November 5, then 37 seen on November 9 with 19 on November 17. There were 54 on November 21 with 77 on November 24, then 52 seen on November 29 with 28 on November 30. That closed the main fall passage. For the winter passage there were 61 on December 2 with 39 on December 8, 34 on December 11 and 12 on December 14. There were 43 on December 16 with 44 on December 21, then 34 seen on December 26. There were 40 on December 28 with 46 on December 30, then 41 seen on January 2 with 32 on January 5 and 29 on January 7. That completed the winter passage. For the spring passage there were 43 on January 9 and January 15 with 38 on January 22, 37 on January 30, 36 on February 2, 19 on February 5 and nine on February 9. It is likely that the bulk

of the wintering birds had left by this point. There were 25 on February 12 with 32 on February 15, then 44 seen on February 19 and February 23 with 42 on March 2, 31 on March 5, 11 on March 9, ten on March 12, four on March 16 and singles on March 24 and March 29. That ended the spring passage. There were no summer sightings. For the early fall passage there were singles on July 25, July 27, July 30, August 8 and August 10 *with three to August 20, five on August 24 and six on August 27, then five seen to September 3.*

Eastern Bluebird (*Sialia sialis*)

This was a vagrant. For the winter passage there were six by the Hooper Farms Road gate on December 21 with one there on January 5. Finally there were six again by the gate on January 7. It is probable that this flock was in residence near the gate but out of sight. The counts of six are still (2013) the highest counts for Zellwood.

Veery (*Catharus fuscescens*)

An uncommon passage migrant; for the early fall passage at the western end of the Sand Farm there was one on September 18 with 12 on the northern border on October 2, then one seen there on October 9. The count of 12 is still (2013) the highest count for Zellwood.

Gray-cheeked Thrush (*Catharus minimus*)

This was a vagrant. For the late fall passage there was one on October 2.

Swainson's Thrush (*Catharus ustulatus*)

An uncommon fall passage migrant; exceptionally there were two spring records this year. For the early fall passage there was one on September 18 with two on September 22, then one seen on September 29. There were three on October 2 with one on October 6. That completed the early fall passage so for the spring passage there were singles on April 16 and April 24.

Hermit Thrush (*Catharus guttatus*)

An uncommon passage migrant and winter visitor; sightings reduced by the inability to get inside the various pieces of woodland. For the late fall passage there was one on October 28 with two on November 17. For the winter passage there were singles on November 29, December 8, December 21, December 28, December 30, January 5, January 7 and January 11. For the early spring passage there was one on January 26.

Wood Thrush (*Hylocichla mustelina*)

This was a vagrant. For the late fall passage there was one on the northern border on October 9.

American Robin (*Turdus migratorius*)

A common winter visitor and spring passage migrant; the greatest numbers were seen from mid-February to early March. For the late fall passage there was one on November 5. There were four on November 21 with 11 on November 24 and 63 on November 29, then one seen on November 30. That was the late fall passage. For the winter passage there were 11 on December 2 with 83 on December 8, 133 on December 11 and 1,376 on December 14, then 430 seen on December 16 with 78 on December 21. There were 159 on December 26 with 755 on December 28, then 310 seen on January 2 with 285 on January 7 and 115 on January 9. That completed the winter passage. For the early spring passage there were 264 on January 11 with 104 on January 15 and 64 on January 19. There were 125 on January 22 with 145 on January 26, 170 on February 2, 335 on February 5, 1,930 on February 9 and 2,140 on February 15, then 1,490 seen on February 19 with 1,065 on February 23 and 1,050 on February 26. That finished the early spring passage. For the late spring passage there were 3,100 on March 2 with 1,400 on March 5, 665 on March 9, 40 on March 12, 11 on March 16 and six on March 19. The count of 3,100 was the highest count for Zellwood but the highest count is now (2013) an estimated 240,000 on December 29, 2006. Finally for the late spring passage there was one by Interceptor Road on April 16.

Gray Catbird (*Dumetella carolinensis*)

This was a common fall passage migrant; there were decreasing numbers through the winter and spring passages. Early fall records: *there were singles on August 4 and August 14.*

For the early fall passage for this year there were three on September 2 with one on September 4. There were two from September 11 to September 26. That was the early fall passage. For the main fall passage there were seven on September 29 with 98 on October 2, 165 on October 6, 207 on October 9 and 270 on October 13, then 223 seen on October 20 with 138 on October 23 and 123 on October 28. The count of 270 was the highest count for Zellwood but the highest count is now (2013) that of 713 on October 17, 2008. There were 140 on November 5 with 81 on November 9 and 36 on November 17. The heaviest passage was now over. There were 85 on November 21 with 107 on November 24, then 98 seen on November 29. That closed the main fall passage. For the winter passage there were 100 on November 30 with 137 on December 2, then 84 seen on December 8 with 54 on December 11 and 42 on December 14. There were 104 on December 16 with 101 on December 21, 72 on December 26 and 60 on December 28. There were 113 on December 30 with 125 on January 2, then 114 seen on January 5 with 102 on January 9 and 48 on January 11. That completed the winter passage. For the early spring passage there were 66 on January 15 with 86 on January 19 and 93 on January 26, then 86 seen on February 2 with 40 on February 5 and 16 on February 9. There were 55 on February 12 and February 19 with 34 on February 23 and 30 on February 26. That ended the early spring passage. For the late spring passage there were 37 on March 2 with 13 on March 5. There were 17 on March 9 with 20 on March 12 and 45 on March 16, then 19 seen on March 19 with ten on March 24. There were 22 on March 26 with 23 on March 29, then 16 seen on April 6 with seven on April 11. There were 34 on April 13 with 47 on April 16 and 78 on April 21, then 74 seen on April 24 with 69 on April 27, 29 on April 30, 12 on May 4, and four on May 7. There was one by Hogshead Road on May 12 with two there on May 15, then one seen there on May 18. There were also two by Hogshead Road on June 1 with one on June 4. There was no evidence of breeding so I am treating this as part of the late spring passage. For the early fall passage there were two on July 30, location not noted.

Northern Mockingbird (*Mimus polyglottos*)

A common resident; during the Breeding Bird Survey a total of 61 pairs located; there were also indications of a fall passage. Early fall records: *for the post-breeding gathering there were 16 on June 19 with 37 on June 23, then 16 seen on June 26 with 13 on June 30. There were 25 on July 3 with 26 on July 10 and 38 on July 14, then ten seen on July 17. There were 13 on July 21 with 18 on July 25, then 14 seen to July 31 with 13 on August 4 and 12 on August 7. There were 14 on August 11 with 15 on August 14, then 12 seen to August 21. There were 24 on August 25 and September 2 with 19 on September 4 and 15 on September 8. That was the post-breeding gathering. There was a single fall passage there were 22 on September 11 with 23 on September 15, 41 on September 18, 67 on September 22 and 81 on September 29, then 39*

seen on October 2. The count of 81 was the highest count for Zellwood but see July 6. There were 42 on October 6 with 54 on October 9, then 42 seen on October 16 with 24 on October 20 and 21 on October 23. That was the end of the heaviest passage. There were 33 on October 28 with 16 to November 9 and seven on November 17. There were 15 on November 21 with 28 on November 24, then 14 seen on November 29. That closed the late fall passage. For the winter passage there were 15 on November 30 with 25 on December 2, then 22 seen to December 11 with 15 on December 14. There were 19 on December 16 with 24 on December 21, then 23 seen on December 26 with 17 on December 28. There were 22 on December 30 with 24 on January 2, then 21 seen to January 7. That completed the winter passage. For the early spring passage there were 24 on January 9 with 23 on January 11, 21 on January 19, 14 on January 22 and 13 on January 26. There were 15 on January 30 with 19 on February 5, then six seen on February 9. There were eight on February 12 with 20 on February 15, then 19 seen on February 23 with 14 on February 26. That ended the early spring passage. For the main spring passage there were 20 on March 2 with 16 on March 5 and 13 on March 9. There were 26 on March 12 with 39 on March 16, then 25 seen to March 24. There were 28 on March 26 with 23 on March 29 and 22 on April 2. There were 25 on April 6 with 53 on April 13, then 32 seen on April 21 with 30 on April 27 and 16 on April 30. That closed the main spring passage. For the summer passage there were 22 on May 4 with 26 on May 7, then 23 seen on May 15 with 19 on May 21 and 16 to May 29. There were 30 on June 1 with 19 on June 8 and 18 to June 16. That completed the summer passage. For the post-breeding gathering there were 21 on June 18 with 23 on June 26, 40 on June 29, 46 on July 2, 84 on July 4 and 102 on July 6, then 65 seen on July 13 with 52 on July 19, 32 on July 23, 26 on July 27 and 23 on July 30. That influx lasted for over seven weeks. The count of 102 was also the highest count for Zellwood but the highest count is now (2013) that of 126 on October 8, 2006. There were 24 on August 5 with 32 on August 8, then 28 seen on August 10 with 14 on August 13.

Brown Thrasher (*Toxostoma rufum*)

A quite common summer visitor; during the Breeding Bird Survey a total of 22 pairs located, outside of the breeding season there was only a trace presence. Early fall records: *there were three from June 30 to July 8, then two seen to July 14 with one on July 17. There were nine on July 21 with four on July 25 and one on July 28. There were six on July 31 with five on August 4 and three on August 7. There were 12 on August 11 with seven on August 18 and six on August 21. There were 11 on August 25 with six on August 28 and four on September 2. There were seven on September 4 with eight on September 8 and 13 on September 11, then ten seen on September 15 and September 22 with one on September 26. That was the end of the early fall passage. For the late fall passage there were 11 on September 29 with six to*

October 9, four to October 23 and one on October 28. That was the end of the late fall passage. In fact there was no further passage until May 18; so for the remainder of the fall passage, the winter passage and both of the spring passages just one to two a day seen with three on March 12. For the summer passage there were two on May 18 with three on May 21 and six on May 29, then two seen on June 1. There were three on June 4 with four on June 8 and seven on June 11, then four seen on June 18 with two on June 23. There were nine on June 26 and July 2 with seven to July 13, five to July 23, four on July 25, three on July 27 and one on July 30. That concluded the summer passage. For the early fall passage there were five on August 5 with four on August 10, three on August 13 *and one on August 20.*

European Starling (*Sturnus vulgaris*)

Present all year in small numbers with the exception of the usual post-breeding gathering. During the Breeding Bird Survey a total of nine pairs located. The first juvenile was seen on May 4. Early fall records: *for the post-breeding gathering there were 52 on May 20 with 94 on May 23, then 80 seen on May 27 with 16 on May 30. There were 92 on June 2 with 287 on June 10, 306 on June 16, 374 on June 19, 565 on June 23, 650 on June 30 and 860 on July 8, then 260 seen on July 10 with 240 on July 14, 200 on July 17, 16 on July 21, eight on July 25 and singles to July 31. That ended the post-breeding gathering. The count of 860 was the highest count for Zellwood but the highest count is now (2013) that of 2,040 on July 13, 2007. For the balance of the early fall passage there were four on August 4 with five on August 7, then singles seen to August 18. Later there was one on September 2 with four on September 4, seven on September 8 and 18 on September 15, then 16 seen on September 18 with six on September 26. That was the early fall passage. For the late fall passage there were 12 on September 28 with 16 on September 29, then 12 seen on October 6 with four on October 9. There were six on October 16 and October 23 with four on November 5. There were eight on November 21 with singles to December 2. That closed the late fall passage. For the winter passage there were three on December 8 with four on December 14, then three seen to December 30 with two on January 2 and one on January 5. That completed the winter passage. For the early spring passage there were two on January 9 with eight on January 11, nine on January 15, 19 on January 19 and 40 on January 22, then ten seen on January 26 with four on January 30 and two on February 2. There were eight on February 5 with ten on February 9, then five seen on February 15 with two to February 23 and one on February 26. That concluded the early spring passage. For the summer passage (this is such an early nester that there was no late spring passage) there were five on March 2 with 17 on March 5 and 36 on March 9, then seven seen on March 12 with six on March 16 and one on March 19. There were 23 on March 24 and March 29 with 34 on April 2, then 14 seen on April 6 with 13 on April 11, seven on April 16 and*

four on April 21. There were 12 on April 24 with seven on April 30, five on May 4 and three on May 7. There were six on May 12 and May 15 with four to May 21, three on May 26 and two on May 29. That completed the summer passage. For the post-breeding gathering there were 21 on June 1 with 155 on June 8, then 77 seen on June 11 with 33 on June 16. There were 130 on June 18 with 49 on June 23 and 24 on June 26. There were 230 on June 29 with 22 on July 2 and five on July 4. There were 86 on July 6 with 46 on July 9 and six on July 13. There were 25 on July 19 with 34 on July 21 and 75 on July 23, then 57 seen on July 25 with five to July 30, three to August 8 and two on August 13. That was the end of a minor post-breeding gathering.

American Pipit (*Anthus rubescens*)

A winter visitor and spring passage migrant; there were only a limited number of sightings for the fall passage. For the fall passage there were singles on November 9 and November 17 with two on November 21 and three on November 24, then two seen to November 30 with one on December 2. For the winter passage there were eight on December 8 with 11 on December 11 and 308 on December 16, then 39 seen on December 26 with seven on December 30 and four on January 2. There were 41 on January 5 with nine on January 7. That completed the winter passage. For the early spring passage there were 19 on January 9 with 22 on January 11, 25 on January 19 and 98 on January 26, then nine seen on January 30 with four on February 2. There were 41 on February 5 with 63 on February 9, then 37 seen on February 15 with 16 on February 19 and four to February 26. That ended the early spring passage. For the late spring passage there were ten on March 2 with four on March 5 and three on March 9. There were five on March 16 with later one on March 29.

Cedar Waxwing (*Bombycilla cedrorum*)

A rather uncommon spring passage migrant this year, there were a scattering of records for the fall and winter passages. For the late fall passage there were singles on October 23 and later November 17. For the winter passage there were 15 on December 14 with two on December 16 and December 26. For the early spring passage there were 14 on January 30 with 35 on February 5, then six seen on February 12 with two on February 15. There were also 15 on February 19. That closed the early spring passage. For the main spring passage there were two on March 12 with 14 on March 24, then 12 seen on March 29 with four on April 2. There were 40 on April 11 with five on April 13 and one on April 24. There were 30 on April 30 with 37 on May 7, then 14 seen on May 12. That completed the main spring passage.

Blue-winged Warbler (*Vermivora pinus*)

This was a vagrant. *There were no sightings for this year but for the early fall passage in 2002 there was one on August 14.*

Tennessee Warbler (*Vermivora peregrina*)

A quite common late fall passage migrant this year; there was one at the Sand Farm on October 6 with one on the eastern border on October 9. There were seven on October 13; there were two at the Sand Farm, two on the northern border and three on the eastern border. On October 16 there were three: two were on the northern border and one was at the Sand Farm. Finally for the late fall passage there was one at the Sand Farm on October 20. The count of seven was a joint high count as there were also seven on September 19, 2000. The highest count is now (2013) that of 29 on October 21, 2004.

Orange-crowned Warbler (*Vermivora celata*)

Present from the late fall to the early spring; the greatest numbers were seen during the winter passage. For the late fall passage there were five on October 28 with three on November 5. There were five on November 9 and November 17 with 16 on November 21, then nine seen to November 29 with seven on November 30. That was the late fall passage. For the winter passage there were nine on December 2 with 11 on December 8, then six seen on December 11. There were nine on December 14 with 11 on December 16, 12 on December 21, 13 on December 28 and 19 on January 2, then 12 seen on January 7 with nine on January 9 and three on January 11. That completed the winter passage. For the early spring passage there were seven on January 15 with 12 on January 19, then 11 seen on January 26 with eight on February 2, five on February 5 and two on February 9. There were six on February 12 with 12 on February 15, then five seen to February 26 with three to March 5. There were no later records.

Nashville Warbler (*Vermivora ruficapilla*)

This was a vagrant. For the winter passage there was one at the Sand Farm on January 2 and January 11.

Northern Parula (*Parula americana*)

A spring passage migrant and summer visitor; during the Breeding Bird Survey a total of ten pairs located. There was a fall passage in 2002 but there was no such passage in the early fall of 2003. Early fall records: *There were singles to June 26 with nine on June 30, then singles seen again to July 10. There were two on July 14 with singles to August 7. There were two on August 11 with three on August 14, then two seen on August 21 with one on August 28. There were two on September 8 with later singles on September 18, October 2, October 9 and October 13. That completed the early fall passage. There were no winter sightings. For the spring passage there were six on March 2 with 15 on March 5, then 11 seen on March 9 with six on March 12 and three on March 16. The count of 15 was the highest count for Zellwood but the highest count is now (2013) that of 52 on March 18, 2005. There were seven on March 19 with three on March 26 and two on March 29. There were three on April 2 with four on April 6, then three seen on April 11 with two on April 13. That closed the spring passage so for the summer passage there were three from April 21 to April 30 with six on May 4, then four seen on May 7 with three to May 18, two to June 1 and singles to June 26. Finally for the summer passage there were two on June 29. There were no later records for this year. *There were fall records for the next survey year from August 20 to November 16.**

Yellow Warbler (*Dendroica petechia*)

A common fall passage migrant, there was a single spring record. There are not many places in Florida where that statement can be made. Early fall records: *there was one on July 21 with eight on July 25, then three seen on July 28. There were six on July 31 with 25 on August 4, 27 on August 11 and 64 on August 14, then 57 seen on August 18 with 44 on August 21. There were 79 on August 25 with 119 on August 28, then 34 seen on September 2. The count of 119 was the highest count for Zellwood but the highest count is now (2013) that of 232 on September 15, 2006. The previous high count was that of 71 on August 16, 2001. There were 43 on September 4 with 66 on September 8, then 51 seen on September 15 with 33 on September 18, 18 on September 22 and 14 on September 26. There were 19 on September 29 with 11 on October 2, nine on October 6, four on October 9 and singles on October 13 and October 20. That completed the fall passage. For the spring passage there was one at the Sand Farm on April 27. For the early fall passage there were singles on July 19, July 23 and July 25 with three on July 27, five to August 8, 14 on August 10, 36 on August 13, 136 on August 20 and 145 on August 24, then 70 seen to September 3 with 62 on September 10, 38 on September 14, 37 on September 16, 26 on September 19 and 15 to September 24. The count of 145 was another intermediate high count for Zellwood. There were 22 on September 29 with ten on October 2,*

five on October 5, three on October 12 and two on October 15. I have shown the whole of this passage for comparison purposes.

Chestnut-sided Warbler (*Dendroica pensylvanica*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on October 16.

Cape May Warbler (*Dendroica tigrina*)

An uncommon spring passage migrant there was one on April 21 with two on April 27 and May 4, then one seen on May 7.

Black-throated Blue Warbler (*Dendroica caerulescens*)

An uncommon passage migrant; the majority of the sightings were in the spring. For the fall passage there was a female on September 29. For the spring passage there were single male and females on April 27 with a female on May 4. Finally there was a male on May 7.

Yellow-rumped Warbler (*Dendroica coronata*)

A very common passage migrant and winter visitor; there was a massive invasion in the spring. For the fall passage there was one on October 6 with two on October 20, four on October 28, 39 on November 5, 50 on November 9, 215 on November 17 and 575 on November 21, then 275 seen on November 24 with 175 on November 29. That was the fall passage. For the winter passage there were 207 on November 30 with 233 on December 2, then 176 seen on December 8. There were 220 on December 11 with 245 on December 14 and 300 on December 16, then 245 seen on December 21. There were 247 on December 26 with 265 on December 28, 275 on December 30 and 425 on January 5, then 380 seen on January 7 with 275 on January 9, 230 on January 11 and 210 on January 15. That completed the winter passage. Now the major passage started so for the spring passage there were 255 on January 19 with 595 on January 26, 1,730 on January 30, 3,140 on February 2, 4,410 on February 5, 5,370 on February 12, 7,635 on February 15, 8,290 on February 23, 8,360 on February 26 and 8,470 on March 5, then 3,560 seen on March 9 with 1,075 on March 12, 280 on March 16, 49 on March 19, nine on March 24, five on March 26 and one on March 29. That mega influx covered just over two months. The

count of 8,470 was the highest count for Zellwood but the highest count is now (2013) that of 10,220 on February 23, 2007. There were no later records.

Black-throated Green Warbler (*Dendroica virens*)

This was a vagrant. For the late fall passage there was one by Lake Apopka to the south of the Hooper Farms Road extension on November 21. There was one at the Sand Farm on January 7; this could be a winter or an early spring sighting.

Blackburnian Warbler (*Dendroica fusca*)

This was a vagrant. For the early fall passage there was a male at the Sand Farm on September 11. There was also a female to the south of the Hooper Farms Road extension on September 15.

Yellow-throated Warbler (*Dendroica dominica*)

An uncommon passage migrant, there were only a few spring sightings. Early fall records: *there were singles on July 17, July 31, August 7, August 11 and August 14*. For this year there were singles on August 18, August 25 and September 8 with two on September 11 and September 18, then singles seen on September 22 and September 26. That completed the early fall passage. Finally for the late fall passage there was one on October 20. There was also one on January 7 and that could be either a winter or an early spring record. For the late spring passage there were singles on March 2 and March 5. For the early fall passage there were two on August 10.

Pine Warbler (*Dendroica pinus*)

An uncommon passage migrant and winter visitor; nearly all the sightings were in oaks. For the early fall passage there was one on August 25. For the main fall passage there were singles on October 16 and October 20 with three on October 23, then singles seen on October 28 and November 21. For the winter passage there were two on November 29 with singles at different sites on December 28 and January 2. Finally for the winter passage there was one at a new site from January 7 to January 11. For the early spring passage there were three at the Sand Farm on January 19. There were also two by the Lake Level Canal on January 26 and

January 30. Locations not noted after this. There was one from February 23 to March 2. That completed the early spring passage. For the late spring passage there were singles on March 12, March 29 and April 2.

Prairie Warbler (*Dendroica discolor*)

An early fall passage migrant; there were much smaller number present from the late fall passage to the late spring passage. Early fall records: *there were singles on July 17 and July 21 with two on July 25 and five on July 31, then four seen on August 4 with three on August 7, two on August 11 and one on August 14.* For this year there was one on August 18 with three on August 21, eight on August 25, nine on September 2, 17 to September 11 and 24 on September 15, then 11 seen on September 18 with six on September 22. That was the early fall passage. For the late fall passage there were 11 on September 26 with ten on September 29, nine on October 6, six on October 9 and four on October 13. There were five on October 16 with ten on October 20, then singles seen to November 9. There were three on November 21 with four on November 24, then three seen on November 29 with one on November 30. That closed the late fall passage. For the winter passage there were three on December 2 with five on December 8, then three seen on December 11 with one on December 14. There were four on December 16 with three to December 26, two on December 28 and one on December 30. There were five on January 2 with six on January 7, then three seen on January 9. That completed the winter passage. For the early spring passage there were four on January 11 with two to January 26. There were three on January 30 with singles to February 12. There were four on February 15 and February 19 with three on February 26 and one on March 2. That ended the early spring passage. For the late spring passage there was one on March 9 and March 12 with two to March 19, three on March 26, four on March 29 and five on April 6, then three seen on April 13 with one on April 16. There were three on April 21 with five on April 24 and seven on April 27, then singles seen to May 7. That concluded the late spring passage; there were no summer sightings. For the early fall passage there was one on July 21 with six on July 23, ten to July 27 and 30 on July 30, then 19 seen on August 5 with eight on August 8, seven on August 10 and five on August 13. *There were 15 on August 24 with ten on August 27. There were 13 on September 1, 19 on September 3 and 83 on September 10, then 22 seen on September 14 with 17 on September 16. There were 33 on September 19 with 16 on September 21. There were 18 on September 24 with 19 on September 29, then 12 seen on October 2 with six on October 5. That was the major part of the following year's early fall passage. The count of 83 is still (2013) the highest count for Zellwood.*

Palm Warbler (*Dendroica palmarum*)

A common passage migrant and winter visitor; this year there was a truly massive spring passage. Early fall record: *that may be a misnomer but there was an adult by the Lake Level Canal on June 30*. For the fall passage there were two on September 18 with four on September 26, 40 on September 29 and 110 on October 6, then 97 seen on October 9 with 71 on October 13. There were 89 on October 16 with 227 on October 20 and 234 on October 28, then 170 seen on October 23 with 119 on November 5. There were 416 on November 9 with 152 on November 17. There were 173 on November 21 with 220 on November 24, then 150 seen on November 29 with 113 on November 30. That was the fall passage. For the winter passage there were 294 on December 2 with 265 on December 11 and 146 on December 14. There were 180 on December 16 with 275 on December 21, 295 on December 28, 475 on December 30 and 605 on January 2, then 305 seen on January 5. That completed the winter passage. For the spring passage there were 380 on January 7 with 1,025 on January 9, then 430 seen on January 15 with 305 on January 19 and 205 on January 22. The previous high count was that of 374 on January 7, 2001. So far there have been seven higher counts (there was also 420 on January 11). There were 640 on January 26 with 820 on January 30 and 960 on February 5, then 80 seen on February 9. That makes ten higher counts. There were 810 on February 12 with 2,425 on February 15, 2,890 on February 19 and 3,120 on February 26, then 1,825 seen on March 2 with 1,530 on March 5, 1,170 on March 9, 1,060 on March 12, 830 on March 16, 330 on March 19 and 250 on March 24. That makes a total of 21 higher counts; of course the count of 3,120 is still (2013) the highest count for Zellwood. That influx lasted for over a month, it was truly a mega influx. There were 440 on March 26 with 330 on March 29, 317 on April 2, 182 on April 6 and 124 on April 11. There were 245 on April 13 with 66 on April 16 and 16 on April 21. There were 19 on April 24 with 64 on April 27, then 12 seen on May 4 with two on May 7 and one on May 15. This was also an invasion year for the Yellow-rumped Warbler. On February 26 there were 12,080 warblers of both species in the area. The noise was deafening in the wood between the Lake Level Canal and Lake Apopka. This was the first year where I noted any "Yellow" Palm Warblers; there were singles on January 11, February 5 and April 6.

Blackpoll Warbler (*Dendroica striata*)

An uncommon spring passage migrant; there were two fall records. For the late fall passage there was one on the northern border on October 16 with one by Lake Apopka to the north of the Lust Road pump house on October 20. For the spring passage there were ten on April 27 with 11 on May 4, then singles seen on May 7 and May 15.

Cerulean Warbler (*Dendroica cerulea*)

This was a vagrant. For the early fall passage there was an adult female by Lake Apopka to the south of the Hooper Farms Road extension on September 15.

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

Some how this was a vagrant this year! Early fall record: *there was one on July 17*. For the early spring passage there was one by the Lake Level Canal on January 22. For the late spring passage there was one by Lake Apopka to the north of the Lust Road pump house on April 24. Those were the only sightings!

American Redstart (*Setophaga ruticilla*)

A passage migrant in both the spring and the fall, there were no large influxes. Early fall records: *there were three on July 25 with two on July 31. There were five on August 4 with two on August 7 and singles on August 11 and August 14*. For this year there was one on August 18 with two to September 4 and five on September 8, then two seen on September 15 with singles to September 22. There were two on September 29 with one on October 2. That was the early fall passage. For the spring passage there was one on April 16 with three on April 21, then two seen on April 24. There were three on April 27 with six on May 4, then one seen on May 7. That closed the spring passage.

Prothonotary Warbler (*Protonotaria citrea*)

This was a vagrant. Early fall record: *there were two on August 7*. For this year and the late spring passage there was one by Lake Apopka to the north of the Lust Road pump house on April 21.

Worm-eating Warbler (*Helmitheros vermivora*)

This was a vagrant. *There were no records for this year but for the early fall passage in 2002 there was one on August 7*.

Swainson's Warbler (*Limnothlypis swainsonii*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 15. For the spring passage there was one by the Lake Level Canal on April 21.

Ovenbird (*Seiurus aurocapilla*)

A quite common fall passage migrant; there was a minimal winter passage with a slightly stronger spring passage. There were no early fall records from the previous year. For the fall passage there were singles on August 18, September 2 and September 4 with six on September 8, then five seen on September 11 with four on September 15. There were 12 on September 18 with three on September 22 and two on September 26. There were 12 on September 29 with 22 on October 2, then eight seen on October 6. There were ten on October 9 with 11 on October 13, then six seen to October 23 with singles to November 9. There were also two on November 21. That appeared to be a single fall passage. The count of 22 was the highest count for Zellwood but the highest count is now (2013) that of 92 on September 27, 2006. For the winter passage there were two on December 8 with singles on December 21, December 26, December 28, January 5, January 9 and January 11. That completed the winter passage. For the early spring passage there were two on January 19 with singles on January 22 and January 26. There were three on January 30 and February 2 with four on February 5, then two seen on February 12 with singles on February 15 and February 19. There were two on February 23 with one on February 26. That closed the early spring passage. For the late spring passage there were two on March 12 with one on March 16. There were two on March 19 with one on March 26. That ended the late spring passage.

Northern Waterthrush (*Seiurus noveboracensis*)

A very common fall passage migrant with a smaller spring passage; there was just a trace through the winter. For the fall passage there were two on August 25 with four to September 4, 25 on September 8, 30 on September 11, 57 on September 15, 65 on September 18 and 102 on September 26, then 31 seen on September 29 with 18 on October 2, 14 on October 9, eight on October 13, six on October 20, four on October 28 and two on November 5. The count of 102 was the highest count for Zellwood but the highest count is now (2013) that of 188 on September 28, 2004. That influx lasted two months. Finally for the fall passage there were four on November 21 with three on November 24 and one on November 30. For the winter passage there were singles on four dates from December 2 to December 14 with three on December 16, then singles seen to December 26. There were two on December 28 with

three to January 5 and four on January 7, then two seen on January 9 with one on January 11. That completed the winter passage. For the early spring passage there was one on January 19 with two on January 22 and four on January 26, then six seen on January 30 and February 2 with four on February 5 and one on February 9. There were six on February 12 with four to February 23 and two on February 26. That ended the early spring passage. For the main spring passage there were five on March 2 with singles to March 9. There were two on March 12 with three on March 19 and four on March 26, then singles seen to April 6. Now the main spring event started. There were two on April 16 with five on April 21, 13 on April 24 and 27 on April 27, then nine seen to May 4 with singles on May 7, May 15 and May 18. On April 24 some were noted as singing.

Louisiana Waterthrush (*Seiurus motacilla*)

A passage migrant; there were no significant influxes this year. Early fall records: *there were singles on July 10, July 25 and July 31 with two on August 7, three on August 11, five on August 14, six on August 18 and nine on August 25, then five seen on August 28 with two on September 2. There were three on September 4 with four on September 8, then singles seen to September 22. That closed the early fall passage. For the spring passage there was one on March 2 with two on March 5 and five on March 12, then three seen on March 16 with two on March 19. There were three on March 24 with two on March 26 and one on March 29. Finally there were two on April 24, they were singing. For the early fall passage there were two on July 13 with one on July 21. There were two on August 8 and August 10 with one on August 13. There were two on August 20 with seven on August 24, 16 on August 27 and 41 on September 3, then ten seen on September 7 with eight on September 10, four on September 14, three on September 16 and two on September 19. There were five on September 21 with two to September 29. The count of 41 was the highest count for Zellwood but the highest count is now (2013) that of 98 on August 27, 2010.*

Kentucky Warbler (*Oporornis formosus*)

This was a vagrant. For the early fall passage there was one at the Sand Farm on September 15. For the spring passage there was one by the Lake Level Canal on April 24.

Common Yellowthroat (*Geothlypis trichas*)

A common fall passage migrant; there were decreasing numbers through to the spring. Whilst present during the summer there was no evidence of breeding. Early fall records: *there was one on June 23 with two on July 3, then singles seen on seven dates to August 14.* For this year there were singles on August 25 and September 2 with two on September 4, nine on September 8, 16 on September 11, 51 on September 15, 64 on September 18, 85 on September 26, 108 on September 29 and 321 on October 2, then 209 seen on October 9 with 125 on October 13, 116 on October 20, 114 on October 28, 103 on November 5, 74 on November 9 and 30 on November 17. That influx nearly lasted three months! The count of 321 was the highest count for Zellwood but the highest count is now (2013) that of 856 on September 22, 2004. There were 85 on November 21 with 95 on November 24, then 52 seen on November 29. That closed the fall passage. For the winter passage there were 58 on November 30 with 114 on December 2, then 112 seen on December 8 with 30 on December 11. There were 56 on December 14 with 84 on December 16, then 83 seen on December 21 with 55 on December 26. There were 66 on December 28 with 119 on December 30, then 95 seen on January 5 with 56 on January 7. That completed the winter passage. For the early spring passage there were 124 on January 9 with 80 on January 15, 75 on January 19 and 45 on January 22. There were 88 on January 26 with 93 on January 30, then 76 seen on February 2 with 47 on February 5 and 13 on February 9. There were 71 on February 12 with 55 on February 19 and 28 on February 23. That ended the early spring passage so for the late spring passage there were 46 on February 26 with 51 on March 2 and 53 on March 5, then 29 seen on March 9. There were 51 on March 12 with 88 on March 16, then 36 seen on March 19 with 23 on March 24. There were 51 on March 26 with 23 on April 2, 14 on April 6 and seven on April 11. There were 31 on April 13 with 23 on April 21. There were 37 on April 24 with 33 on April 27, 20 on May 4, seven on May 7, five on May 12, two on May 15 and one on May 18. That completed the late spring passage. For the summer passage there was one on May 29 with four on June 1. There was one on June 16 with three on June 23, then singles seen to July 2. That was the end of the summer passage. For the early fall passage there were two on July 4 with singles to July 9. There were two on July 13 with singles to August 10.

Hooded Warbler (*Wilsonia citrina*)

This was a very rare passage migrant. Early fall record: *there was a male on August 4.* For this year there were single females on September 4 and September 18 with an immature on September 29. That completed the early fall passage. For the spring passage there was a male on the northern border on April 13.

Wilson's Warbler (*Wilsonia pusilla*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on November 21.

Yellow-breasted Chat (*Icteria virens*)

A common summer visitor, I do not think anywhere in Florida except along the Georgia border can say that! During the Breeding Bird Survey a total of 56 pairs located. Early fall records: *there were nine on June 23 with six on June 26, four on June 30, three on July 3, two on July 8 and singles to August 14. The last individual singing was heard on July 14.* For this year there were two on August 18 and August 21 with three on August 25, then singles seen on seven dates to September 29. That was the end of the early fall passage. For the late fall passage there were two on October 6 with singles on October 9, October 13, October 16 and October 20. For the winter passage there were two on November 29 with singles on November 30 and December 2. Later there was one on December 26. That closed the winter passage. There were no early spring sightings. For the main spring passage there were singles on March 2 and March 9 with two on April 6 and three on April 13, then one seen on April 16. That was the end of the main spring passage. For the summer passage there were two on April 21 with five on April 24, then four seen to May 4. There were five on May 7 with 12 on May 12, 14 on May 15, 15 on May 18 and 16 on May 21, then seven seen on May 26 with six on May 29. There were 19 on June 1 with eight on June 4 and seven on June 8. There were 30 on June 11 with 13 on June 18 and eight on June 23. The count of 30 was the highest count for Zellwood but the highest count is now (2013) that of 41 on May 23, 2004. There were 21 on June 26 and July 2, with 19 on July 4. There were 21 on July 6 but that included two juveniles; then 13 seen on July 9 with eight on July 19, two on July 30 and one on August 5.

Summer Tanager (*Piranga rubra*)

This was a rare passage migrant. For the early fall passage there was a female by Lake Apopka to the north of the Lust Road pump house on August 28 with another female on the northern border on September 8. For the spring passage there was a male by the Lake Level Canal on April 21.

Scarlet Tanager (*Piranga olivacea*)

This was a vagrant. For the late spring passage there was one by the Lake Level Canal on May 4.

Eastern Towhee (*Pipilo erythrophthalmus*)

A common resident, during the Breeding Bird Survey a total of 206 pairs located (there were only ten pairs in 1999...). In the early fall numbers were much higher with the young of the year joining the adults out in the fields. Early fall records: *there were 32 on July 8 with 24 on July 10. There were 28 on July 14 with 30 on July 17 and 38 on July 21, then 25 seen on July 25. There were 26 on July 28 with 29 on July 31, 32 on August 4, 41 on August 7 and 52 on August 14, then 40 seen on August 18 with 38 on August 25, 27 on August 28 and 11 on September 2. There were 13 on September 4 with 14 on September 8 and 30 on September 11, then 26 seen on September 15 with 13 on September 18 and nine on September 22. That was the end of the early fall passage. For the late fall passage there were 12 on September 26 with 15 on September 29, 24 on October 2 and 28 on October 9, then 19 seen on October 16 with 15 on October 20 and six on October 23. There were 17 on October 28 with four on November 5. There were 11 on November 9 and November 17 with 17 on November 21, then 14 seen on November 24 with nine on November 29. That closed the late fall passage. For the winter passage there were 15 on November 30 with 22 on December 2 and 29 on December 11, then 18 seen on December 14 with 17 on December 21, 15 on December 26 and nine on December 28. There were 20 on December 30 with 21 on January 2, then 20 seen on January 5 with 11 on January 7. That completed the winter passage. For the early spring passage there were 25 on January 9 with 15 on January 11. There were 18 on January 15 with 26 on January 19 and 30 on January 22, then 19 seen on January 26. There were 23 on January 30 with 29 on February 2, then 24 seen on February 5 with seven on February 9. There were 18 on February 12 with 35 on February 15, then 28 seen on February 19 with 26 on February 23. That ended the early spring passage. For the main spring passage there were 28 on February 26 with 73 on March 2, then 52 seen on March 5 with 27 on March 9. There were 51 on March 12 with 68 on March 16, then 43 seen on March 19 with 36 to March 29 and 28 on April 2. There were 29 on April 6 and April 11 with 49 on April 13, then 33 seen on April 16. There were 38 on April 21 with 65 on April 24, then 49 seen on April 27 with 34 on April 30. That ended the main spring passage. For the summer passage there were 72 on May 4 with 76 on May 7, then 54 seen on May 12 with 49 on May 15. There were 52 on May 18 with 113 on May 21, then 50 seen on May 26 with 44 on May 29 and 38 on June 1. There were 53 on June 4 with 60 on June 11, then 53 seen on June 16 with 47 on June 18. That completed the summer passage as there was now the equivalent of a post-breeding gathering. There were 57 on June 23 with 129 on June 26, 135 on June 29 and*

191 on July 2, then 172 seen on July 4 with 156 on July 6, 147 on July 9, 118 on July 13, 84 on July 19 and 63 on July 21. There were 65 on July 23 with 103 on July 25, 109 on July 27 and 228 on July 30, then 83 seen on August 5 with 77 on August 10 and 54 on August 13. I cannot think of a reason for a resident species to have two peaks to a post-breeding gathering. The count of 228 is still (2013) the highest count for Zellwood.

Chipping Sparrow (*Spizella passerina*)

This was a vagrant. For the late fall passage there were three on October 16, location not noted. For the late spring passage there was one by the Lake Level Canal on April 13.

Clay-colored Sparrow (*Spizella pallida*)

An uncommon passage migrant and winter visitor; as usual it was commoner than the Chipping Sparrow. For the late fall passage there were two at the Sand Farm on November 21. For the winter passage there were three at the Sand Farm on November 29 with singles there to December 26. There was also one by the Hooper Farms Road gate on January 5 and January 7. That completed the winter passage. For the early spring passage there was one at the Sand Farm on January 22. Later there was one on the eastern border from February 12 to February 19. That was the early spring passage; there were no later records.

Field Sparrow (*Spizella pusilla*)

An uncommon winter visitor, very exceptionally there were no early spring sightings. For the winter passage there were singles at the Sand Farm on December 11, December 26 and December 30 with two there on January 5. Finally there was one by the Hooper Farms Road gate on January 7.

Vesper Sparrow (*Pooecetes gramineus*)

A quite common winter and spring passage migrant. For the late fall passage there was one on November 9. For the winter passage there were five on November 29 with three on November 30 and one on December 2. There were five on December 8 with one on December 11. There were seven on December 21 and December 26 with nine on December 28, then three seen on December 30 with one on January 2. There were six on January 5 with 19 on January 7,

then seven seen on January 9 with six on January 11. The count of 19 was the highest count for Zellwood but the highest count is now (2013) that of 45 on January 16, 2009. That completed the winter passage. For the early spring passage there were 15 on January 15 with one on January 19. There were two from January 22 to January 30 with six on February 2, then three seen on February 5. There were four on February 9 with five on February 12, then four seen to February 19. There were seven on February 23 with five on February 26 and one on March 2. That ended the early spring passage. For the late spring passage there were singles on March 5 and March 9 with four on March 12, then three seen on March 19 with two on March 24.

Savanna Sparrow (*Passerculus sandwichensis*)

A common passage migrant and winter visitor, the greatest numbers were seen during the late winter passage and the early spring passage. For the late fall passage there were singles on October 2, October 6 and October 9 with five to October 20, eight on October 23, 26 on October 28 and 92 on November 5, then 64 seen on November 17 with 43 on November 21 and 30 on November 24. There were 45 on November 29 with 20 on November 30. That was the late fall passage. For the winter passage there were 38 on December 2 with 86 on December 8 and 105 on December 11, then 50 seen on December 14. There were 86 on December 16 with 96 on December 21, 108 on December 26, 117 on December 28 and 190 on December 30, then 148 seen on January 5 with 112 on January 7 and 105 on January 9. That completed the winter passage. For the early spring passage there were 130 on January 11 with 150 on January 19, then 105 seen on January 22. There were 140 on January 26 with 190 on January 30, then 123 seen on February 2. There were 155 on February 5 with 160 on February 9 and 170 on February 12, then 91 seen on February 19 with 57 on February 23, 52 on March 2 and eight on March 5. That closed the early spring passage. For the late spring passage there were 29 on March 9 with 34 on March 12 and 60 on March 16, then 13 seen on March 19 with ten on March 24. There were 13 on March 26 and March 29 with 20 on April 2, then 11 seen to April 13 with ten on April 16, nine on April 21, five on April 27 and singles on April 30 and May 4.

Grasshopper Sparrow (*Ammodramus savannarum*)

An uncommon winter visitor and early spring passage migrant; there were two fall records. For the late fall passage there was one on October 6 with another on November 24. For the winter passage there were singles on November 29, December 8, December 11, December 14, December 16, December 21 and December 26. Locations not noted so I have no idea how many birds involved. There were also two from January 5 to January 9 with one on January 11. That completed the winter passage. For the early spring passage there were singles

on January 19 and January 26 with three on February 2, then singles seen to February 15. There were no later records.

Henslow's Sparrow (*Ammodramus henslowii*)

This was a vagrant. For the late fall passage there was one at the Sand Farm on November 21.

Le Conte's Sparrow (*Ammodramus leconteii*)

This was a vagrant. For the late fall passage there was also one at the Sand Farm on November 21; it had to be vagrant sparrow day.

Fox Sparrow (*Passerella iliaca*)

This was another vagrant. For the winter passage there was one at the Sand Farm on January 5 and January 9.

Song Sparrow (*Melospiza melodia*)

A strong fall and winter passage migrant with decreasing numbers through the spring; this was the best year to date for this secretive species. For the late fall passage there were singles on October 23, October 28 and November 5 with four on November 9 and 12 on November 17, then ten seen on November 21 with eight on November 24, six to November 30, five on December 2 and three on December 8. For the record the previous high count was that of ten on January 1, 2001. That was the late fall passage. For the winter passage there were six on December 11 with 16 on December 16, then five seen to December 26 with two on December 28. The count of 16 is still (2013) the highest count for Zellwood. There were seven on December 30 with eight on January 5, then two seen on January 7. That completed the winter passage. For the early spring passage there were five on January 9 with four on January 11, three to January 22, two on January 26 and one on January 30. There were two on February 2 with three on February 5 and February 12, then two seen to February 23 with singles to March 2. That ended the early spring passage. For the late spring passage there were two on March 5 and March 12 with one on March 19. Finally for the late spring passage there was one on April 2.

Lincoln's Sparrow (*Melospiza lincolnii*)

Unlike the last species this remained an elusive passage migrant and winter visitor. For the late fall passage there were three on October 20 with one on October 23. There were five on November 17 with two on November 21 and singles on November 24 and November 30. The count of five is still (2013) the highest count for Zellwood. That was the late fall passage. For the winter passage there were singles on December 11, December 14 and December 16 with two on December 21, then singles seen again on December 26, December 30, January 2 and January 7. That completed the winter passage. For the early spring passage there were singles on January 19, January 22 and February 15; there were no later records.

Swamp Sparrow (*Melospiza georgiana*)

A very common fall passage migrant and winter visitor; there were only small numbers seen during the spring passages. For the late fall passage there were 21 on October 20 with 22 on October 23, 132 on October 28 and 354 on November 5, then 163 seen on November 9 with 57 on November 17. There were 275 on November 21 with 287 on November 24, 434 on November 29 and 725 on December 2, then 246 seen on December 8 with 70 on December 11. The count of 725 was the highest count for Zellwood but the highest count is now (2013) that of 1,126 on November 21, 2004. There were also six counts (including one from the winter passage) that were higher than the previous high count of 254 on November 12, 2000. That was also the end of late running late fall passage. For the winter passage there were 77 on December 14 with 181 on December 16 and 402 on December 21, then 172 seen on December 26 with 51 on December 28. There were 235 on December 30 with 213 on January 5, 112 on January 9 and 54 on January 11. That completed the winter passage. Numbers were much lighter for the early spring passage there were 76 on January 15 with 94 on January 19, then 42 seen on January 22. There were 65 on January 26 with 78 on January 30, then 72 seen on February 2 with 27 on February 5 and 20 on February 9. There were 46 on February 12 with 66 on February 15, then 34 seen on February 19 with 33 on February 23, 32 on February 26, 27 on March 2 and 20 on March 5. That ended the early spring passage. For the late spring passage there were 28 on March 9 with 43 on March 12 and 55 on March 16, then 25 seen on March 19 with 17 on March 26 and 13 on March 29. There were 21 on April 2 with 12 on April 6 and three on April 11. There were 33 on April 13 with 11 on April 16, seven on April 24, four on April 27 and two to May 4.

White-throated Sparrow (*Zonotrichia albicollis*)

A very uncommon passage migrant and winter visitor; it is such a secretive species that it is probably overlooked. For the late fall passage there was one at the Sand Farm on October 28. For the winter passage there was one at the Sand Farm on December 2. There was one on the eastern border on December 16. Unfortunately I do not now remember what the “eastern border” means it could relate to the Workshops area. There was also one on the eastern border from December 28 to January 7. Finally there was one by Canal Road on January 7 and January 11. That completed the winter passage. For the early spring passage there was one on the eastern border on January 15 and January 19. For the late spring passage there was one by Lust Road on May 4.

White-crowned Sparrow (*Zonotrichia leucophrys*)

A commoner species which is nowhere near as secretive; passage noted from November to April. For the late fall passage there were singles on November 9 and November 17 with two on November 21, then one seen on November 24. For the winter passage there were two on November 29 with three on December 2 and six on December 8, then four seen on December 11 with two to December 16. There were four on December 21 with three on December 26 and two to December 30. There were nine on January 2 with eight on January 7 and one on January 11. That completed the winter passage. For the early spring passage there were two on January 15 and January 22 with one on January 26. There were two from January 27 to February 5 with four from February 9 to February 15, then three seen on February 19 with one on February 23. That ended the early spring passage. For the late spring passage there were two on February 26 and March 5 with singles to March 16. There were six on April 6 and April 11 with three on April 13 and April 21.

Northern Cardinal (*Cardinalis cardinalis*)

A common resident; during the Breeding Bird Survey a total of 575 pairs located, there was the possibility of a passage in October. Early fall records: *there were 52 on June 30 with 71 on July 3 and 76 on July 8, then 58 seen on July 10 with 49 on July 14 and 43 on July 17. There were 106 on July 21 with 47 on July 25 and 39 on July 28. There were 48 on July 31 with 60 on August 7, then 57 seen on August 11 with 47 on August 14.* There were 61 on August 18 with 54 on August 25 and 49 on August 28. There were 50 on September 2 with 69 to September 8, 80 on September 11 and 82 on September 15, then 81 seen on September 22 with 77 on September 26. That was the early fall passage. For the main fall passage there were 88 on

September 29 with 96 on October 6 and 109 on October 9, then 90 seen on October 13 with 75 on October 16, 73 on October 20 and 68 on October 23. There were 83 on October 28 with 64 on November 5, 56 on November 9, 52 on November 21, 47 on November 24, 38 on November 29 and 31 on November 30. That closed the main fall passage. For the winter passage there were 52 on December 2 with 57 on December 8, then 31 seen on December 11. There were 35 on December 14 with 54 on December 16, then 45 seen on December 21. There were 50 on December 26 with 55 on December 28 and 67 on December 30, then 55 seen on January 2 with 47 on January 5. That completed the winter passage. For the early spring passage there were 77 on January 7 with 89 on January 9, then 47 seen on January 11 with 44 on January 15 and 36 on January 19. There were 71 on January 22 with 74 on January 30, then 71 seen on February 2 with 62 on February 5 and 20 on February 9. There were 65 on February 12 with 92 on February 15, then 91 seen on February 19 with 89 on February 23. That ended the early spring passage. For the main spring passage there were 101 on February 26 with 134 on March 2, then 89 seen on March 5 with 48 on March 9. There were 153 on March 12 and March 16 with 120 on March 19 and 96 on March 24. There were 218 on March 26 with 132 on March 29, 118 on April 6 and 90 on April 11. There were 235 on April 13 with 185 on April 16. That concluded the main spring passage. For the summer passage there were 191 on April 21 with 243 on April 24, 244 on April 27 and 273 on May 4, then 163 seen on May 7 with 133 on May 12. The count of 273 was the highest count for Zellwood but the highest count is now (2013) that of 344 on April 9, 2008. There were 166 on May 15 with 190 on May 21, then 109 seen on May 26 with 106 on May 29. There were 129 on June 1 with 119 on June 4 and 58 on June 8. There were 141 on June 11 with 93 on June 16. There were 96 on June 18 with 99 on June 23, 148 on June 26, 180 on June 29 and 186 on July 2, then 137 seen on July 4 with 133 on July 6. That was the end of the summer passage. For the early fall passage there were 140 on July 9 with 131 on July 13, 69 on July 19, 66 on July 21 and 56 on July 23. There were 58 on July 25 and July 27 with 103 on July 30, then 45 seen on August 5 with 36 on August 8. There were 67 on August 10 with 38 on August 13.

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant. For the late fall passage there was a female at the Sand Farm on October 6 and October 13.

Blue Grosbeak (*Guiraca caerulea*)

A common summer visitor, now that is a surprising statement. During the Breeding Bird Survey a total of 87 pairs located; the first brood (of three) was seen on July 4. Again there were winter sightings even though this species is not meant to winter in the United States; there was

however a significant gap in the sightings from January 28 to April 1. Early fall records: *there were 11 on June 26 with 19 on June 30 and 28 on July 3, then 21 seen on July 8 with 17 on July 10 and ten on July 14. There were 14 on July 17 with 16 on July 21, 17 on July 25 and 18 on July 28, then 15 seen on July 31 with ten on August 4. There were 20 on August 7 with 17 on August 11, 15 on August 14 and two on August 18. There were 18 on August 21 with 11 on August 28, six on September 4, five to September 11 and four on September 15. There were eight on September 18 with ten on September 26 and 14 on September 29, then seven seen on October 2 with six on October 6. That was the early fall passage. For the late fall passage there were eight on October 9 with ten on October 13, then three seen on October 16 with one on October 20. In reality that was the end of the fall passage even though there was one on November 17. For the winter passage there were singles on December 8 and December 16 with three on December 21, then one seen on December 26. There were five on December 28 and December 30 with two to January 5. There were three on January 7 with two on January 11. That completed the non-existent winter passage. For the early spring passage there were two on January 22 with one on January 27 that was it. There were no further sightings until the summer visitors arrived in April. For the main spring passage there were four on April 2 with singles to April 13. There were five on April 16 with 11 on April 21 and 18 on April 27, then 13 seen on April 30 with 11 on May 4. That ended the main spring passage. For the summer passage there were 22 on May 7 with 16 to May 15 and nine on May 18. There were 24 on May 21 with 17 on May 26, 16 on May 29 and 14 on June 1. There were 21 on June 4 and June 11 with 16 on June 16. There were 23 on June 18 with 27 on June 26 and 29 on June 29, then 26 seen on July 4 with 19 on July 6. That closed the summer passage. For the early fall passage there were 27 on July 9 and July 13 with 21 on July 19, 17 on July 23, 15 on July 25 and 11 on July 27. There were 19 on July 30 and August 5 with 22 on August 10, *then 16 seen on August 20 with 14 on August 24 and six on August 27.**

Indigo Bunting (*Passerina cyanea*)

An increasing summer visitor; during the Breeding Bird Survey a total of 96 pairs located, the first fledged young (two) were seen on August 13. There was also a major fall passage this year with very small numbers through the winter and the early spring passages. Early fall records: *there were eight on June 26 and June 30 with 11 on July 3 and 18 on July 8, then 14 seen to July 21 with ten on July 25 and six to July 31. There were seven on August 4 with 14 on August 7, then 11 seen on August 11 with three on August 14. For this year there were four on August 18 with six on August 21, then five seen on August 28 with four on September 2. There were eight on September 4 with five on September 11, two on September 15 and one to September 22. That was the early fall passage. Now the major passage started so for the main*

fall passage there were three on September 26 with ten on September 29, 12 on October 6, 30 on October 9, 117 on October 13 and 281 on October 16, then 48 seen on October 20 with 29 on October 23, 19 on October 28, eight on November 9 and one on November 17. That was the end of this event; the influx went on for nearly two months. The count of 281 was the highest count for Zellwood but the highest count is now (2013) that of 840 on October 26, 2007. There were also two on November 21 with five on November 24, then two seen on November 29. That closed the main fall passage. For the winter passage there were five on November 30 with ten on December 8 and 14 on December 14, then three seen on December 21 with one on December 26. There were two on December 28 with three to January 2 and six on January 5, then five seen on January 7 with singles to January 11. That completed the winter passage. For the early spring passage there were singles from January 15 to February 5. Later there was one on February 23 with two on February 26, then singles seen to March 5. That ended the early spring passage. For the main spring passage there were singles on March 16 and March 29 with two on April 6, three on April 13, four on April 16, 13 on April 21, 16 on April 24, 34 on April 27 and 38 on May 4, then 25 seen on May 7 with 14 on May 12. That closed the main spring passage. For the summer passage there were 19 on May 15 with 20 on May 18 and 25 on May 21, then 20 seen on May 26 with 18 on May 29 and 17 on June 1. There were 22 on June 4 with 31 on June 11, then 28 seen on June 18 with 25 on June 23. There were 36 on June 26 with 34 on July 2 and 21 on July 4. There were 43 on July 6 with 25 on July 9 and 11 on July 13. That was the end of the summer passage. For the early fall passage there were 18 on July 19 with 19 on July 21, 21 on July 23 and 26 on July 25, then 23 seen on July 30 with nine on August 5. There were 17 on August 8 with 19 on August 10, then nine seen on August 13 with *five on August 24, three on August 27, two on September 1 and singles to September 14.*

Painted Bunting (*Passerina ciris*)

A non-breeding summer visitor that was outside of the breeding season very difficult to locate; during the Breeding Bird Survey a total of 19 adult males or immature males were found on territory as usual no females located. Early fall records: *there were six on July 8 with two on July 10 and singles to July 17. There were three on July 21 with two to July 28. There were four on July 31 with three on August 7, two on August 11 and one on August 14.* For this year there were singles from August 18 to September 8. Later there was one on September 26. That was the end of the early fall passage. For the late fall passage there were singles on October 16 and October 20, November 9 and from November 17 to November 29. That was the extent of the late fall passage. For the winter passage there were two on December 2 with three on December 8, then two seen on December 11 with singles to December 16. There were two on December 21 with singles to January 5. There were three on January 7 with two on January 9.

The sharp contrast between the winter passage and the late fall and early spring passages was stark. That completed the winter passage. For the early spring passage there were three on January 11 with two to January 26 and singles to February 15. Later there were singles on February 26 and March 2. That ended the early spring passage. For the main spring passage there was one on March 12. There was then a month long gap until the summer visitors arrived. There were singles on April 11 and April 21 with five on April 24 and May 4, then four seen on May 12 with two to May 18. There were four on May 21 with singles to June 1. That was the end of the main spring passage so for the summer passage there were five on June 4 with six on June 11, then four seen to June 18 with three on June 23. There were five on June 26 and July 2 with three to July 19, two on July 21 and singles to July 27. There were two on July 30 and August 8 with one on August 10.

Dickcissel (*Spiza americana*)

An uncommon passage migrant and winter visitor, during the Breeding Bird Survey a total of four pairs were located. This colony was near Airport Road. Early fall records: *there was a male by the McDonald Canal on June 30 and July 3. There was also a male by the Workshops on July 31 and August 4.* Those were the early fall records. For the late fall passage there were two on September 26 with two later on October 13. For the winter passage there was one on the eastern border on December 28. There were no records for the early spring passage. For the main spring passage there was one by the Lake Level Canal on March 16 with two there on March 19. For the summer passage there were up to four males by Airport Road from June 18 to July 23. No females were seen but that is normal. These small colonies can go undetected unless you happen to stop and hear a male singing. It is possible these males had been around for some time.

Bobolink (*Dolichonyx oryzivorus*)

A common spring passage migrant; there were much smaller numbers seen during the fall passage. For the early fall passage there were 14 on August 28 with two on September 2. There were five on September 4 with 18 on September 8, then 11 seen on September 11. There were 12 on September 15 with 14 on September 18, 21 on September 22 and 64 on September 26, then 43 seen on October 2 with seven on October 9. That was the early fall passage. For the spring passage there was one on April 6 with two on April 16, 535 on April 21 and 1,570 on April 27, then 610 seen on April 30 with 430 on May 4, 44 on May 7, 28 on May 2, ten on May 15 and one on May 18. Whilst 1,570 is a very high count the highest count is still (2013) that of 16,550 on April 30, 2008.

Red-winged Blackbird (*Agelaius phoeniceus*)

A very common species; during the Breeding Bird Survey a total of 2,582 pairs located, for much of the year there was a roost at the Sand Farm Cattail Marsh. There was a minor post-breeding gathering together with a winter and an early spring passage. There was also a significant event in early April; I do not know what that represents. Early fall records: *for the post-breeding gathering there were 435 on June 19 with 415 on June 23 and 305 on June 26. There were 705 on June 30 with 1,395 on July 8, then 765 seen on July 10 with 550 on July 14, 420 on July 17 and 355 on July 21. There were 875 on July 25 with 1,370 on July 31, 1,650 on August 7 and 4,015 on August 11, then 2,495 seen on August 14.* For this year there were 3,845 on August 18 with 4,410 on August 21, 6,920 on August 25 and 8,120 on August 28, then 7,765 seen on September 2 with 5,555 on September 4. There were 6,740 on September 8 with 7,810 on September 11 and 10,375 on September 15, then 7,390 seen on September 18 with 6,170 on September 22, 4,640 on September 26, 1,630 on September 29, 960 on October 2 and 230 on October 6. The count of 10,375 was the highest count but read on. The post-breeding gathering took up all of the early fall passage. The late fall passage was a very light event there were 265 on October 9 with 470 on October 13, then 245 seen on October 16. There were 430 on October 20 with 615 on October 23, 640 on November 5 and 825 on November 9, then 365 seen on November 17. That closed the late fall passage. For the winter passage there were 1,450 on November 21 with 3,540 on November 24, 4,150 on November 29 and 6,030 on December 2, then 5260 seen on December 8 with 1400 on December 11. There were 3850 on December 14 with 8,580 on December 16, then 2,500 seen on December 21. There were 3,610 on December 26 with 5,900 on December 30, then 4,120 seen on January 2 with 3,960 on January 5. There were 5,200 on January 7 with 1,275 on January 9 and 1,230 on January 11. That completed the winter passage. For the early spring passage there were 4,950 on January 15 with 5,965 on January 19, 7,320 on January 22 and 8,660 on January 26, then 5,360 seen on January 30 with 3,440 on February 2, 2,925 on February 9, 1,895 on February 12, 1,685 on February 15 and 595 on February 19. That was the early spring passage. For the main spring passage there were 1,460 on February 23 with 4,000 on February 26, then 2,800 seen on March 5 with 225 on March 9. There were 1,160 on March 12 with 2,240 on March 16, then 2,000 seen to March 29. Now we come to the event that does not seem to fit in. There were 2,850 on April 2 with 13,310 on April 6, then 9,490 seen on April 11 with 7,230 on April 13. There were 13,475 on April 16 with 3,710 on April 24, 2,690 on April 27, 2,070 on April 30, 240 on May 4, 160 on May 7 and 12 on May 12. The count of 13,475 was another intermediate high count. That was the end of this event and it was also the end of the main spring passage. For the summer passage there were 350 on May 15 with 490 on May 21, then 310 seen on May 26. There were 375 on May 29 with 600 on June 1 and 650 on June 4, then 450 seen on June 8. There were 600 on June 11 with 1,200 on June 16, 1,800 on June 18 and 2,390 on June 23, then 450 seen on June 29 with 370 on July 4, 190 on July 6 and 125 on July 9. That ended the

summer passage. For the post-breeding gathering there were 240 on July 13 with 280 on July 19, 290 on July 23, 930 on July 25, 2,030 on July 27, 3,020 on July 30, 5,075 on August 5, 13,970 on August 8, 18,030 on August 10, 27,000 on August 13, 37,650 on August 20, 52,000 on August 24, 52,400 on August 27, 70,000 on September 1 and 74,000 on September 3, then 72,000 seen on September 7 with 69,000 on September 10. For the survey year the count of 27,000 was the highest count. That influx lasted two months. There were 96,000 on September 14 with 115,000 on September 16, then 100,000 seen on September 21 with 80,000 on September 24, 31,000 on September 29, 11,100 on October 2 and 170 on October 5. Again the post-breeding gathering took up the whole of the early fall passage; there were much higher numbers this year. The count of 115,000 was the highest count for Zellwood but the highest count is now (2013) that of 303,000 on July 17, 2005. All these major counts came from an icterid roost at the Sand Farm Cattail Marsh.

Eastern Meadowlark (*Sturnella magna*)

A resident in any short grass habitat that tended to mean the Sod Farm and an area near the Lust Road gate; during the Breeding Bird Survey a total of 26 pairs located. Early fall records: *there were five on June 26 with 15 on June 30, then 11 seen on July 3 with nine to July 10 and two on July 14. There were 11 on July 17 with eight on July 21, seven on July 28, five on July 31 and singles to August 7. There were two on August 11 with singles to August 28.* There were 12 on September 2 with two to September 8 and one on September 11. There were three on September 15 with six from September 18 to September 29, then five seen on October 2. That was the early fall passage. For the late fall passage there were six on October 6 with four on October 9 and three on October 13. There were seven on October 16 with three on October 20 and two on October 23. There were four on October 28 with five on November 9 and eight on November 17, then two seen to November 29. That closed the late fall passage. For the winter passage there were four on November 30 with two to December 8. There were ten on December 11 with eight on December 14, two on December 16 and one on December 21. There were two from December 26 to December 30 with one on January 2. There were six on January 5 with eight on January 7 and January 9, then two seen on January 11. That completed the winter passage. For the early spring passage there were two on January 15 and January 19 with three on January 22 and four on January 26, then two seen on January 30 with one on February 2. There were two on February 5 with six on February 9 and 12 on February 12, then five seen on February 19 with three on February 23. That ended the early spring passage. For the main spring passage there were nine on February 26 with 12 on March 2, then five seen on March 5 with four on March 9. There were five on March 12 with 17 on March 16, then 15 seen on March 19 with five on March 24 and three on March 26. There were four on March 29 with

five on April 2 and ten on April 6, then five seen on April 11 with four on April 13. There were six on April 16 and April 21 with eight on April 24 and 12 on April 30, then three seen on May 4. That closed the main spring passage. For the summer passage there were five on May 7 and May 12 with nine on May 15, 11 on May 21 and 14 on May 26, then ten seen on May 29 with nine on June 4 and three on June 8. There were five on June 11 with 11 on June 16 and 12 on June 23, then 11 seen on June 26 with ten to July 2. That concluded the summer passage. For the early fall passage there were 11 on July 4 with six to July 9. There were seven on July 13 with three on July 21 and one on July 23. There were four on July 25 with two on July 30 and singles to August 13.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

This was a vagrant. For the late fall passage there was a female at the Sand Farm on November 24.

Rusty Blackbird (*Euphagus carolinus*)

This was a vagrant. There was a male by Lake Apopka to the south of the Hooper Farms Road extension on November 29 with two males there on November 30. These are best treated as winter records.

Common Grackle (*Quiscalus quiscula*)

A resident, there were marked fall and winter passages; during the Breeding Bird Survey a total of 26 pairs located. Unlike the Red-winged Blackbird and the Boat-tailed Grackle there was no post-breeding gathering. Early fall records: *there were 32 on June 30 with 105 on July 8, then 37 seen on July 10 with 31 on July 17 and 24 on July 21. There were 69 on July 25 with 46 on July 31, 17 on August 7 and four on August 11. There were 17 on August 14 with 21 on August 18, then 20 seen on August 25 with 19 on August 28, seven to September 4 and three to September 11. There were five on September 15 with eight on September 18, 32 on September 22, 140 on September 28 and 146 on September 29, then 80 seen on October 2 with three on October 6. That was the early fall passage. For the main fall passage there were five on October 9 with 27 on October 13 and 145 on October 20, then 21 seen on October 23. There were 50 on October 28 with 450 on November 5 and 960 on November 17, then 230 seen on November 21 with 67 on November 24 and four on November 29. That closed the main fall passage. For the winter passage there were 20 on November 30 with 49 on December 2, 485 on December 8*

and 930 on December 14, then 540 seen on December 16 with 11 on December 21. There were 27 on December 26 with 178 on December 28, then 25 seen on December 30 with two on January 2. There were 57 on January 5 with 79 on January 7 and 89 on January 11, then 16 seen on January 15. That completed the winter passage. For the early spring passage there were 62 on January 19 with 67 on January 22, then 21 seen on January 26 with nine on January 30. There were 25 on February 2 with five on February 5 and one on February 9. There were seven on February 12 with 40 on February 15, then eight seen on February 19 with three on February 23. That concluded the early spring passage. For the late spring passage there were seven on February 26 with nine on March 2 and 27 on March 5, then 17 seen on March 12 with 15 on March 19, ten to March 29 and eight on April 2. There were 13 on April 6 with seven on April 13, five on April 21 and four on April 24. That ended the late spring passage. For the summer passage there were 11 on April 27 with 16 on May 4, then 13 seen on May 7 with ten on May 12. There were 16 on May 15 with 33 on May 18, then 12 seen on May 21 with five on May 26. There were 13 on May 29 with 21 on June 4 and 70 on June 8, then 51 seen on June 16 with 20 on June 23 and nine on June 26. That closed the summer passage. For the early fall passage there were 330 on June 29 with 17 on July 2. These one day high counts are a feature of this species. There were 47 on July 4 with 87 on July 6, then 54 seen on July 9 with eight on July 13. There were 72 on July 19 with 21 on July 21, 12 on July 23 and eight to July 27. There were 44 on July 30 with 110 on August 5, then 26 seen on August 10 with two on August 13.

Boat-tailed Grackle (*Quiscalus major*)

A resident and winter visitor; during the Breeding Bird Survey a total of 164 pairs located there were also post-breeding gatherings in 2002 and 2003. Early fall records: *for the post-breeding gathering there were 295 on May 27 with 400 on June 2, 2,080 on June 10 and 2,605 on June 12, then 490 seen on June 16. There were 1,225 on June 19 with 2,690 on June 23, then 1,070 seen on June 26. There were 1,540 on June 30 with 1,815 on July 3 and 3,680 on July 8, then 3,020 seen on July 14 with 1,170 on July 17. There were 4,050 on July 21 with 485 on July 25 and 70 on July 28. The count of 4,050 was the highest count for Zellwood but read on. That ended the post-breeding gathering. For the early fall passage there were 610 on July 31 with 580 on August 4 and 190 on August 7. There were 840 on August 11 with 120 to August 18, 65 on August 25 and 60 on August 28. There were 214 on September 2 with 15 on September 4. There were 37 on September 8 with 85 on September 11, then 35 seen on September 15 with 15 on September 18. There were 400 on September 22 with 395 on September 26 and 35 on September 29. That was the early fall passage. For the late fall passage there were 155 on October 2 with 125 on October 9 and 35 on October 13. There were 45 on October 16 with 88 on October 20 and 90 on October 23, then 35 seen on October 28. There were 60 on November*

5 with 80 on November 9, 115 on November 17 and 365 on November 21, then 285 seen on November 24 with 105 on November 29 and ten on November 30. That closed the late fall passage. For the winter passage there were 65 on December 2 with 405 on December 11 and 3,700 on December 14, then 2,510 seen on December 16 with 160 on December 21 and 15 on December 28. There were 1,250 on December 30 with 1,700 on January 2, then 1,250 seen on January 5 with 150 on January 7 and 16 on January 9. That completed the winter passage. For the early spring passage there were 135 on January 11 with 155 on January 19, 360 on January 26 and 405 on February 2, then 40 seen on February 5. There were 50 on February 9 with 390 on February 12, then 95 seen on February 26 with 60 on March 2 and 45 on March 5. That ended the early spring passage. For the summer passage (this species breeds so early) there were 95 on March 9 with 80 on March 12 and 35 on March 16. There were 150 on March 19 with 160 on March 24, 165 on March 29, 225 on April 2, 430 on April 6, 695 on April 11 and 1,075 on April 13, then 510 seen on April 16 with 280 on April 24, 100 on April 27, 90 on April 30, 70 on May 4, 65 on May 7 and 50 on May 12. There were 145 on May 15 with 40 on May 18. There were 55 on May 21 with 70 on May 26, 80 on June 1, 85 on June 4, 120 on June 8 and 380 on June 11, then 340 seen on June 16. The first fledged juveniles were seen out in the fields on June 11. That closed the summer passage. For the post-breeding gathering there were 1,040 on June 18 with 785 on June 23, 460 on June 29, 350 on July 2 and 150 on July 4. There were 275 on July 6 with 395 on July 9, 1,000 on July 19, 1,650 on July 21, 2,430 on July 23, 4,500 on July 27, 5,100 on August 5, 5,360 on August 8, 5,410 on August 10 and 5,510 on August 13, *then 5,140 seen on August 24 with 4,770 on August 27. The count of 5,510 was the highest count for Zellwood but read on. There were 5,300 on September 1 with 5,410 on September 3, then 5,030 seen on September 7 with 5,020 on September 10. There were 6,700 on September 14 with 7,300 on September 16 and September 19, then 5,280 seen on September 21 with 1,850 on September 24, 1,650 on September 29, 265 on October 2 and 20 on October 5. That was the end of the post-breeding gathering. Here the counts of 7,300 were the highest counts for Zellwood but the highest count is now (2013) that of 167,000 on July 14, 2005.*

Shiny Cowbird (*Molothrus bonariensis*)

This had near vagrant status. There was an adult male by Lust Road on June 8, June 11 and June 16. There was also a male there on June 29 with two there on July 2, then one seen on July 4. There were two on July 13 with single males on July 19 and July 21. On July 2 the two males were displaying against one another; they had their heads stretched out and the heads were then jerked up and down. One of them then sidled up to a female Brown-headed Cowbird which promptly flew off. A male Brown-headed Cowbird which had been with the female paid no attention to these events

Bronzed Cowbird (*Molothrus aeneus*)

This was a vagrant. There was an adult male by the Hooper Farms Road gate on December 21; a winter passage record.

Brown-headed Cowbird (*Molothrus ater*)

Present all year in variable numbers; there was clearly a strong spring passage. During the Breeding Bird Survey a total of five pairs located. Early fall records: *there was a juvenile on June 10 with a female on June 12. There were four juveniles on June 16 with three juveniles and three adults on June 23. On June 26 there were single adult and juveniles. After this date I did not separate out any juveniles. There were two on June 30 with 23 on July 3, then seven seen on July 10 with two on July 14. There were six on July 17 with 20 on July 25, then eight seen on July 28 with four on July 31, three on August 4, two on August 7 and one on August 11.* For this year there was one on August 21 with two to September 2 and eight on September 15, then one seen on September 18. That was the early fall passage. For the main fall passage there were six on September 29 with 30 on October 9, 405 on October 16 and 485 on October 23, then 250 seen on October 28 with 20 on November 5, 15 on November 29, ten on November 30 and one on December 2. That closed the main fall passage. For the winter passage there were 52 on December 8 with 200 on December 11, then 15 seen on December 14 with one on December 16. There were 12 on December 21 with 965 on December 26, then 15 seen on December 28. There were 20 on December 30 with 70 on January 2, 400 on January 5 and 750 on January 7, then 150 seen on January 9 with 20 on January 11. That completed the winter passage. For the early spring passage there were 350 on January 15 with 240 on January 26 and one on January 30. There were 53 on February 2 with 450 on February 5, then 100 seen on February 9 with 15 on February 12. There were 2,050 on February 15 with seven on February 19. There were 1,750 on February 23 with 1,800 on February 26, then 1,500 seen to March 9 with 1,255 on March 16 and one on March 19. Whilst the count of 2,050 was a high count the highest count is now (2013) that of 3,600 on February 27, 2009. That was the end of the early spring passage. There was no late spring passage as the young are already fledged in early June so for the summer passage there was one on March 24 with five on March 26, then two seen on March 29 with singles to April 6. There were six on April 11 with singles to April 24. There were three on April 27 with four on May 4, then singles seen to May 12. There were two on May 15 with three on May 18, May 29 and June 4, then two seen on June 8. The first juvenile was seen on June 11 by Interceptor Road. There were three (not aged) on June 16 with five on June 23, then two seen to July 4. There were two adults and two juveniles on July 6 with four juveniles on July 13. A Northern Mockingbird fed one of the juveniles by Hooper Farms Road gate on that date. No

further juveniles noted. There were three adults on July 19 with two on July 21 then singles seen to August 5. There were two on August 8 with singles to August 13.

Orchard Oriole (*Icterus spurius*)

Summer visitors with pairs breeding through the area although the greatest concentration was along the bank of Lake Apopka; during the Breeding Bird Survey a total of 26 pairs located. Early fall records: *there were three on June 23 with one on June 26. There were two on June 30 and July 3 with five on July 8, then singles seen to July 25.* There were no later fall records. For the spring passage there were three on April 13 and April 16 with seven on April 24, then four seen to May 4 with two on May 7 and one on May 12. That completed the spring passage. For the summer passage there were two on May 15 with four to May 21, six on May 26 and 11 on May 29, then eight seen on June 1 with four on June 4. There were five on June 8 with seven to June 16, ten on June 18 and 14 on June 26, then nine seen on June 29 with eight on July 2, three on July 4 and two on July 6. There were five on July 9 with two on July 13, then singles seen to July 27. That was the end of the summer passage. *Exceptionally there were later fall records as there was one on August 20 with two on August 24 and four on September 3. There were no further sightings.*

Baltimore Oriole (*Icterus galbula*)

This was an uncommon passage migrant and winter visitor. For the early fall passage there were three at the Sand Farm on September 18. There was one by the Lust Road gate on September 26 and there was one at the Sand Farm on September 29. That completed the early fall passage. For the winter passage there was one by the Hooper Farms Road gate on January 5, January 7 and January 11. For the early spring passage there were three by the Hooper Farms Road gate on January 22.

Bullock's Oriole (*Icterus bullockii*)

This was a vagrant. For the early spring passage there was a female by the Hooper Farms Road gate on January 22. There is a description in Appendix B.

Pine Siskin (*Spinus pinus*)

This was a vagrant. For the late spring passage there was one by Interceptor Road on April 30; it was with a flock of 16 American Goldfinches; this was a very late date.

American Goldfinch (*Spinus tristis*)

A common winter visitor; there were much lower numbers during the spring passages. For the winter passage there was one on November 17 with 27 on November 21 and 62 on November 24, then 47 seen on November 30 with 20 on December 2, 14 on December 11, six on December 14 and four on December 16. That started out as a fall influx but as there was no incoming winter influx it just morphed into a winter influx. The count of 62 was the highest count for Zellwood but the highest count is now (2013) that of 196 on February 20, 2008. There were 16 on December 21 with 13 on December 26. There were 14 on December 28 with 21 on December 30, then nine seen on January 5 with three on January 7 and two on January 9. That completed the winter passage. For the early spring passage there were three on January 11 and January 15 with seven on January 22, then three seen on January 26 with singles to February 12. There were two on February 15 with later three on February 26, then one seen on March 2. That closed the early spring passage. For the main spring passage there were four on March 5 with three on March 9, two on March 12 and one on March 19. There were three on March 24 with four on March 29, then singles seen to April 6. There were six on April 13 with 16 on April 30, then four seen on May 4.

House Sparrow (*Passer domesticus*)

An occasional visitor; during the Breeding Bird Survey a pair was located on the northern border. Early fall records: *there was one on June 19 with two on June 30*. There were no further sightings until November. For the late fall passage there was one on November 21. There were no winter sightings. For the early spring passage there were singles on January 22 and February 19. For the late spring passage there were singles on March 5, April 6 and April 24 with two on April 27. For the summer passage there were two on June 11 with one on July 2.

Orange Bishop (*Euplectes franciscanus*)

This was an exotic. There was a male by Hooper Farms Road on April 6. This was the first record for Zellwood.

Table A

The Spreadsheet - August 15, 2002 to August 14, 2003.

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	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	17	11	12	1	3	3	.	.	.	.	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	11	4	4	3	7	10	9	4	4	3	4	78	.	36	5	3
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	13	10	7	10	12	5	9	7	10	6	16	10	.	9	12	7
2	American Bittern	.	.	1	1	1	2	4	2	3	5	10	8	.	6	3	3
2	Least Bittern	2	1	1	2	2	.	.	.	1	2	2	1	.	2	1	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	18	12	24	15	17	13	14	24	21	24	25	9	.	20	14	19
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	12	21	12	11	7	14	27	11	14	9	16	16	.	13	11	42
2	Snowy Egret	67	64	52	24	28	34	42	12	9	20	16	24	.	15	12	8
2	Little Blue Heron	21	10	17	5	8	12	58	13	11	16	15	16	.	11	17	20
2	Tricolored Heron	10	14	11	5	8	10	13	6	9	7	8	3	.	3	3	7
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1,220	1,550	710	430	850	1,630	1,170	430	1,450	2,120	260	1,500	.	605	1,280	1,260
2	Green Heron	12	8	8	14	12	4	5	3	7	3	8	2	.	3	2	3
2	Black-crowned Night-Heron	.	1	3	.	.	1	.	.	2	.	.	.	.	.	.	.
2	Yellow-crowned Night-Heron	.	.	3	.	.	.	.	1	.	.	.	.	.	.	.	.
2	White Ibis	6	8	1	1	5	1	6	6	1	1	47	7	.	2	38	1
2	Glossy Ibis	1	8	3	4	.	29	48	3	8	4	2	2	.	41	26	24
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
7	Black Vulture	48	26	2	7	.	32	3	7	3	6	1	6	.	1	5	.
7	Turkey Vulture	64	65	30	20	53	78	49	25	23	16	15	34	.	12	10	8
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	36	9	5	3	7	7	14	17	7	7	2	8	.	.	2	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	7	.	.	.	.	2	.	2	2	.	.	.	.	.	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	4	8	2	4	3	3	6	2	3	4	5	5	2	4	3	4
3	Mottled Duck	22	82	18	38	55	45	54	39	50	72	84	67	66	69	63	70
3	Blue-winged Teal	2	.	.	4	.	23	68	35	18	6	.	192	4	140	95	3
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	1	1	2	.	.	2	2
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	4	.	.	.	5	8	.	.	.	.
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	14	8	8	16	8	5	7	5	4	4	8	9	.	5	7	9
7	Swallow-tailed Kite	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	.	.	.	2	2	4	3	3	2	3	4	3	3	2	4	3
7	Northern Harrier	.	.	.	.	.	2	3	4	1	3	4	5	2	5	4	4
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.
8	Cooper's Hawk	3	6	2	3	4	3	4	1	2	2	3	3	.	2	3	1
8	Red-shouldered Hawk	10	13	15	11	11	9	10	9	11	12	13	12	.	8	11	12
8	Broad-winged Hawk	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	15	11	15	15	12	13	15	6	8	10	10	8	.	11	7	9
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	1	1	1	1	1	1	1	3	4	4
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	2	1	1	.	.	1	1
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	1	2	.	.	1	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	1	1	.	.	.	.	.	1	1	1	.	.	1	.	.
7	Northern Bobwhite	6	6	7	3	3	2	8	3	2	5	3	.	.	1	4	2
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	2	.	.	1	.	1	2	1	2	1	.	2	1	2
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1
2	Sora	.	.	.	1	.	.	.	.	1	1	3	1	.	5	6	4
2	Purple Gallinule	6	2	3	3	1	4	1	2	2	2	1	2	.	3	1	1
4	Common Moorhen	63	59	73	95	65	82	70	103	63	88	38	57	.	80	63	114
1	American Coot	.	.	.	.	.	.	1	.	.	2	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	.	.	1	.	.	1	1	2	2	3	1	.	3	3	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	2	2	14	.	.	.	.	1	.	.	.	.	.	.	.	1
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	30	28	22	14	8	14	13	10	12	18	33	7	8	6	3	7
4	Black-necked Stilt	12	4	4	.	2	2	2	.	.	.	2	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	1	1	1	1	.	1	.	.	.	.
4	Greater Yellowlegs	5	2	2	9	1	1	2	1	2	2	3	3	.	1	3	3
4	Lesser Yellowlegs	35	20	11	5	8	10	18	13	9	8	18	12	10	25	32	13
4	Solitary Sandpiper	1	1	1	2	2	4	3	5	3	1	2	1	1	2	1	2
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	1	3	5	3	1	.	1	.	.	1	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	16	12	41	16	36	95	31	10	3	2	4	1	.	1	.	.
4	Western Sandpiper	21	15	14	4	8	11	19	12	6	3	6	.	.	1	1	.
4	Least Sandpiper	84	45	320	11	32	52	310	45	205	210	130	49	63	185	132	350
4	White-rumped Sandpiper	.	.	.	.	.	1	1	2	2	1	1	1	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	14	4	9	2	17	16	13	9	5	6	12	23	27	12	22	12
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	10	14	7	2	.	5	.	8	6	7	10	14	24	11	5	22

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	4	19	4	2	2	8	7	2	.	.	.	1	3	3	.	.
4	Long-billed Dowitcher	.	.	1	.	.	.	.	.	.	.	4	1	.	4	.	9
4	Wilson's Snipe	.	.	.	.	.	3	1	9	3	4	2	14	7	12	10	33
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	1	3	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	14	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	2	1	.	2	2	2	1	1	3	1	3	.	2	1	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	.	.	15	1	2	2	50	18	57	65	27	40	.	.	.	.
8	Mourning Dove	15	125	61	57	34	43	50	18	57	65	27	40	.	33	6	30
8	Common Ground-Dove	37	16	42	10	12	10	10	7	13	12	13	7	.	18	16	20
8	Cockatiel	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	1	1	1	.	.	.	.	.	.	1	.	.	1	.	.	5
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	1	3	2	2	1	2	2	3	5	3	3	5	.	5	4	3
8	Eastern Screech-Owl	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	1	1	.	1	.	1	1	2	.	1	.	.	1	1	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	1	.	.	.	.	.	.	1	2	1	1	.	.	.	1	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	.	.	1	.	.	.	3	1,233	247	470	57	36	.	173	52	28
8	Chuck-will's-widow	.	.	.	.	1	.	.	.	.	1	1	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	.	4	43	6	15	185	9	8	.	28	51	130	.	224	250	20
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	.	1	3	3	1	3	2	2	3	5	4	8	.	12	8	9
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Red-bellied Woodpecker	18	17	18	10	8	17	10	12	10	14	11	14	.	16	11	12
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	10	5	6	4	1	4	7	1	10	9	7	4	.	11	4	5
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	1	1	3	1	1	1	3	1	3	1	3	1	.	1	1	2
8	Pileated Woodpecker	4	3	3	1	1	1	1	1	2	1	2	1	.	2	1	2

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	1	1	1	.	.	1	1	.	1	.	.	.	.	.	1
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	1	1	1	1	1	.	1	2	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	1	.	.	.	.	.	.	.	.	.	2	1	1
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	2	2	.	3	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	5	8	1	4	5	11	10	.	6	8	30	.	11	.	.
8	Gray Kingbird	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	4	13	5	3	6	4	3	4	2	6	6	.	5	4	2
8	White-eyed Vireo	1	1	1	5	3	4	8	2	8	18	15	2	.	20	17	15
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	1	.	1	1	3	1	1	1	1	1	.	3	1	3	2
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	8	19	18	13	11	16	18	17	17	31	26	18	.	34	16	26
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	1	.	.	.	.	.	.	.	3	3	2	2
7	Fish Crow	.	.	.	1	1	14	.	.	1	.	1	.	.	.	1	.
7	Purple Martin	.	1	.	2	.	.	.	2	.	.	.	.	.	.	.	.
7	Tree Swallow	.	.	.	.	.	.	.	.	.	4	3	.	.	.	4	3
7	Northern Rough-winged Swallow	.	3	1	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Bank Swallow	.	23	23	3	1	41	17	40	6	1	5	2	.	.	1	3

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
7	Cliff Swallow	.	2	1	.	1	.	.	.	.	2	.	.	.	.	.	1
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	95	478	830	167	65	455	840	409	47	27	315	400	.	10	41	16
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	3	3	2	1	1	3	2	2	2	4	1	2	.	2	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	38	31	31	25	31	26	19	30	34	29	24	11	.	23	6	24
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	5	5	31
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
7	Marsh Wren	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Blue-gray Gnatcatcher	2	7	.	7	5	30	23	32	49	39	36	13	.	52	30	60
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	1	.	.	.	.	12	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	1	2	.	.	1	3	1
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	1	.	2	.	2	.	2	.	7	98	165
8	Northern Mockingbird	12	12	24	10	24	19	15	22	23	41	67	43	.	81	39	42
8	Brown Thrasher	7	6	11	6	4	7	8	13	10	3	10	1	.	11	6	2
7	European Starling	1	.	.	.	1	4	7	.	18	16	.	6	12	16	6	12
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	2	.	1	.	.	2	.	.	1	.	.	.	.	1	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
7	Yellow Warbler	57	44	79	119	34	43	66	44	51	33	18	14	.	19	11	9
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
8	Yellow-throated Warbler	1	.	1	.	.	.	1	2	.	2	1	1	.	.	.	.
8	Pine Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	1	3	8	7	9	17	10	17	24	11	6	11	.	10	7	9
7	Palm Warbler	.	.	.	.	.	.	.	.	.	2	.	4	.	40	26	110
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	1	2	.	.	.	2	5	1	2	1	1	.	.	2	1	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	1	1	6	5	4	12	3	2	.	12	22	8
7	Northern Waterthrush	.	.	2	1	4	4	25	30	57	65	14	102	.	31	18	12
7	Louisiana Waterthrush	6	3	9	5	2	3	4	1	1	1	1	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	1	.	1	2	9	16	51	64	52	85	.	108	321	186
8	Hooded Warbler	.	.	.	.	.	1	.	.	.	1	.	.	.	1	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	2	2	3	1	.	.	1	.	1	1	1	1	.	1	.	2
8	Summer Tanager	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6	
7	Eastern Towhee	40	29	38	27	11	13	14	30	26	13	9	12	.	15	24	21	
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
7	Grasshopper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-throated	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	61	41	54	49	50	69	69	80	82	75	81	77	.	88	73	96	
8	Rose-breasted	1
8	Blue Grosbeak	2	18	7	11	1	6	5	5	4	8	7	10	.	14	7	6	
8	Lazuli Bunting
8	Indigo Bunting	4	6	3	5	4	8	2	5	2	1	1	3	.	10	6	12	
8	Painted Bunting	1	1	1	1	.	1	1	.	.	.	.	1	.	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
7	Bobolink	.	.	.	14	2	5	18	11	12	14	21	64	.	14	43	3	
7	Red-winged	3,845	4,410	6,920	8,120	7,765	5,555	6,740	7,810	10,375	7,390	6,170	4,640	.	1,630	960	230	
6	Eastern Meadowlark	1	1	1	1	12	2	2	1	3	6	6	3	.	6	5	6	
7	Yellow-headed	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	21	5	20	19	7	7	3	3	5	8	32	22	140	146	80	3	
7	Boat-tailed Grackle	120	50	65	60	214	15	37	85	35	15	400	395	.	35	155	55	

Table A. Part 1

Hab	SPECIES	8/18	8/21	8/25	8/28	9/2	9/4	9/8	9/11	9/15	9/18	9/22	9/26	9/28	9/29	10/2	10/6
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed	.	1	.	2	2	.	.	1	8	1	.	.	.	6	.	.
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	3	.	1	.	1	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	82	87	92	88	85	90	93	96	96	107	102	95	20	95	98	98
	TOTAL	6,374	7,584	9,887	9,617	9,665	8,965	10,245	10,943	13,352	11,308	8,400	8,472	381	4,359	4,349	3,433

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	1	1	.	.	1	1	3	2	2	2	1	4	2	3	1
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	60	56	.	.	10	.	4
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	3	2	62	12	12	16	52	61	37	48	75	118	118	133	178	128
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	10	2	10	19	14	16	15	22	17	36	13	19	19	24	17	24
2	American Bittern	3	3	4	2	2	5	5	4	2	3	2	.	2	2	3	2
2	Least Bittern	1	3	.	2	2	1	1	.	.	1	1	1	1	.	2	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	11	6	15	17	15	18	21	24	9	22	34	28	23	22	17	14
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	91	3	6	8	3	9	5	9	4	12	8	4	5	25	4	21
2	Snowy Egret	18	22	16	3	4	8	13	2	1	17	5	5	2	5	4	8
2	Little Blue Heron	41	13	22	14	8	5	8	11	12	20	18	18	10	11	13	8
2	Tricolored Heron	5	2	8	9	5	6	5	4	5	9	10	5	4	1	4	2
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1,490	5,375	1,840	190	1,035	205	275	440	2,530	650	420	126	16	111	410	580
2	Green Heron	3	2	2	4	1	3	3	4	1	5	4	4	.	6	3	5
2	Black-crowned Night-Heron	1	.	1	1	.	.	1	1	.	2	2	.	9	2	1	1
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	3	1	2	36	8	.	.	.	62	22	1	.	35	17	30	110
2	Glossy Ibis	5	81	7	32	8	3	22	2	36	2	.	.	42	105	2	474
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	2	6	.	.	.	.	.	12	.	.	.	.	.	.	3
7	Black Vulture	18	.	4	1	2	3	1	1	3	1	1	5	2	4	1	3
7	Turkey Vulture	6	6	8	9	48	7	4	18	9	18	18	43	15	104	14	12
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	2	.	2	.	.	.	.	.	.	.	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	2	.	.	.	2	1	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	.	.	.	.	.	.	.	.	.	.	6	.	.	.	6
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	3	1	3	1	1	.	.	1	.	.	.	.	.	.	5
3	Mottled Duck	7	66	73	77	55	87	14	2	19	2	2	.	4	.	2	19
3	Blue-winged Teal	74	17	119	12	33	3	250	.	1	.	.	2	.	.	.	7
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	3	4	.	.	.	.	6	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	14	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	2	1	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	17	.	.	.	.	1	.	.	1	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	1	.	.	.	.	1	1	.	1	3	1	.	8	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	3	16	.	27	60	10	4	3	1,450	60
5	Osprey	5	3	5	7	3	4	9	8	4	9	8	6	14	12	10	22
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hub	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	3	2	4	1	2	3	3	3	7	10	4	6	6	3	4	5
7	Northern Harrier	6	1	7	8	10	8	10	9	17	11	14	23	12	11	15	21
8	Sharp-shinned Hawk	1	1	1	2	2	1	1	3	1	.	1	3	.	2	3	1
8	Cooper's Hawk	1	1	2	3	1	2	1	3	1	2	1	2	2	2	2	1
8	Red-shouldered Hawk	7	9	12	9	6	10	12	11	5	16	12	12	9	13	8	6
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Red-tailed Hawk	8	8	9	8	12	12	12	9	12	15	21	16	17	21	18	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	9	9	13	15	21	16	19	18	14	15	27	21	16	14	20	15
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	2	1	.	1	1	2	.	.	.	1	.	1	.	1	.	.
7	Peregrine Falcon	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.
7	Northern Bobwhite	1	5	1	3	.	3	19	3	.	1	1	.	4	4	2	1
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	4	5	4	5	6	5	6	4	1	7	3	4	2	2	1	1
2	Virginia Rail	1	1	1	1	1	1	.	1	.	.	2	1	.	1	.	1
2	Sora	16	16	9	22	8	14	28	15	16	22	42	53	66	102	58	51
2	Purple Gallinule	.	2	1	3	1	2	.	1	.	2	1	1	1	1	3	2
4	Common Moorhen	106	101	84	109	115	89	65	75	75	62	119	98	120	133	200	130
1	American Coot	.	.	3	.	.	.	.	2	.	.	1	2	2	3	1	1

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	2	2	2	1	.	3	2	1	2	3	2	1	1	1	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	1	19	82	78	5	69	.	26
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	10	9	4	6	5	6	16	48	48	12	103	50	9	26	9	123
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	1	1	3	19	6	2	.	.	.	.	.	.	.	.	5
4	Lesser Yellowlegs	16	6	9	23	10	41	.	.	.	3	.	.	1	.	.	42
4	Solitary Sandpiper	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	340	156	10	160	180	251	116	67	39	17	11	.	.	.	.	3
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	8	2	7	4	.	1	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	1	3	2	3	7	6	2	2	2	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	10	6	26	4	2	3	.	1	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	10	11	3	6	1	14	.	.	.	.	.	.	.	.	.	7
4	Wilson's Snipe	10	18	42	8	11	11	25	44	19	42	26	19	24	14	82	12
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	.	.	.	.	.	.	.	.	1	2	.	.	.	.	.	1
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	14	22	22	6	4
5	Ring-billed Gull	.	.	.	.	.	.	17	9	13	4	57	27	15	27	165	460
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	4	.	1	1	2
5	Taylor's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	12	2	7	94	141	27	42	6	24
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	1	2	2	1	3	1	4	.	1	3	1	1	1	1	3	1

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Mourning Dove	19	8	11	9	49	23	63	75	26	27	50	54	160	41	97	14
8	Common Ground-Dove	12	14	4	10	9	7	1	5	3	5	2	1	.	1	.	3
8	Cockatiel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	1	3	2	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	2	2	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	3	3	1	2	4	1	.	2	.	2	.	.	2	1	2	2
8	Eastern Screech-Owl	.	.	1	.	.	1	1	.	.	1	.	.	.	.	.	.
8	Great Horned Owl	.	1	2	1	1	1	1	1	.	1	.	1	2	1	1	2
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	.	.	.	2	.	.	1	2	3	.	.	.	1	.
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	12	.	9	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chuck-will's-widow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	1	.	.	1	1	.	.	.	.	.	.	1	.	.	.	.
7	Chimney Swift	45	34	33	1	3	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-throated Hummingbird	.	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	8	6	13	9	9	12	12	19	6	15	10	10	11	8	7	5
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	13	20	10	9	13	11	16	12	4	13	10	14	10	12	10	5
8	Yellow-bellied Sapsucker	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	8	11	3	1	6	4	3	1	4	2	2	7	1	6	2	4
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	2	2	1	1	2	1	4	2	2	1	1	1	2	1	2	1
8	Pileated Woodpecker	2	3	1	1	1	1	1	1	.	2	1	3	1	1	3	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	1	1	2	3	.	.	1	1	.	2	4	5	3	8	3	3
7	Eastern Phoebe	34	35	89	185	162	167	217	201	41	194	163	103	112	186	156	92
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	1	1	1	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	1	1	.	.	.	1	1	1	1	1
8	Western Kingbird	.	.	2	2	.	1	3	6	.	.	3	9	11	12	22	12
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	1	2	3	.	.	.	1	1	2	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	8	3	8	3	3	4	3	6	2	5	5	5	8	7	4	8
8	White-eyed Vireo	21	13	10	16	10	12	5	10	2	8	8	4	2	9	13	5
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	1	.	1	.	3	1	2	4	2	1
8	Philadelphia Vireo	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	2	2	1	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	30	24	19	17	19	14	6	10	9	22	21	20	10	12	12	5
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	.	.	.	.	.	2	.	1	.
7	Fish Crow	2	2	.	16	.	2	15	1	.	45	2	10	1	1	12	42
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	12	.	26	3	3	.	2	10	4	12	14	1	.	9	15	43
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	21	1	7	.	7	.	.	.	9	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	3	1	3	1	1	2	2	1	1	2	2	1	1	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	23	20	11	16	16	11	9	13	6	11	12	7	6	17	10	10
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	55	111	162	264	160	257	174	174	63	183	223	113	99	219	134	66
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	1	.	1	5	6	6	7	11	1	10	10	7	7	5	5	5
7	Marsh Wren	6	3	3	4	6	18	7	25	4	15	13	18	16	21	26	15
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	1	1	1	1	1	1	4	5	5	9	23	19	6	11	8	7
8	Blue-gray Gnatcatcher	35	40	29	39	23	33	44	37	19	54	77	52	28	61	39	34
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	1	.	.	2	.	.	1	.	.	1	.
8	Wood Thrush	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	1	.	.	4	11	63	1	11	83	133
8	Gray Catbird	207	270	181	223	138	123	140	81	36	85	107	98	100	137	84	54
8	Northern Mockingbird	54	34	42	24	21	33	16	16	7	15	28	14	15	25	22	22
8	Brown Thrasher	6	3	4	3	4	1	1	1	2	1	2	1	1	1	.	.
7	European Starling	4	.	6	5	6	.	4	.	.	8	1	1	1	1	3	1
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	1	1	2	3	2	2	1	8	11
8	Cedar Waxwing	.	.	.	.	1	.	.	.	1	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	1	7	3	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	5	3	5	5	16	9	9	7	9	11	6
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
7	Yellow Warbler	4	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	.	.	.	2	.	4	39	50	215	575	275	175	207	233	176	220
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	1	1	3	1	.	.	.	1	.	2	.	.	.	.
7	Prairie Warbler	6	4	5	10	1	1	1	1	.	3	4	3	1	3	5	3
7	Palm Warbler	97	71	89	227	170	234	119	416	152	173	220	150	113	294	240	265
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	10	11	6	6	6	1	.	1	.	2	.	.	.	.	2	.
7	Northern Waterthrush	14	8	3	6	2	4	2	.	.	4	3	.	1	1	1	1
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	209	125	109	116	57	114	103	74	30	85	95	52	58	114	112	30
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	1	1	1	.	.	.	.	.	.	.	2	1	1	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
7	Eastern Towhee	28	18	19	15	6	17	4	11	11	17	14	9	15	22	19	29
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	2	.	3	.	.	.	1
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
7	Vesper Sparrow	.	.	.	.	.	.	.	1	.	.	.	5	3	1	5	1
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	1	5	3	5	8	26	92	17	64	43	30	45	20	38	86	105
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	1	1	.	.	1	1
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	1	1	1	4	12	10	8	6	6	5	3	6
7	Lincoln's Sparrow	.	.	.	3	1	.	.	.	5	2	1	.	1	.	.	1
7	Swamp Sparrow	.	.	.	21	22	132	354	163	57	275	287	434	200	725	246	70
7	White-throated Sparrow	.	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	1	1	2	1	2	1	3	6	4
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	109	90	75	73	68	83	64	56	43	52	47	38	31	52	57	31
8	Rose-breasted Grosbeak	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	8	10	3	1	.	.	.	.	1	.	.	.	.	.	1	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	30	117	281	48	29	19	2	8	1	2	5	2	5	3	10	2
8	Painted Bunting	.	.	1	1	.	.	.	1	1	1	1	1	.	2	3	2
7	Dickcissel	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	265	470	245	430	615	285	640	825	365	1,470	3,540	4,150	3,780	6,030	5,260	1,400
6	Eastern Meadowlark	4	3	7	3	2	4	2	5	8	2	2	2	4	2	2	10
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	1	2	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	5	27	18	145	21	50	450	425	960	230	67	4	20	49	485	40
7	Boat-tailed Grackle	125	35	45	88	90	35	60	80	115	365	285	105	10	65	40	405

Table A. Part 2

Hab	SPECIES	10/9	10/13	10/16	10/20	10/23	10/28	11/5	11/9	11/17	11/21	11/24	11/28	11/30	12/2	12/8	12/11
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	30	2	405	4	485	250	20	3	.	.	.	15	10	1	52	200
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	1	27	62	15	47	20	7	14
8	House Finch	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	100	98	106	106	89	97	90	92	89	106	102	104	96	102	99	106
	TOTAL INDIVIDUALS	3,983	7,675	4,500	2,965	3,952	2,932	3,827	3,859	5,361	5,371	7,149	6,866	5,864	9,634	10,397	5,942

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	2	1	1	.	1	2	.	.	.	1	1	2	1	2	2	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	30	1	.	15	35	4	1	18	36	21	.	3	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	148	204	188	265	198	264	308	220	229	155	200	190	233	187	219	.
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	21	15	19	13	8	21	19	15	23	10	13	7	14	16	10	.
2	American Bittern	4	3	2	2	1	2	1	1	4	3	.	.	1	1	2	.
2	Least Bittern	.	1	1	.	.	.	.	.	.	1	.	.	.	1	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	12	20	28	13	21	19	19	19	18	19	22	28	22	21	24	.
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	22	24	9	5	9	12	15	10	9	29	14	11	14	17	16	.
2	Snowy Egret	80	34	34	23	9	12	32	14	20	29	15	21	10	11	16	.
2	Little Blue Heron	24	16	12	7	9	12	18	11	10	15	23	10	15	18	10	.
2	Tricolored Heron	10	3	7	7	6	8	7	5	11	12	6	5	7	4	3	.
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	3,450	905	415	40	50	47	82	230	46	42	148	620	145	280	95	.
2	Green Heron	4	5	9	6	5	7	10	6	4	8	6	3	3	4	4	.
2	Black-crowned Night-Heron	4	5	2	6	4	7	4	5	4	1	2	.	1	2	1	.
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	670	250	248	18	7	97	177	178	25	88	36	20	91	60	1	.
2	Glossy Ibis	750	650	174	10	29	72	1,230	1,250	385	28	45	280	29	430	97	.
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	2	.	1	.	1	.	.	.	.	.	.	.	.	.	.
7	Black Vulture	1	2	3	4	10	5	6	1	1	16	4	1	1	4	2	.
7	Turkey Vulture	14	188	18	41	26	17	6	23	11	15	43	40	15	420	39	.
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
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	2	.	.	.	.	.	.	.	3	.	.	2	2	.	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
3	Mallard	3	.	.	1	1	.	.	1	2	1	.	.	1	1	3	.
3	Mottled Duck	16	4	2	13	10	6	2	6	13	21	6	6	10	11	11	.
3	Blue-winged Teal	10	.	6	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	7	10	4	4	3	2	1	1	6	1	1	2	.	.	2	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	960	615	160	60	2,600	450	640	160	.	160	.	.	.	10	.
5	Osprey	14	12	19	9	11	13	7	8	14	9	10	10	19	15	14	.
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	4	5	2	3	3	4	2	2	5	8	6	5	6	6	8	.
7	Northern Harrier	14	11	17	8	7	11	8	10	10	8	9	9	21	16	18	.
8	Sharp-shinned Hawk	1	1	2	1	2	1	1	1	1	1	1	3	1	2	3	.
8	Cooper's Hawk	.	2	1	2	2	3	2	1	3	3	2	2	3	3	3	.
8	Red-shouldered Hawk	7	10	12	13	12	14	8	8	6	10	11	10	7	8	8	.
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	13	32	17	18	9	19	16	20	14	16	14	19	20	17	24	.
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	19	12	15	13	18	16	15	9	11	12	16	11	17	15	21	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	2	.	.	.	.	.	.	.	1	1	.	1	1	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Northern Bobwhite	.	2	1	.	.	10	2	.	.	2	1	.	1	1	1	.
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	1	2	1	1	8	7	6	2	14	12	10	2	7	8	.
2	Virginia Rail	.	2	1	.	2	1	2	3	1	1	1	1	1	1	1	.
2	Sora	42	55	48	50	57	109	98	77	71	90	62	76	35	49	61	.
2	Purple Gallinule	2	1	1	1	1	2	2	1	1	1	1	2	1	2	3	.
4	Common Moorhen	170	136	127	115	120	150	150	170	130	170	173	149	115	130	175	.
1	American Coot	1	1	1	1	4	4	4	2	4	2	1	3	2	1	1	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	1	2	1	.	.	2	.	1	1	.	.	1	1	.
2	Sandhill Crane	11	.	.	.	.	.	.	6	1	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	575	710	176	84	266	82	20	9	61	174	383	192	1,760	1,205	1,000	.
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	8	3	.	.	.	.	2	2	2	2	3	3	3	6	2	.
4	Lesser Yellowlegs	61	5	.	.	.	1	.	1	2	3	10	4	8	14	8	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	3	12	43	60	17	41	.	1	9	24	27	40	2	22	39	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	8	8	1	.	2	4	.	.	8	16	4	4	4	.	3	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	2	2	2	.	2	5	1	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	32	117	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	33	17	20	15	42	26	6	93	51	38	29	61	88	51	51	.
4	American Woodcock	1	.	1	.	.	.	1	.	.	1	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	6	6	3	3	3	85	13	185	185	4	104	42	50	.	30	.
5	Ring-billed Gull	1,250	835	4,600	110	1,245	1,210	660	3,650	1,200	142	510	270	170	182	410	.
5	Herring Gull	.	.	2	.	2	2	1	3	2	.	4	.	1	.	1	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	1	.	1	.	.	1	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	1	2	4	1	.	5	2	.	1	2	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	15	25	7	13	11	11	10	7	7	7	7	4	2	6	1	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	1	.	.	1	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.
8	Eurasian Collared-Dove	1	4	5	2	1	.	.	.	2	.	.	.	1	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	87	127	49	44	20	34	168	132	260	63	110	157	153	44	96	
8	Common Ground-Dove	2	2	3	4	6	5	7	6	2	3	8	4	3	17	17	
8	Cockatiel							1									
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	2	1	1	2	1	1	1	1	2	
8	Eastern Screech-Owl								1								
8	Great Horned Owl			2	1	1	2	2	1	1	2	1	2	1	1	1	
8	Burrowing Owl																
8	Barred Owl	4		2			2	2	2		1	1	1	1	2	3	
7	Long-eared Owl																
7	Short-eared Owl									1		1		1		2	1
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will			1			1		1	1	1		1				
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	10	1	4	4	8	5	6	8	8	6	7	7	5	5	10	
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	10	12	7	10	8	11	12	14	9	20	8	9	11	9	13	
8	Yellow-bellied Sapsucker	1	1	1						1							1
8	Downy Woodpecker	2	3	3	2	6	6	7	5	7	3	2	2	6	4	5	
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	2	3	3	1	1	2	2	3	2	2	2	3	2	3	
8	Pileated Woodpecker	1	1	1		1	1	2	1	2	2	2	1	2	1	1	

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	1	3	4	.	4	3	3	3	3	5	1	2	3	3	3	.
7	Eastern Phoebe	68	113	79	123	89	105	105	84	66	112	65	79	86	61	75	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	1	1	1	1	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	1	1	.	1	1	.	.	1	1	1	.	.	.	.	.
8	Western Kingbird	1	16	11	11	15	27	15	6	7	15	24	16	1	.	10	.
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	1	.	.	.	1	.	.	.	2	2	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	5	10	6	5	8	4	5	2	2	4	5	2	2	5	3	.
8	White-eyed Vireo	1	2	5	6	4	8	6	3	1	6	4	5	6	6	1	.
8	Bell's Vireo	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Blue-headed Vireo	1	1	3	3	2	2	1	1	2	1	1	.	1	.	1	1
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	12	14	14	13	20	14	8	20	21	19	8	19	9	14	11	.
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	1	.	.	.	.	.	2	.	1
7	Fish Crow	.	.	2	65	60	47	63	395	3	2	2	3	550	3	9	.
7	Purple Martin	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
7	Tree Swallow	1	.	.	19	.	20	21	58	3	12	165	68	25	8	290	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	1	2	1	.	1	3	3	3	5	1	1	1	3	1	.
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	11	9	10	12	14	15	15	19	13	13	21	22	20	21	23	.
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	69	105	77	74	56	105	118	88	65	108	69	72	51	47	100	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
7	Sedge Wren	4	12	6	2	2	6	9	13	5	10	6	4	8	11	20	.
7	Marsh Wren	19	12	20	17	16	18	16	25	6	23	14	14	7	15	16	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	3	10	11	3	14	9	8	9	13	12	5	6	6	8	6	.
8	Blue-gray Gnatcatcher	12	43	44	34	40	46	41	32	29	43	20	43	13	38	22	.
8	Eastern Bluebird	.	.	6	.	.	.	.	1	6	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	1	.	1	1	.	1	1	.	1	.	.	.	1	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	1,376	430	78	159	755	73	310	180	285	115	264	104	64	125	145	.
8	Gray Catbird	42	104	101	72	60	113	125	114	55	102	48	66	86	69	93	.
8	Northern Mockingbird	15	19	24	23	17	22	24	21	21	24	23	20	21	14	13	.
8	Brown Thrasher	.	1	2	1	1	.	.	1	.	.	1	2	1	.	1	1
7	European Starling	4	3	3	3	2	3	2	1	.	2	8	9	19	40	10	.
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	9	308	23	39	4	7	4	41	9	19	22	8	25	22	98	.
8	Cedar Waxwing	15	2	.	2	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	9	11	12	8	13	11	19	7	12	9	3	7	12	6	11	.
8	Nashville Warbler	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	245	300	245	247	265	275	240	425	380	275	230	210	255	250	595	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	1	.	1	.	1	1	1	.	3	.	2	.
7	Prairie Warbler	1	4	3	3	2	1	5	4	6	3	4	1	2	2	2	.
7	Palm Warbler	146	180	275	235	295	475	605	305	380	1,025	420	430	305	205	640	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	1	1	1	.	.	1	.	1	1	.	2	1	1	.
7	Northern Waterthrush	1	3	1	1	2	1	3	3	4	2	1	.	1	2	4	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	56	84	83	55	66	119	73	95	56	124	50	80	75	45	88	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
7	Eastern Towhee	18	13	17	15	9	20	21	20	11	25	15	18	26	30	19	.
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	1	1	1	1	.	.	1	1	1	.	.	.	.	1	.	.
7	Field Sparrow	.	.	.	1	.	1	.	2	1	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	7	7	9	3	1	6	19	7	6	15	1	2	2	2
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	50	86	96	108	117	190	115	148	112	105	130	120	150	105	140	.
7	Grasshopper Sparrow	1	1	1	1	.	.	.	2	2	2	1	.	1	.	1	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.
7	Song Sparrow	3	16	5	5	2	7	6	8	2	5	4	2	3	3	2	.
7	Lincoln's Sparrow	1	1	2	1	.	1	1	.	1	.	.	.	1	1	.	.
7	Swamp Sparrow	77	181	402	172	51	235	204	213	72	112	54	76	94	42	65	.
7	White-throated Sparrow	.	1	.	.	1	1	.	1	2	.	1	1	1	.	.	.
7	White-crowned Sparrow	2	2	4	3	2	2	9	6	8	.	1	2	1	2	1	.
7	Dark-eyed Junco																
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	35	54	45	50	55	67	55	47	77	89	47	44	36	71	46	.
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	1	3	1	5	5	2	2	3	.	2	.	.	2	.	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	14	1	3	1	2	3	3	6	5	1	1	1	1	.	.	.
8	Painted Bunting	1	1	2	1	.	.	.	1	3	2	3	.	1	2	2	1
7	Dickcissel	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	3,850	8,580	2,500	3,610	950	5,900	4,120	3,960	5,200	1,275	1,230	4,950	5,965	7,320	8,660	.
6	Eastern Meadowlark	8	2	1	2	2	2	1	6	8	8	2	2	2	3	4	.
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	930	540	11	27	178	25	2	57	79	15	89	16	62	67	21	.
7	Boat-tailed Grackle	3,700	2,510	160	15	15	1,250	1,700	1,250	150	16	135	20	155	95	360	.

Table A. Part 3

Hab	SPECIES	12/14	12/16	12/211	12/26	12/28	12/30	1/2	1/5	1/7	1/9	1/11	1/15	1/19	1/22	1/26	1/27
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	15	1	12	965	15	20	70	400	750	150	20	350	.	4	240	.
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	1	1	.	1	.	.	3	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	6	4	16	13	14	21	8	9	3	2	3	3	1	7	3	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	102	105	114	102	103	107	100	114	117	106	115	96	108	103	106	8
	TOTAL INDIVIDUALS	18,523	19,277	11,474	7,473	5,625	14,411	11,845	15,205	11,061	5,288	5,570	9,304	11,309	12,134	14,480	9

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	4	3	1	2	2	1	1	2	1	2	1	.	.	.	.	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	1	3	.	.	5	25	16	34	64	12	75	85	136	103	246	167
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
1	Neotropical Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	198	244	224	214	151	107	23	83	186	168	163	76	159	145	77	136
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	22	11	18	20	19	14	16	11	12	5	7	11	6	5	2	4
2	American Bittern	1	2	3	1	1	2	2	1	6	5	11	10	5	9	16	6
2	Least Bittern	.	.	.	1	.	.	.	.	.	1	3	2	3	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	19	22	23	23	20	22	14	31	18	17	13	18	20	14	30	18
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	19	6	11	8	23	12	44	14	17	19	18	13	28	8	40	4
2	Snowy Egret	7	7	16	14	30	23	37	21	12	30	17	33	45	6	43	9
2	Little Blue Heron	10	18	12	9	7	19	16	14	8	12	9	16	15	5	10	8
2	Tricolored Heron	4	7	10	5	5	4	8	7	5	2	6	5	3	2	6	2
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	15	80	64	102	195	260	100	27	203	20	177	205	203	155	17	140
2	Green Heron	4	7	5	4	4	8	4	5	5	6	6	4	6	13	18	9
2	Black-crowned Night-Heron	3	1	2	3	1	3	.	1	2	1	9	2	6	1	5	2
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
2	White Ibis	45	87	7	28	43	188	20	48	26	22	39	95	31	263	22	110
2	Glossy Ibis	250	560	7	270	220	370	32	311	260	20	20	197	282	248	27	70
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Black Vulture	2	1	.	.	4	3	1	5	21	2	1	1	13	1	2	11
7	Turkey Vulture	16	17	16	.	9	16	24	58	20	14	31	45	20	46	8	6
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	.	1	9	2	10	37	22	9	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	.	2	.	2	4	2	2	5	2	2	2	5	8	7	2
3	Gadwall	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	2	2	2	1	1	2	3	2	1	3	1	2	3	3	2	1
3	Mottled Duck	10	8	9	11	7	9	9	9	6	16	5	12	15	17	13	5
3	Blue-winged Teal	.	.	8	.	.	.	.	.	.	.	9	30	55	22	44	210
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	2	.	.	.	.	.	.	2	.
3	Northern Pintail	.	.	.	.	3	.	.	.	.	.	2	.	.	.	.	.
3	Green-winged Teal	.	.	.	5	.	.	.	.	.	.	1	1	2	.	1	2
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	1	.	.	.	45	.	.	2	5	10	.	.	3
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	3	8	7	2	3	4	2	2	2	.	3	.	3	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	830	12	.	.	.	.	.	22	.	.	3,100	.	3,650	.	120	.
5	Osprey	8	6	12	13	14	13	9	8	10	17	10	13	11	9	12	13
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	5	3	2	5	7	6	3	6	7	8	4	7	4	10	8	7
7	Northern Harrier	7	7	23	12	23	23	31	36	26	18	10	5	17	18	28	15
8	Sharp-shinned Hawk	3	1	3	1	3	2	1	1	2	1	1	2	1	1	.	1
8	Cooper's Hawk	4	4	4	4	4	1	2	1	2	2	.	3	2	4	2	2
8	Red-shouldered Hawk	8	8	8	1	4	8	6	7	7	5	7	1	7	4	3	6
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	15	17	10	8	12	25	25	21	9	12	14	10	11	13	8	13
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	15	12	15	9	12	14	11	11	10	8	8	11	7	12	11	14
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	1	.	1	.	.	.	1	.
7	Merlin	.	.	.	1	.	.	.	1	1	1	.	1	.	.	.	1
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1
7	Northern Bobwhite	.	.	.	1	1	.	.	1	1	1	.	.	1	1	.	2
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	8	5	4	1	2	8	6	5	5	3	6	1	1	4	3	.
2	Virginia Rail	.	1	.	.	.	1	.	.	.	.	1	.	.	.	.	.
2	Sora	62	65	61	41	45	41	37	37	36	27	43	21	30	32	22	21
2	Purple Gallinule	3	4	2	2	2	6	4	7	8	10	5	4	10	8	3	8
4	Common Moorhen	157	125	185	180	185	130	100	135	80	190	90	130	135	135	70	100
1	American Coot	1	1	.	1	1	1	.	3	2	2	1	1	7	4	3	5

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	1	.	.	.	.	.	1	.	.	2	1	3	.	1	.
2	Sandhill Crane	.	.	.	.	.	33	.	.	12	.	1	.	1	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	2	2	5	3	1	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	1,025	1,085	1,065	1,935	950	550	480	65	25	28	155	5	5	12	5	10
4	Black-necked Stilt	.	.	.	.	.	.	.	.	1	1	1	1	.	.	2	2
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	4	2	7	4	15	1	15	21	13	10	11	5	1	.	4
4	Lesser Yellowlegs	6	4	4	6	17	11	14	22	121	25	60	10	94	4	5	5
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	22	10	11	9	5	2	23	14	33	126	115	52	265	105	74	2
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	1	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24	
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
4	Wilson's Snipe	67	116	80	108	88	79	126	17	21	42	27	9	123	74	18	3	
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	14	3	63	45	49	31	.	2	2	1	1	.	.	.	4	.	
5	Ring-billed Gull	43	160	29	20	830	6	2	3	5	15	2	16	5	5	9	16	
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	.	1	.	.	.	2	10	1	8	1	4	2	3	
5	Royal Tern
5	Sandwich Tern
5	Roseate Tern
5	Common Tern	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.
5	Arctic Tern
5	Forster's Tern	4	2	7	4	5	2	1	7	3	4	17	3	2	8	2	14	
5	Least Tern	2
5	Black Tern
5	Bridled Tern
5	Sooty Tern
5	Black Skimmer
8	Rock Pigeon	.	.	1	1	.	.	.	.	.	1	1	.	.	.	.	.
8	Eurasian Collared-Dove	.	.	.	.	.	.	.	2	1	.	1	1	1	1	1	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	81	88	21	130	19	17	64	65	15	61	45	49	81	80	132	101
8	Common Ground-Dove	20	21	10	9	15	18	12	17	7	6	10	7	12	17	14	5
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	2	2	3	1	3	3	2	
8	Eastern Screech-Owl																
8	Great Horned Owl	1	1	1	1	1	2	2	1	1	1					1	
8	Burrowing Owl																
8	Barred Owl	3	1				2	1		2	2		2	1	1		1
7	Long-eared Owl																
7	Short-eared Owl						1										
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will				1							1	1	1	1		
7	Chimney Swift																2
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	6	9	8	6	6	10	6	6	4	6	5	6	7	8	7	4
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	13	15	5	1	5	13	14	14	17	10	16	10	17	19	15	11
8	Yellow-bellied Sapsucker		2												1		
8	Downy Woodpecker	6	6	5		1	10	6	8	5	3	5	1	9	10	5	4
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	1	1	2	1	1	2	2	5	2	1	5	2	2	3	1	1
8	Pileated Woodpecker	2	2	1		2	3	3	2	3	3	3	2	3	4	2	2

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	2	2	1	.	2	2	3	1	2	1	1	.	1	1	.	.
7	Eastern Phoebe	72	79	64	14	43	72	73	65	65	70	46	30	39	50	29	5
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	1	2	.	.	.	2	.	1	.	.	.	.	.	.	.
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Brown-crested Flycatcher	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
8	Western Kingbird	8	7	.	.	5	5	5	5	20	6	18	9	23	11	27	21
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	3	1	.	2	.	3	.	.	.	2	3
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	4	.	1	.	1	1	2	1	2	2	2	2	1	4	3	3
8	White-eyed Vireo	2	3	2	1	6	8	10	18	13	11	12	9	8	6	6	6
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Blue-headed Vireo	1	1	.	.	.	2	1	.	1	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	21	15	11	3	11	10	11	16	9	17	13	5	14	23	7	9
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	3	2	2	.	2	.	1	1	1	.	.
7	Fish Crow	32	46	5	30	61	78	45	10	19	5	18	3	6	6	9	8
7	Purple Martin	2	.	1	.	1	4	4	.	.	.	2	.	4	2	1	2
7	Tree Swallow	110	72	450	260	105	675	960	1,160	70	3,020	565	7,120	545	1,635	115	140
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	17	16	22	34	34	34	49
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	3	1	.	1	2	1	2	2	1	1	2	2	1	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	23	22	20	2	20	64	32	71	56	83	44	29	63	59	43	56
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	84	75	43	4	61	47	52	57	58	32	52	25	43	62	44	35
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	6	11	5	2	7	11	12	12	11	9	6	9	8	7	8	7
7	Marsh Wren	14	13	11	4	18	12	10	14	9	9	8	10	6	12	4	2
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	8	6	5	1	4	7	7	5	6	3	2	.	2	3	1	1
8	Blue-gray Gnatcatcher	37	36	19	9	25	32	44	44	39	42	31	11	10	4	.	1
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	120	170	335	1,930	1,080	2,140	1,490	1,065	1,050	3,100	1,400	665	40	11	6	.
8	Gray Catbird	83	86	40	16	55	35	55	34	30	37	13	17	20	45	19	10
8	Northern Mockingbird	15	13	19	6	8	20	18	19	14	20	16	13	26	39	25	25
8	Brown Thrasher	1	1	2	.	.	1	2	1	1	.	1	1	3	1	.	1
7	European Starling	4	2	8	10	4	5	2	2	1	5	17	36	7	6	1	23
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	9	4	41	63	19	37	16	4	4	10	4	3	.	5	.	.
8	Cedar Waxwing	14	8	35	.	6	2	15	.	.	.	.	.	2	.	.	14
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	7	8	5	2	6	12	5	5	5	3	3	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	6	15	11	6	3	7	1

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	1,730	3,140	4,410	1,270	5,370	7,635	6,260	8,290	8,360	3,740	8,470	3,560	1,075	280	49	9
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.
8	Pine Warbler	2	.	.	.	.	.	.	1	1	1	.	.	1	.	.	.
7	Prairie Warbler	3	1	1	.	1	4	4	2	3	1	.	1	1	2	2	1
7	Palm Warbler	820	775	960	80	810	2,425	2,890	2,350	3,120	1,825	1,530	1,170	1,060	830	330	250
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	3	3	4	.	2	1	1	2	1	.	.	.	2	1	2	.
7	Northern Waterthrush	6	6	4	1	6	4	4	4	2	5	1	1	2	1	3	1
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	1	2	1	5	3	2	3
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	93	76	47	13	71	48	55	28	46	51	53	29	51	88	36	23
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
7	Eastern Towhee	23	29	24	7	18	35	28	26	28	73	52	27	51	68	43	22
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	1	1	1	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	2	6	3	4	5	4	4	7	5	1	1	1	4	.	3	2
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	190	123	155	160	170	70	91	57	19	52	8	29	34	60	13	10
7	Grasshopper Sparrow	.	3	1	1	1	1	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	1	2	3	.	3	2	2	2	1	1	2	1	2	.	1	.
7	Lincoln's Sparrow	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	78	72	27	20	46	66	34	33	32	27	20	28	43	55	25	5
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	2	2	2	4	4	4	3	1	2	.	2	1	.	1	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	74	71	62	20	65	92	91	89	101	134	89	48	153	153	120	96
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	1	.	1	.	.	.	.	1	2	1	1	.	.	1	.	.
8	Painted Bunting	1	1	1	1	1	1	.	.	1	1	.	.	1	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	5,360	3,440	2,390	2,925	1,895	1,685	595	1,460	4,000	1,570	2,800	225	1,160	2,240	2,000	2,000
6	Eastern Meadowlark	2	1	2	6	12	2	5	3	9	12	5	4	5	17	15	5
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	9	25	5	1	7	40	8	3	7	9	27	6	17	11	15	10
7	Boat-tailed Grackle	35	405	40	50	390	95	35	105	95	60	45	95	80	35	150	160

Table A. Part 4

Ha	SPECIES	1/30	2/2	2/5	2/9	2/12	2/15	2/19	2/23	2/26	3/2	3/5	3/9	3/12	3/16	3/19	3/24
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	1	53	450	100	15	2,050	7	1,750	1,800	60	1,500	1,500	450	1,255	1	1
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	1	1	1	.	1	2	.	.	3	1	4	3	2	.	1	3
8	House Finch	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	101	102	98	87	101	105	97	104	109	107	113	104	109	100	98	103
	TOTAL INDIVIDUALS	12,198	11,819	11,817	10,309	13,514	19,739	14,368	18,134	20,523	15,187	21,352	16,047	10,734	8,863	4,461	4,369

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	2	3	1	.	4	4	.	1	1	1	1	2	1	1	2
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	200	740	440	190	165	55	211	197	155	33	16	26	56	192	6	.
1	Brown Pelican	.	1	.	.	1	1	.	.	1	.	.	.	1	1	1	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	128	98	89	80	89	165	62	107	35	36	37	19	21	9	7	9
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	5	6	5	4	3	6	5	6	6	3	2	7	7	6	13	16
2	American Bittern	17	16	15	10	3	4	1	2	1	1	.	.	.	.	.	.
2	Least Bittern	3	2	2	1	.	1	2	1	3	2	2	3	8	17	4	5
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	12	11	21	20	33	16	36	28	22	16	22	18	7	12	16
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	26	51	13	22	39	13	14	39	10	26	39	11	18	39	7	7
2	Snowy Egret	46	77	11	19	17	19	19	23	7	33	22	12	15	32	7	21
2	Little Blue Heron	22	15	11	12	16	7	9	8	4	8	9	10	6	26	13	21
2	Tricolored Heron	4	5	8	6	6	5	8	8	3	6	9	5	2	17	4	12
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	280	73	380	115	215	122	175	62	66	114	300	71	68	150	275	140
2	Green Heron	10	11	13	13	9	19	13	15	17	19	6	20	14	14	21	15
2	Black-crowned Night-Heron	.	1	1	3	1	2	2	1	1	3	1	2	.	1	1	3
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	1	.	.	.	.	2	1	.	.	.
2	White Ibis	133	107	160	33	54	203	89	9	10	28	5	7	44	67	18	11
2	Glossy Ibis	85	77	75	13	76	4	50	11	5	2	2	9	16	2	42	3
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.
7	Black Vulture	7	2	89	7	30	4	4	3	13	3	1	7	2	1	8	7
7	Turkey Vulture	8	3	18	4	9	5	7	5	3	6	4	9	5	2	4	7
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	29	4	7	25	10	5	6	5	10	6	10	10	2	2	1	2
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	2	4	2	1	5	4	.	2	3	.	.	1	2	1	2	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	1	3	1	1	1	1	1	1	1	1	1	1	1	.	1	1
3	Mottled Duck	7	4	9	7	10	9	4	6	6	4	6	2	5	2	12	11
3	Blue-winged Teal	213	68	63	112	28	82	21	7	2	.	.	.	.	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	1	1	.	.	.	.	1	1	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	870	340	1,295	233	.	187	1	4	3	3	.	.	.	.	.	.
5	Osprey	8	11	21	22	43	49	56	38	57	30	43	30	13	34	20	13
7	Swallow-tailed Kite	.	1	.	1	.	.	.	1	.	.	.	3	.	2	6	5

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	6	6	5	4	6	5	5	7	4	5	6	4	4	4	2	2
7	Northern Harrier	15	9	11	10	10	6	7	4	6	4	2	1	1	.	.	.
8	Sharp-shinned Hawk	2	1	3	1	.	.	1	.	.	.	.	.	.	.	.	.
8	Cooper's Hawk	1	3	.	2	.	1	2	1	.	.	1	1	.	.	.	.
8	Red-shouldered Hawk	5	3	6	6	5	5	4	4	4	3	1	4	2	2	3	1
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	8	10	8	10	10	10	6	4	11	9	7	7	8	7	7	8
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	6	7	6	3	5	5	2	.	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	1	.	.	.	.	1	.	.	1	.	.	.	.	.
7	Northern Bobwhite	3	11	6	7	6	11	7	18	21	13	11	17	15	14	24	41
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	1	.	.	.	.	1	1	.	2	.	1	1	2	2	1	3
2	Virginia Rail	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	18	10	20	9	13	21	14	2	1	2	.	.	1	.	.	.
2	Purple Gallinule	8	10	8	10	13	18	17	58	33	45	39	56	38	55	57	31
4	Common Moorhen	90	75	70	70	67	85	71	90	65	70	50	90	70	55	65	65
1	American Coot	1	1	1	1	1	12	2	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	5	3	5	3	6	6	5	5	9	6	4	8	5	9	6	8
4	Black-necked Stilt	3	23	7	13	17	31	41	33	23	28	24	20	19	8	14	14
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	4	3	2	1	3	1	1	1	2	4	1	2	.	.	.
4	Lesser Yellowlegs	2	4	2	.	4	14	1	2	7	4	4	2	1	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	1	6	2	2	2	2	2	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	1	.	1	4	.	.	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	.	.	.	.	.	.	.	.	.	.	.	.	6	4	13	5
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.
4	Least Sandpiper	22	.	44	6	.	3	1	2	3	8	8	15	20	6	8	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	6	.	.	.	.	.	.	.	.	.	18	.
4	Long-billed Dowitcher	.	.	4	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	25	.	4	5	6	1	.	1	.	1	2	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	2	2	1	.	.	19	8	8	1	1	.	.	18	2	2
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	1	.	43	12	2	2	4	2	.	.	.	.	.	.	.	.
5	Ring-billed Gull	7	27	19	35	22	66	69	14	13	8	2	2	12	3	.	.
5	Herring Gull	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
5	Caspian Tern	3	5	8	2	5	4	11	11	6	3	1	1	.	3	.	.
5	Royal Tern	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	21	13	36	63	2	13	21	18	7	3	1	.	.	1	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
5	Black Tern	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Rock Pigeon	2	.	.	.	.	.	7	.	2	2	4	.	.	4	.	.
8	Eurasian Collared-Dove	1	1	1	2	1	2	2	1	1	1	1	4	2	2	1	3

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove	2				1						6			2		
8	Mourning Dove	60	86	38	74	50	13	50	38	21	21	27	25	29	32	79	70
8	Common Ground-Dove	14	21	17	18	5	26	19	34	27	25	17	47	34	37	38	49
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo							1	1	2	7	1	23	13	8	5	6
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl		1			2	1	1	2	1	1	2	2	3		2	
8	Eastern Screech-Owl																
8	Great Horned Owl					1	1	1	1				1	1			
8	Burrowing Owl																
8	Barred Owl					1	2	1				2		1		1	
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk								2	12	4	1	5	2	3	6	4
8	Chuck-will's-widow		4	1	1	2	3	1	1	4	1		6	1	2	1	2
8	Eastern Whip-poor-will		2				1										
7	Chimney Swift			1	4	21	5	14	20	2	5	9	7	4	9	5	5
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	5	8	9	3	2	3	1	2	2	1					1	
8	Red-headed Woodpecker		1														
8	Red-bellied Woodpecker	10	10	14	15	13	19	13	19	22	48	16	29	17	11	22	19
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	4	2	1	1	2	4	3	5	2	3	3	7	2	1	3	1
8	Hairy Woodpecker											1					
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	2	1	2	2	2	1	1	1	1	1	2	2	1	4	2
8	Pileated Woodpecker	2	2	1	3	1	1	3	2	2	2	1	2	1	2	2	3

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	1	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	5	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	1	1	1	3	2	5	10	1	10	9	2	11	7	11	8	5
8	Brown-crested Flycatcher	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	29	30	19	21	.	19	13	19	10	9	5	9	5	.	.	.
8	Eastern Kingbird	1	.	1	1	.	.	2	.	.	.	.	3	1	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	1	2	3	.	.	.	.	2	2	1	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	1	2	1	2	2	1	2	1	1	1	2	1	1	2	2	1
8	White-eyed Vireo	5	3	6	3	2	3	5	5	5	5	2	3	3	4	2	1
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	1	2	3	2	1	2	1	2	2	1	1	1	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	18	7	7	11	8	12	22	15	17	24	6	22	10	15	23	12
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	American Crow	.	.	2	.	1	.	.	.	.	.	.	.	.	2	.	.
7	Fish Crow	6	20	35	6	16	10	9	6	4	6	7	6	5	6	14	8
7	Purple Martin	3	1	4	2	4	7	6	2	2	.	1	9	8	8	43	11
7	Tree Swallow	290	665	360	250	295	112	10	30	.	1	5	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	2	.	2	.	.	.	3	.	.	.	1	.
7	Bank Swallow	.	.	.	.	1	.	2	.	.	.	2	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	36	48	39	59	82	52	61	68	64	47	96	68	51	73	54	72
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	2	2	1	2	1	3	4	2	2	3	3	3	1	1	2	3
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	55	47	36	36	31	50	50	54	103	91	55	88	55	53	73	46
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	55	38	34	32	23	33	20	3	1	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	13	9	9	7	5	12	5	8	3	3	1	.	.	.	.	.
7	Marsh Wren	11	8	13	6	3	6	4	16	22	10	7	7	4	4	3	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Gray Catbird	22	23	11	16	7	34	47	78	74	69	29	12	4	1	2	1
8	Northern Mockingbird	28	23	22	25	22	53	29	32	24	30	16	22	26	22	23	16
8	Brown Thrasher	1	1	1	.	1	2	1	1	2	2	1	2	2	1	1	2
7	European Starling	3	23	34	14	13	3	7	4	12	3	7	5	3	6	6	4
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	12	4	.	40	5	.	.	1	.	30	10	37	14	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	3	2	3	4	3	2	.	3	2	3	3	6	4	2	3	3

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	1	1	.	2	.	2	1	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	2	.	1	1	.	.	.
8	Yellow-rumped Warbler	5	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	3	4	1	5	.	3	1	3	5	7	1	1	1	.	.	.
7	Palm Warbler	440	330	317	182	124	245	66	16	19	64	1	12	2	.	1	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	10	1	11	1	.	1	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	1	3	2	3	2	6	1	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	4	1	1	1	.	.	2	5	13	27	9	9	1	.	1	1
7	Louisiana Waterthrush	2	1	.	.	.	.	.	.	2	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
7	Common Yellowthroat	51	19	23	14	7	31	23	23	37	33	13	20	7	5	2	1
8	Hooded Warbler	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	2	1	3	1	2	5	4	4	4	5	12	14	15
8	Summer Tanager	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
7	Eastern Towhee	36	36	28	29	29	49	33	38	65	49	34	72	76	54	49	52
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	13	13	20	11	4	11	10	9	3	5	1	1	.	.	.	.
7	Grasshopper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	17	13	21	12	3	33	11	6	7	4	2	2	.	.	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	White-crowned Sparrow	.	.	.	6	6	3	.	3	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	218	132	102	118	90	235	185	191	243	244	132	273	163	133	166	132
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	.	4	1	1	1	5	11	6	18	13	11	22	16	16	9
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	1	.	2	.	3	4	13	16	34	12	38	25	14	19	20
8	Painted Bunting	.	.	.	.	1	.	.	1	5	1	.	5	3	4	2	2
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	1	.	.	2	535	280	1,570	610	430	44	28	10	1
7	Red-winged Blackbird	1,600	2,000	2,850	13,310	9,490	7,230	13,475	3,680	3,710	2,690	2,070	240	160	12	350	45
6	Eastern Meadowlark	3	4	5	10	5	4	6	6	8	2	12	3	5	5	9	8
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	6	10	8	13	5	7	4	5	4	11	8	16	13	10	16	33
7	Boat-tailed Grackle	85	165	225	430	695	1,075	510	270	280	100	90	70	65	50	145	40

Table A. Part 5

Hab	SPECIES	3/26	3/29	4/2	4/6	4/11	4/13	4/16	4/21	4/24	4/27	4/30	5/4	5/7	5/12	5/15	5/18
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	5	2	1	1	6	1	1	.	1	3	1	4	1	1	2	3
8	Orchard Oriole	.	.	.	.	.	3	3	2	7	4	4	4	2	1	2	4
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
8	Purple Finch	2	4	1	1	.	6	.	1	.	.	16	4	.	.	.	.
8	House Finch	.	.	.	1	.	.	.	.	1	2	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	104	108	102	103	97	105	108	109	106	102	103	103	95	84	85	74
	TOTAL INDIVIDUALS	5,583	5,817	7,406	16,014	12,192	10,793	15,870	6,194	5,868	5,940	4,120	2,218	1,476	1,503	1,942	1,224

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	1	1	1	1	.	.	.	1	.	2	1	3	.	.	.	3
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	9	11	12	18	2	5	11	7	4	4	6	7	7	12	9	10
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	10	8	13	14	9	14	19	14	18	22	31	31	32	18	23	13
2	American Bittern	.	.	.	.	.	.	1	.	.	1	1	.	.	.	.	.
2	Least Bittern	3	2	3	3	4	6	1	4	1	2	7	7	3	5	3	5
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	14	7	12	20	14	11	14	9	16	16	15	27	20	10	14	16
2	Great White Heron	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	24	4	7	20	13	45	22	14	19	61	23	48	64	45	24	41
2	Snowy Egret	22	2	17	21	5	51	14	26	46	110	50	76	50	44	51	46
2	Little Blue Heron	15	22	22	29	12	21	14	13	26	26	45	55	19	42	37	38
2	Tricolored Heron	10	5	4	7	5	10	4	11	14	15	14	35	31	44	64	31
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	310	100	350	430	39	186	636	800	490	910	1,345	1,125	455	890	750	605
2	Green Heron	41	14	37	37	34	67	28	45	29	84	61	109	28	73	50	44
2	Black-crowned Night-Heron	1	1	3	2	.	1	1	.	4	3	5	2	3	7	4	8
2	Yellow-crowned Night-Heron	.	.	2	.	.	.	1	2	.	.	1	.	2	1	.	.
2	White Ibis	51	41	61	37	18	72	40	56	92	1,370	101	220	180	110	96	47
2	Glossy Ibis	6	.	2	10	17	79	4	56	4	240	12	117	9	62	162	58
2	White-faced Ibis	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	1	.	7	.	1	.	1	1	1
7	Black Vulture	.	10	9	5	.	1	4	5	7	8	3	7	4	8	9	4
7	Turkey Vulture	1	3	5	9	6	7	16	5	18	34	14	14	23	31	16	81
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	1	5	.	3	2	.	.	2	1	3	.	3	2	1
3	Fulvous Whistling-Duck	.	2	3	3	1	3	3	3	4	5	2	10	39	16	71	61
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	.	3	.	.	.	.	2	2	2	.	4	1	.	1	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	1	.	.	.	.	1	.	.	.	.	.	.	2	2	.
3	Mottled Duck	1	4	3	6	6	9	4	2	6	3	3	3	13	20	14	7
3	Blue-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	21	12	24	22	21	10	23	13	18	10	17	21	16	9	20	5
7	Swallow-tailed Kite	.	13	6	24	.	2	23	27	4	18	21	12	106	19	148	211

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	3	2	2	1	5	3	.	.	2	.	1	.	2	1	.	.
7	Northern Harrier	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cooper's Hawk	.	.	.	1	1	.	.	2	1	1	.	1	2	.	.	1
8	Red-shouldered Hawk	1	1	2	2	2	2	2	1	4	5	2	5	6	8	1	2
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	7	6	6	4	5	3	6	4	1	6	6	7	7	5	8	8
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kirder'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	55	37	22	25	34	18	30	26	27	15	40	34	60	69	51	46
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	1	.	1	1	4	3	7	.	3	7	4	.	.
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	27	31	21	32	26	18	17	16	23	27	26	44	26	24	28	16
4	Common Moorhen	90	90	51	60	46	65	75	135	125	116	120	150	115	80	135	105
1	American Coot	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	4	2	2	7	2	5	2	2	1	1	1	2	1	1	2	.
4	Black-necked Stilt	9	7	13	15	7	16	4	6	2	14	20	.	2	25	16	8
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
4	Lesser Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Least Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	3	10	6	.	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	.	.	.	2	.	1	.	.	.	1	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Eurasian Collared-Dove	2	1	1	2	2	.	5	1	1	1	2	1	2	1	1	1

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	114	37	31	28	86	38	50	115	43	160	92	200	189	77	290	73
8	Common Ground-Dove	111	69	40	39	51	53	69	60	42	49	54	51	53	41	55	54
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo	15	6	6	9	9	6	12	10	4	5	5	5	4	4	4	4
8	Smooth-billed Ani											1					
8	Groove-billed Ani																
8	Barn Owl	1	2			3	2		1	1		1				2	1
8	Eastern Screech-Owl					1			1								
8	Great Horned Owl						1		3							1	1
8	Burrowing Owl									1							
8	Barred Owl			1			2		2	1			1				
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk	2	1	2	1	5	5	6	1	1	1	1	1	3	3	1	2
8	Chuck-will's-widow	1	6	1	1	13	1	4	1			1			2	1	1
8	Eastern Whip-poor-will																
7	Chimney Swift	9	2	11	7	4	5	10	4	2	2	6	18	10	8	27	2
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher									2							
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	20	13	16	19	20	5	13	16	14	14	14	19	24	19	17	16
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	1	7	6	3	10	2	5	4	2	2	3	4	4	1	2	1
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker										1						
8	Northern Flicker	1	3	5	2	1	1	1	1		2	1	1	2	2	1	1
8	Pileated Woodpecker	2	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
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	9	4	4	2	7	2	5	3	5	4	4	4	4	4	10	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	2	3	2	1	.	2	2	1	2	1	1	.	.	1	2
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	1	1	2	1	1	1	1	1	2	1	1	3	2	3	5	1
8	White-eyed Vireo	2	1	1	3	3	1	2	.	2	3	4	2	4	2	2	4
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	15	16	12	18	15	10	11	17	5	9	19	28	23	31	22	17
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	2	.	.	.	.	.	.	.	.	6	.	.
7	Fish Crow	5	3	21	8	3	4	10	6	20	6	16	21	26	26	28	3
7	Purple Martin	13	1,440	305	395	395	370	160	320	180	155	54	28	2	11	610	9
7	Tree Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	48	60	47	40	22	39	85	92	84	85	59	60	58	62	85	107
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	3	1	2	1	3	1	4	3	1	2	1	5	6	1	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	53	24	35	34	28	13	30	26	26	41	31	52	52	42	38	38
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	2	1	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	19	16	16	30	14	19	18	18	21	14	23	40	46	84	102	50
8	Brown Thrasher	3	1	6	2	3	4	7	2	4	2	9	6	9	5	7	5
7	European Starling	4	3	2	21	5	155	77	33	130	49	24	230	22	5	86	46
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	2	2	1	2	1	1	1	1	1	1	1	2	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler																
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Palm Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	1	4	.	.	.	1	.	3	1	1	1	2	1	1
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	16	7	6	19	8	7	30	5	13	8	21	14	21	19	21	13
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
7	Eastern Towhee	113	50	44	38	53	31	60	53	47	57	129	135	191	172	156	147
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	190	109	106	129	119	58	141	93	96	99	148	180	186	137	133	140
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	24	17	16	14	21	11	21	16	23	20	27	29	23	26	19	27
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	25	20	18	17	22	16	31	27	28	25	36	31	34	21	43	25
8	Painted Bunting	4	1	1	1	5	1	6	4	4	3	5	4	5	3	3	3
7	Dickcissel	.	.	.	.	.	.	.	.	4	1	.	3	1	2	1	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	490	310	375	600	650	450	600	1,200	1,800	2,390	280	450	360	370	190	125
6	Eastern Meadowlark	11	14	10	5	9	3	5	11	9	12	11	10	10	11	6	6
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	12	5	13	12	21	70	36	51	3	20	9	330	17	47	87	54
7	Boat-tailed Grackle	55	70	45	80	85	120	380	340	1,040	785	240	460	350	150	275	395

Table A. Part 6

Hab	SPECIES	5/21	5/26	5/29	6/1	6/4	6/8	6/11	6/16	6/18	6/23	6/26	6/29	7/2	7/4	7/6	7/9
7	Shiny Cowbird	.	.	.	.	.	1	1	1	.	.	.	1	2	1	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	1	.	3	1	3	2	1	3	1	5	2	.	2	2	4	2
8	Orchard Oriole	4	6	11	8	4	5	7	7	10	4	14	9	8	3	2	5
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	2	.	.	.	.	.	1	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	65	68	72	76	67	71	72	77	72	74	72	72	70	74	73	73
	TOTAL INDIVIDUALS	2,145	2,775	1,957	2,486	2,045	2,254	2,941	3,881	4,689	7,194	3,348	4,627	3,091	3,104	4,158	2,916

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	2	1	.	.	.	2	2	2	2	2	2
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	.	.	.	.	.	.	.	.	.	.	.
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	10	12	10	5	8	9	7	8	3	4	4
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	18	24	19	11	12	16	21	17	9	19	13
2	American Bittern	1	.	.	.	.	.	.	.	.	.	.
2	Least Bittern	5	5	3	2	3	2	2	1	.	2	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	13	8	5	7	15	9	10	17	13	12	7
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	6	38	16	37	20	20	10	5	29	37	7
2	Snowy Egret	33	72	51	45	38	19	6	18	55	48	17
2	Little Blue Heron	32	79	58	16	42	29	25	27	27	26	18
2	Tricolored Heron	27	93	83	48	28	15	26	23	33	14	13
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	1,410	1,700	830	430	295	610	285	655	1,020	340	545
2	Green Heron	42	59	66	71	32	27	27	17	7	14	11
2	Black-crowned Night-Heron	1	3	4	7	1	1	1	2	3	1	1
2	Yellow-crowned Night-Heron	.	2	.	1	2	2	1	2	2	1	2
2	White Ibis	56	190	95	11	42	17	17	21	80	117	47
2	Glossy Ibis	41	1,380	243	90	109	39	27	7	51	122	17
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	1	4	3	.	.	.	.	.	.	.	1
7	Black Vulture	13	7	14	2	16	3	5	3	4	6	3
7	Turkey Vulture	47	38	11	15	25	20	16	25	12	24	51
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	6	4	3	1	4	2	1	1	3	1
3	Fulvous Whistling-Duck	8	29	22	8	15	7	2	15	6	2	14
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	1	7	.	1	.	.	.	4	.	2	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	3	2	1	.	1	.	.	.	1	.
3	Mottled Duck	5	56	14	12	.	2	2	3	.	19	.
3	Blue-winged Teal	.	.	1	1	1	2	.	.	.	1	4
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	9	8	7	11	18	7	6	9	7	10	5
7	Swallow-tailed Kite	105	303	413	207	556	415	243	202	41	36	90

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	1	2	.	.	.	.	1	.	1	1	1
7	Northern Harrier	.	.	.	.	.	.	.	.	.	1	.
8	Sharp-shinned Hawk	.	.	.	.	.	1	.	1	.	.	1
8	Cooper's Hawk	2	3	2	5	3	2	8	6	7	12	8
8	Red-shouldered Hawk	3	5	4	3	7	9	6	15	7	18	13
8	Broad-winged Hawk	.	.	.	.	.	.	.	1	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	1	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	4	9	6	7	7	7	7	10	11	18	12
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.
8	Kriider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	.	.	1
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	45	37	24	22	40	25	21	31	14	15	8
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	5	2	2	6	4	4	6	6	8	8	8
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	18	20	6	19	12	17	14	12	10	11	9
4	Common Moorhen	155	130	110	185	115	160	185	170	135	135	140
1	American Coot	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
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	1	1	1	.	.	1	.	1	1	.	1
4	Black-necked Stilt	.	28	29	1	.	.	4	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	.	.	2	.	.	.	.	.	.
4	Lesser Yellowlegs	.	2	.	1	.	.	.	.	.	.	.
4	Solitary Sandpiper	.	1	1	1	.	.	1	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	1	1	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	1	.	1
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	3	.	.	5	3	.	.	.	.	.
4	Western Sandpiper	.	2	.	3	3	1	.	.	.	.	.
4	Least Sandpiper	5	20	2	.	4	.	.	2	.	1	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	3	1	2	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	6	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	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	.	.	.	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	.	.	.	.	.	.	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	2	.	.	.	.
8	Eurasian Collared-Dove	2	1	2	1	1	1	2	1	2	1	2

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
8	Diamond Dove											
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	.	3	2	.	2	.	.	2	2	.	1
8	Mourning Dove	270	725	195	170	300	340	255	135	85	147	155
8	Common Ground-Dove	48	36	32	26	51	44	36	30	16	33	21
8	Cockatiel	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	3	1	1	1	5	2	1	1	.	2	.
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	3	1	1	3	3	1	4	5	2	7	4
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	.	.	.	.	.	1	.	.	.	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	.	.	.	.	.	1	.	.	1
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	5	1	2	1	.	1	.	.	1	.	1
8	Chuck-will's-widow	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	16	2	4	30	4	5	16	9	865	165	270
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	.	.	.	.	.	.	.	.	.	.	.
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	14	12	14	17	15	13	17	15	8	23	10
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	3	3	3	3	4	2	2	2	2	6	1
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	2	2	1	1	2	2	1	1	1	1	2
8	Pileated Woodpecker	1	1	1	2	2	1	2	1	2	3	1

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	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	2	2	2	1	1	1	2	2	2	8	1
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	1	1	1	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	4	4	2	1	3	3	2	2	2	2	1
8	White-eyed Vireo	3	4	2	1	2	2	2	2	1	2	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	1	.	1	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	25	19	17	21	17	25	22	23	16	18	15
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	.	.	.	.	2
7	Fish Crow	7	110	22	45	3	4	14	28	76	39	1
7	Purple Martin	15	.	.	.	.	.	.	.	7	2	.
7	Tree Swallow	.	.	.	.	.	.	1	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	2	.
7	Bank Swallow	.	1	1	.	.	.	.	.	.	5	.

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
7	Cliff Swallow	.	.	.	.	.	.	.	1	3	1	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	85	170	90	77	82	49	49	43	330	64	50
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	3	3	4	2	2	2	1	1	2	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	20	25	28	27	25	25	26	19	13	26	17
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	1	.	1	1	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	.	.	.	.	.	.	2	.	.	.	.
8	Northern Mockingbird	65	52	18	32	21	26	23	24	32	28	14
8	Brown Thrasher	7	5	5	5	4	3	1	5	3	4	3
7	European Starling	6	25	34	75	57	5	5	3	3	1	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	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
7	Yellow Warbler	.	1	.	1	1	3	5	5	5	14	36
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	.	.	.	.	.	.	.	.	.	2	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	.	.	1	6	10	10	30	19	8	7	5
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	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	2	.	1	.	.	.	.	.	2	2	1
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	2	1	1	1	1	1	1	1	1	1	.
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	7	8	1	2	2	1	2	1	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
7	Eastern Towhee	118	84	63	65	103	109	228	83	44	77	54
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	131	69	66	56	58	58	103	45	36	67	38
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	27	21	8	17	15	11	19	19	15	22	6
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	11	18	19	21	26	19	23	9	17	19	9
8	Painted Bunting	2	3	2	1	1	1	2	1	2	1	.
7	Dickcissel	4	.	1	4	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	240	280	220	290	930	2,030	3,020	5,075	13,970	18,030	27,000
6	Eastern Meadowlark	7	1	3	1	4	1	2	1	1	1	1
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	8	72	21	12	8	8	44	110	7	26	2
7	Boat-tailed Grackle	380	1,000	1,650	2,430	4,500	4,500	3,720	5,100	5,360	5,410	5,510

Table A. Part 7

Hab	SPECIES	7/13	7/19	7/21	7/23	7/25	7/27	7/30	8/5	8/8	8/10	8/13
7	Shiny Cowbird	2	1	1	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	4	3	2	1	1	.	1	1	2	1	1
8	Orchard Oriole	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	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	75	82	77	74	69	72	74	73	71	76	71
	TOTAL INDIVIDUALS	3,684	7,168	4,707	4,753	7,748	8,819	8,688	12,166	22,549	25,355	34,320

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

The Sod Farm was closing and the farmers were removing all the turf creating a habitat resembling Habitat 4. The short grass habitat rarely existed now; the species in this category are the Cattle Egret, Killdeer, Upland Sandpiper, Buff-breasted Sandpiper, American Pipit and the Eastern Meadowlark.

Habitat 7 Weedy fields

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

Habitat 8 The eastern and northern borders of woodland and scrub

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

Habitat	1	2	3	4	5	6	7	8
18-Aug-02	42	156	71	268	14	1251	4306	266
21-Aug-02	25	149	99	198	9	1579	5158	367
25-Aug-02	23	141	25	506	11	733	8083	365
28-Aug-02	14	87	49	153	22	445	8584	263
2-Sep-02	22	89	65	176	11	870	8192	240
4-Sep-02	18	125	80	292	12	1646	6477	315
8-Sep-02	19	219	146	478	12	1185	7864	322
11-Sep-02	11	85	95	222	10	441	8548	1531
15-Sep-02	14	93	80	308	23	1466	10749	619
18-Sep-02	11	97	90	333	13	2144	7731	889
22-Sep-02	20	161	97	233	19	300	7126	444
26-Sep-02	90	93	284	179	20	1510	5939	357
28-Sep-02	0	0	72	135	3	8	158	5
29-Sep-02	45	129	213	337	19	617	2331	668
2-Oct-02	17	138	165	270	19	1288	1980	472
6-Oct-02	10	136	79	559	21	1273	727	628
9-Oct-02	13	205	81	504	16	1504	963	697
13-Oct-02	6	164	88	301	11	5387	866	852
16-Oct-02	76	106	200	183	22	1851	1141	921
20-Oct-02	31	160	98	321	17	199	1329	810
23-Oct-02	26	72	89	340	14	1042	1754	615
28-Oct-02	33	83	93	421	19	215	1383	685
5-Nov-02	103	120	264	215	41	293	2151	640
9-Nov-02	105	83	2	193	51	494	2318	613
17-Nov-02	56	164	27	135	33	2587	1876	483
21-Nov-02	176	168	2	126	47	666	3015	1171
24-Nov-02	212	217	4	159	173	528	4821	1035
29-Nov-02	152	203	8	117	210	180	5221	775
30-Nov-02	152	208	4	145	95	31	4430	799
2-Dec-02	183	372	2	148	115	140	7714	960
8-Dec-02	1650	145	3	282	199	429	6831	858
11-Dec-02	218	729	37	199	523	724	2813	699
14-Dec-02	184	1635	43	316	1299	4042	8996	2008
16-Dec-02	1191	1072	4	298	884	1925	12561	1342
21-Dec-02	858	579	8	192	4638	615	3745	839
26-Dec-02	444	152	14	190	144	165	5521	843
28-Dec-02	274	162	11	181	1289	322	1945	1441
30-Dec-02	2909	369	6	222	1331	138	8506	930
2-Jan-03	817	1622	2	159	701	107	7193	1244
5-Jan-03	882	1594	7	267	3869	286	7101	1199
7-Jan-03	423	566	19	204	1424	124	6973	1328
9-Jan-03	187	340	22	256	176	243	3082	982
11-Jan-03	412	246	7	248	650	555	2496	956

Habitat	1	2	3	4	5	6	7	8
15-Jan-03	225	467	8	261	341	822	6319	861
19-Jan-03	250	232	13	224	253	1932	7595	810
22-Jan-03	209	629	12	228	214	1510	8523	809
26-Jan-03	244	248	14	279	474	1197	10749	1275
27-Jan-03	0	0	0	0	0	0	4	5
30-Jan-03	1059	436	12	255	80	1051	6903	2402
2-Feb-03	282	793	10	261	184	1170	5278	3841
5-Feb-03	250	163	21	287	122	1172	4710	5092
9-Feb-03	240	410	17	313	93	2106	3709	3421
12-Feb-03	181	403	11	300	912	1176	3732	6799
15-Feb-03	152	740	13	237	68	849	7452	10228
19-Feb-03	58	224	16	264	21	601	4936	8248
23-Feb-03	203	503	16	204	32	99	7205	9872
26-Feb-03	267	420	12	278	34	241	9415	9856
2-Mar-03	189	175	22	398	62	70	6918	7353
5-Mar-03	3352	209	29	303	40	341	6772	10306
9-Mar-03	178	424	49	213	54	217	10410	4502
12-Mar-03	3971	489	90	623	30	213	3668	1650
16-Mar-03	260	613	87	319	44	189	6481	870
19-Mar-03	448	246	91	169	44	37	2877	549
24-Mar-03	318	267	231	116	59	155	2776	447
26-Mar-03	1205	396	256	155	51	288	2668	564
29-Mar-03	1189	395	83	106	73	81	3403	487
2-Apr-03	1833	349	82	130	143	390	4124	355
6-Apr-03	509	173	146	100	142	128	14398	418
11-Apr-03	259	267	54	95	83	226	10876	332
13-Apr-03	430	350	101	143	142	132	8929	566
16-Apr-03	286	256	32	115	187	186	14286	522
21-Apr-03	315	213	21	130	101	73	4781	560
24-Apr-03	201	125	22	106	97	83	4583	651
27-Apr-03	76	199	11	115	52	122	4669	696
30-Apr-03	56	151	17	95	56	316	3001	428
4-May-03	53	160	14	135	37	82	1021	716
7-May-03	87	183	10	123	29	78	473	493
12-May-03	209	279	5	76	63	164	299	408
15-May-03	28	187	16	119	25	290	758	519
18-May-03	27	148	15	84	17	156	351	426
21-May-03	20	216	2	104	24	325	822	632
26-May-03	20	129	7	97	17	116	2013	376
29-May-03	26	191	10	64	36	362	915	353
1-Jun-03	33	222	14	75	31	442	1290	379
4-Jun-03	11	149	7	53	26	50	1291	458
8-Jun-03	19	382	15	81	16	194	1282	265

Habitat	1	2	3	4	5	6	7	8
11-Jun-03	30	162	10	79	23	643	1523	471
16-Jun-03	22	257	7	141	14	813	2172	455
18-Jun-03	22	277	12	127	23	500	3380	348
23-Jun-03	28	1969	12	130	11	923	3641	480
26-Jun-03	39	361	6	140	18	1357	919	508
29-Jun-03	42	744	20	150	21	1137	1818	695
2-Jul-03	40	442	53	117	17	466	1256	700
4-Jul-03	31	472	42	105	11	902	1010	531
6-Jul-03	33	534	90	152	21	758	1795	775
9-Jul-03	27	351	69	117	5	611	1246	490
13-Jul-03	30	281	14	160	11	1418	1106	664
19-Jul-03	37	1955	101	190	10	1702	2143	1030
21-Jul-03	29	635	43	143	7	834	2575	441
23-Jul-03	16	360	26	199	11	431	3285	425
25-Jul-03	20	348	17	129	18	299	6339	578
27-Jul-03	27	201	16	164	7	612	7188	604
30-Jul-03	30	172	6	190	7	287	7421	575
5-Aug-03	27	158	23	173	9	657	10740	379
8-Aug-03	14	318	7	136	8	1023	20754	289
10-Aug-03	25	413	28	136	11	341	23929	472
13-Aug-03	19	158	19	140	6	548	33087	343

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

The hours shown below relate to completed ¼ hours i.e. a count of 11 hours 23 minutes has been treated as a count of 11 hours 15 minutes i.e. 11.25 hours.

Date	Field work hours	Total species	Number of birds
8.18.02	13.50	82	6,374
8.21.02	14.00	87	7,584
8.25.02	14.00	92	9,887
8.28.02	13.00	88	9,617
9.2.02	13.25	85	9,665
9.4.02	13.25	90	8,965
9.8.02	14.00	93	10,245
9.11.02	14.25	96	10,943
9.15.02	14.00	96	13,352
9.18.02	14.00	107	11,308
9.22.02	14.00	102	8,400
9.26.02	13.75	95	8,472
9.28.02	3.50	20	381
9.29.02	13.75	95	4,359
10.2.02	13.75	98	4,349
10.6.02	13.75	98	3,433
10.9.02	13.75	100	3,983
10.13.02	13.00	98	7,675
10.16.02	13.25	106	4,500
10.20.02	13.50	106	2,965

Date	Field work hours	Total species	Number of birds
10.23.02	12.50	89	3,952
10.28.02	12.50	97	2,932
11.5.02	11.25	90	3,827
11.9.02	12.50	92	3,859
11.17.02	11.75	89	5,361
11.21.02	12.00	106	5,371
11.24.02	12.25	102	7,149
11.29.02	12.25	104	6,866
11.30.02	11.50	96	5,864
12.2.02	12.25	102	9,634
12.8.02	12.25	99	10,397
12.11.02	12.00	106	5,942
12.14.02	11.50	102	18,523
12.16.02	12.25	105	19,277
12.21.02	13.25	114	11,474
12.26.02	12.00	102	7,473
12.28.02	12.25	103	5,625
12.30.02	12.50	107	14,411
1.2.03	12.50	100	11,845
1.5.03	12.25	114	15,205
1.7.03	12.25	117	11,061
1.9.03	12.25	106	5,288
1.11.03	12.25	115	5,570
1.15.03	12.50	96	9,304
1.19.03	12.50	108	11,309
1.22.03	12.50	103	12,134
1.26.03	12.75	106	14,480
1.27.03	4.50	-	-
1.30.03	12.75	101	12,198
2.2.03	12.75	102	11,819
2.5.03	12.75	98	11,817
2.9.03	12.50	87	10,309
2.12.03	12.75	101	13,514
2.15.03	13.00	105	19,739
2.19.03	12.75	97	14,368
2.23.03	13.00	104	18,134
2.26.03	13.00	109	20,523
3.2.03	13.00	107	15,187

Date	Field work hours	Total species	Number of birds
3.5.03	13.00	113	21,352
3.9.03	11.25	104	16,047
3.12.03	12.50	109	10,734
3.16.03	12.75	100	8,863
3.19.03	13.00	98	4,461
3.24.03	12.25	103	4,369
3.26.03	12.50	104	5,583
3.29.03	13.25	108	5,817
4.2.03	13.50	102	7,406
4.6.03	13.75	103	16,014
4.11.03	13.25	97	12,192
4.13.03	14.25	105	10,793
4.16.03	14.00	108	15,870
4.21.03	13.75	109	6,194
4.24.03	14.25	106	5,868
4.27.03	14.50	102	5,940
4.30.03	14.00	103	4,120
5.4.03	14.50	103	2,218
5.7.03	14.50	95	1,476
5.12.03	13.50	84	1,503
5.15.03	13.50	85	1,942
5.18.03	12.00	74	1,224
5.21.03	13.25	65	2,145
5.26.03	13.50	68	2,775
5.29.03	10.00	72	1,957
6.1.03	13.00	76	2,486
6.4.03	13.50	67	2,045
6.8.03	14.00	71	2,254
6.11.03	14.00	72	2,941
6.16.03	12.00	77	3,881
6.18.03	13.00	72	4,689
6.23.03	14.00	74	7,194
6.26.03	13.50	72	3,348
6.29.03	13.25	72	4,627
7.2.03	13.25	70	3,091
7.4.03	13.00	74	3,104
7.6.03	13.25	73	4,158
7.9.03	13.00	73	2,916

Date	Field work hours	Total species	Number of birds
7.13.03	11.75	75	3,684
7.19.03	12.50	82	7,168
7.21.03	10.50	77	4,707
7.23.03	12.75	74	4,753
7.25.03	12.25	69	7,748
7.27.03	12.75	72	8,819
7.30.03	13.25	74	8,688
8.5.03	12.75	73	12,166
8.8.03	12.50	71	22,549
8.10.03	13.00	76	25,355
8.13.03	13.00	71	34,320

Total days = 105 Total hours = 1,369.75

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	1,600	1,822	19,578
8.15.11-8.14.12	153	1,753	1,558	21,136

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

This list covers all the species seen during the first 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 August 14, 2012. When the same high count occurred on more than one date only the first is given. I will be including a similar double table in Reports 1 to 4.

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
GreatCrested Flycatcher	18	7.3.02	45	5.16.07
Brown-crested Flycatcher	1	1.14.01	2	3.1.06
Tropical Kingbird	1	12.9.01	1	12.9.01
Cassin's Kingbird	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* and in *Bird Migration a Second Florida Study*.

Appendix B

Field Descriptions

Eurasian Kestrel (*Falco tinnunculus*)

I was driving to the east down Lust Road on February 26, 2003 when I spotted a falcon on the utility wires. As I normally do I checked to make sure it was an American Kestrel but this time it was not the head pattern was very different. This bird had a single dark bar coming down the face from the eye tapering towards the end. Face was gray with the rest of the head a pale brown. Throat was white. Upperparts and wing coverts a warm brown with darker bars. Primaries were darker. Tail long and barred with a darker tip. Underparts were white with pale brown streaking. This was all about the facial pattern. I failed to remember to check the claw color but Harold Weatherman told me that they were black not the pale of a Lesser Kestrel (*Falco naumanni*) which was possibly a more likely candidate for Florida.

Yellow Rail (*Coturnicops noveboracensis*)

On March 9, 2003 I was walking through the grass along the bank of the Lake Level Canal by the Sand Farm Bridge when I flushed this rail. This was a tiny pale brown bird with broad yellowish lines running down the back. The other feature was the large white patch on the secondaries as against the whitish trailing edge of some Sora's.

Sharp-tailed Sandpiper (*Calidris acuminata*)

On September 26, 2002 I had stopped by the Sod Farm to check the shorebirds that were using the muddy puddles created by the removal of all the sod. I set up the telescope and started to check the shorebirds. There was a variety of shorebirds including an American Avocet, both yellowlegs, Least, Pectoral and Stilt Sandpipers. With the Pectoral Sandpipers there was a look-a-like that was still clearly different. This individual was much brighter it had a bright rufous cap with a strong white supercilium. The upperparts were also brighter. The legs

were the same pale color as the Pectorals. It was the breast that was really different. The base color was a buffy orange with streaking limited to the sides of the neck tapering off on the sides of the breast. There was no pectoral band; the center of the breast was a clear buffy orange. On the next visit the Pectoral Sandpipers were in thick grass and some way away, this bird may still have been present.

Smooth-billed Ani (*Crotophaga ani*)

On June 26, 2003 I was driving south down the side of the lake towards the Lust Road pump house when I spotted an Ani in the scrub by the lake. Initially I was able to get a good look at this bird before it headed towards the pump house. This was a typical ani but because of the time of year I concentrated on the head. The culmen was quite high giving the bill a massive look. There were no visible grooves on the bill. The call was a two syllable rising whistle. I lost sight of the bird before the pump house.

Northern Saw-whet-Owl (*Aegolius acadicus*)

On November 5, 2002 I was driving south by the Lake Level Canal with the Sod Farm on my left and a line of trees on my right. I had been stopping at selected points to listen for owls. At this particular stop I heard a totally different owl (the regular species are Barn, Great Horned, Barred and rarely an Eastern Screech-Owl). This bird was giving a short hoot at the rate of approx two a second. The calls were all identical and they went on and on. I tried to pick out the bird with a flashlight but that failed; all that did was stop it calling for a bit.

Red-cockaded Woodpecker (*Picoides borealis*)

I was at the Sand Farm Bridge early on June 23, 2003 when I spotted this bird in the Elderberry. It was clearly a relative of the Downy Woodpecker but a bit larger. The face was very different in that it was white with a black crown and black malar streak. It was the back and wings coverts that were so very different. The mantle was all black with white barring and the wing coverts were black spotted with white. The bird took off and flew out over the fields to the east (a distance of some three miles before it reached any cover). In flight the barred back was very distinctive. I take it the bird was flying to the east when it saw the open expanse ahead of it and this forced it to land for a moment or two.

Winter Wren (*Troglodytes troglodytes*)

On January 19, 2003 I was walking by the canal that runs to the west from the Sand Farm Bridge when I spotted a tiny wren working its way through the vegetation by the water. This was a very cold and windy day. In that location I expected to see House, Sedge or Marsh Wrens but it was none of these. Instead it was a Winter Wren a species that I was very familiar with in England. This was a very tiny bird generally a quite dark brown with a noticeable supercilium. The short tail was raised up very high. The mantle was lightly spotted and the wings were more barred. Underparts barred especially to the rear. I did not hear it call.

Bullock's Oriole (*Icterus bullockii*)

On January 22, 2003 I was walking alongside the wood that ran to the north from the Hooper Farms Road gate when I spotted a group of four orioles in the trees. On the other side of the trees there was a grove of citrus. Three of these birds were clearly Baltimore Orioles but the fourth was different. It was a female but it did not seem right; I was aware of the problems with pale Baltimore Orioles. This individual had an orange yellow head with an indistinct dark line through the eye. The throat and breast were a bit paler. The mantle and wings were grayish; there were two white wing bars. Only the tips of the greater and median coverts were white creating a scalloped edge. Underparts were white and the tail was a pale orange-yellow.

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 larger islands but those areas could not be seen from the shore of the lake.

American Bittern

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

Least Bittern

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

Great Blue Heron

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

Little Blue Heron

Two pairs nested on an island near the end of Lust Road in 2000. Young almost certainly raised but the vegetation grew too thick to see what was going on.

Cattle Egret

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

Green Heron

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

Night-Herons

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

Fulvous Whistling-Duck

In 1999 there were 25 pairs, many broods of young seen. This population probably stemmed from birds that had stayed locally after the fields of Unit Two drained in February, 1999. One pair located in 2000, none in the next three years. In 2004 there was a pair at the Sand Farm Cattail Marsh, young 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 located in 1999 with seven pairs in 2001, nine pairs in 2002 and 13 pairs in 2004. The increase will be due to the change in the shape of their territories, they are now hunting out over the fields so they need a smaller woodland range.

Barred Owl

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

Common Nighthawk

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

Chuck-will's-widow

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

Red-bellied Woodpecker

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

Downy Woodpecker

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

Northern Flicker

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

Pileated Woodpecker

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

Great Crested Flycatcher

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

Eastern Kingbird

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 with 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 were located but no females found.

Yellow-breasted Chat

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

seen carrying food and fledged young have been noted. This is such a secretive species that I have only seen the females occasionally.

Eastern Towhee

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

Northern Cardinal

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

Blue Grosbeak

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

Indigo Bunting

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

Painted Bunting

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

Dickcissel

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

Red-winged Blackbird

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

Eastern Meadowlark

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

Common Grackle

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

Boat-tailed Grackle

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

Brown-headed Cowbird

This is an increasing but unwelcome addition to the breeding birds of Zellwood. There were single pairs seen in 1999 and 2000 with three 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 was 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 four to six feet down. Two large tracts, Phases One and Two have been re-flooded.

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

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

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

SPECIES	1999	2000	2001	2002	2003	2004
Pied-billed Grebe	5				1	7
Anhinga		5				
American Bittern						1
Least Bittern	3	4	8	6	15	7
Great Blue Heron						5
Little Blue Heron		2				
Cattle Egret	413	103				
Green Heron	9	20	25	54	43	38
Fulvous Whistling-Duck	25	1				1
Wood Duck	1		1	2	1	1
Mallard	3	1				
Mottled Duck	12	13	7	12	4	
Bald Eagle	1	1	1	1	1	1
Cooper's Hawk		4	1	3	2	3
Red-shouldered Hawk	4	6	9	6	4	5
Red-tailed Hawk	6	11	6	6	8	6
Northern Bobwhite	40	38	65	89	125	87
King Rail				2	14	18
Purple Gallinule	21	23	17	40	51	54
Common Gallinule	104	129	126	146	214	305
American Coot	5					2
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

SPECIES	1999	2000	2001	2002	2003	2004
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
Red-winged Blackbird	545	1,109	932	826	2,582	1,537
Eastern Meadowlark	9	22	12	15	26	43
Common Grackle	25	26	45	32	26	45
Boat-tailed Grackle	225	134	152	111	164	154
Brown-headed Cowbird	1	1	3	4	5	8
Orchard Oriole	1	1	10	15	26	22
House Sparrow	1	12	1	2	1	
Totals	2,117	2,428	2,665	2,770	5193	4,477

SPECIES	1999	2000	2001	2002	2003	2004
Totals	2,117	2,428	2,665	2,770	5,193	4477
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
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

Species	1999	2000	2001	2002	2003
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-		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
Swarthy Skipper			7.11.01		
Clouded Skipper	5.1.99	1.11.00	2.28.01	6.16.02	4.27.03

Species	1999	2000	2001	2002	2003
Least Skipper					
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
Dotted Skipper					
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
Orange Bluet					
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
Twilight Darner	4.1.99	1.21.00	6.10.01	1.20.02	5.4.03

Species	1999	2000	2001	2002	2003
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
Black Bear					
Raccoon	1.29.99	1.1.00	1.4.01	1.7.02	1.5.03
Long-tailed Weasel				5.23.02	
Spotted Skunk	3.18.99				

Species	1999	2000	2001	2002	2003
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 14, 1998.