



The 4th Zellwood Bird Report

August 15, 2001 to August 14, 2002

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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TABLE OF CONTENTS

Introduction.....	1
Map showing the watershed.....	3
Acknowledgements.....	5
The survey route.....	6
An Annotated Checklist – August 15, 2001 to August 14, 2002.....	7
Table A the Spreadsheet – August 15, 2001 to August 14, 2002.....	124
Table B Habitat usage on a daily basis.....	202
Table C Survey information: hours surveying, number of species seen etc.....	207
Table D Systematic Lists of all species seen August 15, 1998 to August 14, 2012.....	211
Appendix A Historical Bird Sightings at Zellwood.....	222
Appendix B Field Descriptions.....	223
Appendix C Banded/tagged American White Pelicans.....	225
Appendix D the Breeding Birds of Zellwood.....	227
Appendix E Butterflies.....	242
Appendix F Dragonflies and Damselflies.....	245
Appendix G Amphibians and Reptiles.....	247
Appendix H Mammals.....	249

INTRODUCTION

This is the fourth 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, 2001 to August 14, 2002. The survey is ongoing. At the end of this survey year a total of 400 surveys had been completed involving at least 4,880 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 1,345 hours were spent on fieldwork over 104 visits. This year there were no breaks in the coverage. Surveys were normally conducted on Wednesdays and Sundays.

During this year the only permanent water has been Lake Apopka together with the canals and ditches. In the fall of 2001 a tropical storm flooded the fields and water remained in some areas well into the winter. The District was draining the fields but the excessive volume of water meant that this took time. The water level in Lake Apopka is now crucial as far as seeing a wide range of species goes. There were extensive areas of mud in the summer of 2001 and again in the spring of 2002.

From the fall of 2001 the District began to actively clear the vegetation from the fields. A few selected areas were not cleared and others were not reached before the start of the breeding season. One area that was left was the roost site of the Northern Harriers. To go into more detail: the Sod Farm continued in operation through the year but the lease was coming to an end so the farmer was taking up all the sod. This caused the occasional shallow flooded area. An area next to Interceptor Road remained flooded through to the early fall of 2002.

The Sand Farm is on sandier soils and a small cattail marsh has developed in the south-eastern corner. The fields were mowed at least once during the year.

The north-western part of Potter's Farm was not cleared creating a varied maturing habitat. The rest of Unit One was mowed at least once during the year. The areas cleared in the early fall of 2001 became flooded after a Tropical Storm crossed the area. The area effected stretched from Interceptor Road to the McDonald Canal and from the Lake Level Canal to the eastern border. The water in the fields by the Lake Level Canal drained very quickly but the fields by Laughlin Road and those fields in the south-east next to the McDonald Canal remained flooded into the winter.

Unit Two was mowed during the year. Much of the area from the McDonald Canal to Lust Road was not cut or if cut cleared only once. This provided a large nesting area for birds in the summer of 2002.

The habitat along the borders varied from scrub to woodland on the northern and eastern borders. To the west there was the Lake Level Canal and Lake Apopka. The three most important areas of woodland were the wood between Lust and Hooper Farms Road, the wood between Lake Apopka and the Lake Level Canal and the wood that stretched south from the Workshops. During this year I paid a lot of attention to the patches of woodland along the shore of Lake Apopka. In particular sections of woodland to the north of the Lust Road pump house and to the south of the Hooper Farms Road extension were looked at regularly.

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.

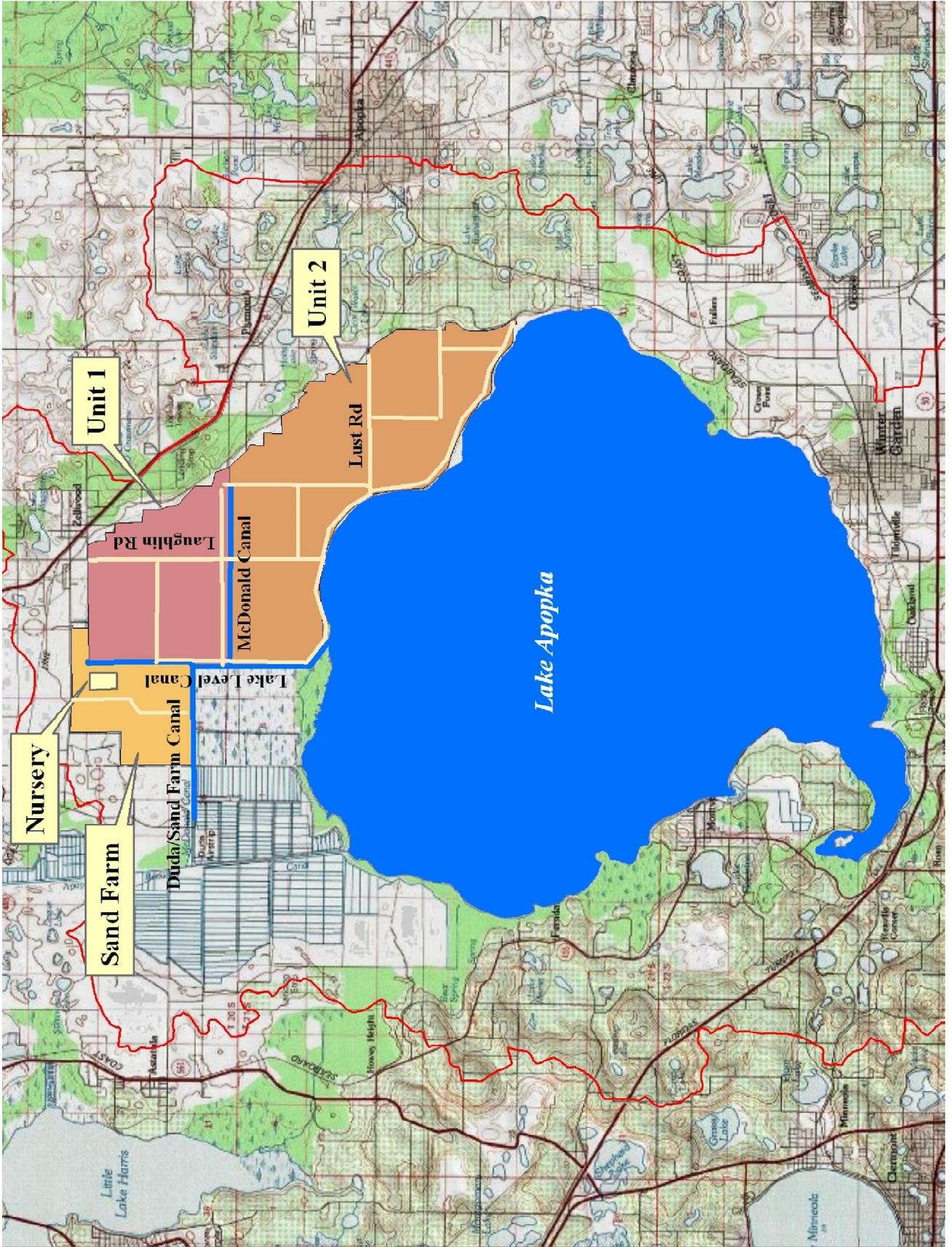
The aim of this report is to record what I saw during the twelve months. I concentrate on the basic unit an influx (this is defined in both of the five year analyses) and I try to show you its shape and duration. The actual pattern of migration at Zellwood is very different from the generalized ideas 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 fourth of six such surveys. Rather than just show the results for this year I am including all six surveys so that that this one year can be put into perspective. The counts for all the years are detailed in Appendix D.

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. I have decided that all the reports 1 to 5 will carry the data for the first five years.

There is also a bird list of all the bird species seen during the first five years together with the highest daily count for each species. For comparison purposes I am including a second list detailing the highest daily counts as at August 14, 2012. Again I have used the 5th year as the benchmark rather than continue to show lower and lower peak counts.

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 along with Units One and Two and 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.

Kacy Ray has come through again with yet another report. I know it is very hard for her to find the time for this project. As always without her help this report would not be in your hands. Thanks Kacy.

Rachel Gerker has helped me get this book ready for the Orange Audubon Society's website. That sounds simple but it is not as she has had to take sections from two copies (P.D.F. and Word) to make a whole new book. Thanks Rachel.

Harry Robinson

Front Cover: The photograph of Blue-winged Teals was taken on January 19, 2013 by the late Rebecca Holmes

THE SURVEY ROUTE

I am now finding it hard to remember how I actually conducted the survey in the earliest years. I would start at Canal Road near Jones Avenue in the dark and at first light I would walk around the corner. In the winter this was the spot to see American Woodcock as they left the fields for deeper cover.

I would then start what had to be at least a four mile walk. I would go south down Potter's Farm Road to Interceptor Road and then east to Laughlin Road. Next I turned north to Jones Avenue and then back to Canal Road. I believe that at some point I had permission from the farmer to go down the edge of the fields on the northern border. Sometimes I would reverse this route as Laughlin Road was best for sparrows very early in the morning. When Potter's Farm ceased operating I was able to not only walk the northern border but take a track through the middle of the property.

After completing this circuit I would drive south by the Lake Level Canal to the wood that stretched down the canal and across to Lake Apopka. I would also pay close attention to the woods both to the north and the south of the Lust Road pump house.

At some point I will have checked the fields that were being mowed and roller-chopped. In the fall after the Tropical Storm I would have diverted to the flooded fields after the morning circuit.

AN ANNOTATED CHECKLIST OF THE BIRDS OF

ZELLWOOD

AUGUST 15, 2001 TO AUGUST 14, 2002

This checklist covers the 4th year of the survey. I hope in the future to make printed reports for years one to three. The survey covered Units One and Two and the Sand Farm, in all some 10,000 acres were surveyed twice a week. During the year I carried out 104 surveys and spent 1,345 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, 2001 to August 14, 2002 but fall passage and any post-breeding gatherings do not recognize such dates. I am therefore providing records from earlier in 2001 where this helps to provide a better picture. The same situation could arise in August, 2002 in which case I will describe records proper to the following report. **These entries are all in italics to show that they do not belong to this survey year.**

Common Loon (*Gavia immer*)

This was a vagrant. For the late fall passage there was one on November 18.

Pied-billed Grebe (*Podilymbus podiceps*)

Present in low numbers from late October to mid-March; there were also a few records for the early fall passage. For the early fall passage there was one on September 9. For the main fall passage there were six on October 7. Later there was one on October 24 with ten on October 28, then three seen on November 7. There were four on November 11 with three on November 15, two to November 25 and one on November 27. That was the main fall passage. For the winter passage there were four on November 29 with singles to December 5. There were two on December 9 and December 13 with three on December 19, six on December 21 and eight on December 27, then three seen to January 3. There were six on January 7 with three on January 10. That completed the winter passage. For the early spring passage there were five on January 13 with six on January 16, then one seen on January 20. There were three on January 24 with six on January 27, then three seen on February 3. There were four on February 6 with five on February 10, then two seen on February 17. There were three on February 20 with four on February 24, then three seen on February 27. That ended the early spring passage. For the late spring passage there were four on March 4 with six on March 6, then two seen to March 14 with one on March 17. There were also two on March 19. That concluded the late spring passage. There were no summer sightings. For the early fall passage there were singles on July 3, July 8 and later July 28, then three seen on July 31 with one on August 11.

Eared Grebe (*Podiceps nigricollis*)

This was a vagrant. For the late fall passage there was one on October 7.

American White Pelican (*Pelecanus erythrorhynchos*)

Exceptionally they were present all year; there was a very strong spring passage from mid-March to the end of April. Early fall and summer records: *there were 191 on May 20 with 303 on May 24, 450 on May 27, 590 on May 31, 760 on June 3, 880 on June 7, 890 on June 10, 1,430 on June 17, 1,580 on June 20, 1,710 on June 24 and 2,400 on June 27, then 2,100 seen on July 1 with 550 on July 4. That was a major influx that was also the end of the summer passage. For the early fall passage there were 1,045 on July 8 with 1,250 on July 11, then 860 seen on July 15 with 585 on July 18. There were 1,155 on July 22 with 1,100 on July 23, 640 on July 25, 388 on*

July 27, 288 on July 29 and 252 on August 2. There were 460 on August 5 with 350 on August 14, 124 on August 16 and 94 on August 19. There were 112 on August 22 with 185 on August 26, then 149 seen on August 29 with 128 on September 2, 124 on September 5, 27 on September 9 and 18 on September 13. There were 132 on September 16 with 131 on September 23, 126 on September 26, 111 on September 30 and 101 on October 3. That was the early fall passage. For the late fall passage there were 105 on October 7 with 121 on October 10, then 85 seen on October 14 with 60 on October 17. There were 171 on October 21 with 90 on October 24 and 12 on October 28. There were 125 on November 1 with 75 on November 7, 54 on November 15 and 14 on November 18. That closed the late fall passage. For the winter passage there were 240 on November 25 and November 27 with 245 on November 29, then 165 seen on December 2 with 95 on December 5. There were 274 on December 9 with 120 on December 13. There were 180 on December 16 with 190 on December 19, then 159 seen on December 21 with 87 on December 30, 53 on January 7 and four on January 10. That completed the winter passage so for the early spring passage there were 35 on January 13 with 310 on January 20 and 460 on January 24, then 210 seen on January 27. There were 320 on February 3 with 384 on February 6, then 150 seen on February 10 with 145 on February 17. There were 235 on February 20 with 500 on February 27, then 215 seen on March 4 with 85 on March 6. That concluded the early spring passage. For the main spring passage there were 574 on March 10 with 495 on March 14 and 380 on March 17. There were 435 on March 19 with 620 on March 22, 650 to March 31 and 1,220 on April 3, then 1,150 seen on April 10 with 630 on April 14. There were 720 on April 17 with 850 on April 21, then 640 seen on April 24 with 580 on April 28, 450 on May 1, 250 on May 9 and 160 on May 12. That was the end of the main spring passage. There were large numbers for this passage this year at least in part because there were large areas of mud for the birds to loaf on. For the summer passage there were 245 on May 15 with 270 on May 20 and 325 on May 23, then 150 seen on May 27 with 27 on May 30. There were 205 on June 2 with 154 on June 5 and 44 on June 10. 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. That ended the summer passage. For the early fall passage 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. This year showed what could be achieved if the habitat was there.

Brown Pelican (*Pelecanus occidentalis*)

This was a vagrant. There were three immatures seen. For the early spring passage there was one on January 24. For the main spring passage there were singles on March 10 and May 1.

Double-crested Cormorant (*Phalacrocorax auritus*)

Present all year; above all it was a common spring passage migrant. Early fall records: *there were 23 on June 20 with 37 on June 24 and 45 on June 27, then 35 seen on July 1 with 30 on July 8, 28 to July 22 and 14 to July 27. There were 16 on July 29 and August 2 with 13 to August 14 and seven on August 16. There were 11 on August 19 with 12 to August 26 and 23 on August 29, then nine seen on September 2 with eight on September 5 and four on September 9. There were seven on September 13 with 12 on September 16, then eight seen on September 19 with seven on September 23 and five on September 26. That was the early fall passage. For the main fall passage there were 45 on September 30 with 19 on October 3 and 11 on October 7. There were 20 on October 10 with 12 on October 10 and six on October 14. There were 15 on October 17 with 27 on October 21 and 30 on October 24, then 16 seen on October 28. There were 29 on November 1 with 39 on November 4, 93 on November 7 and 130 on November 15, then 53 seen on November 18. There were 63 on November 25 with 98 on November 27, then 93 seen on November 29 with 83 on December 2. That ended the main fall passage. For the winter passage there were 102 on December 5 with 122 on December 13 and 123 on December 19, then 92 seen on December 21 with 86 on December 27. There were 150 on December 30 with 181 on January 3, then 156 seen on January 7. That completed the winter passage. For the early spring passage there were 184 on January 10 with 200 on January 16 and 217 on January 24, then 156 seen on January 27 with 125 on February 3. There were 247 on February 6 with 237 on February 10 and 222 on February 17. There were 296 on February 20 with 263 on February 24. That concluded the early spring passage. For the main spring passage there were 326 on February 27 with 329 on March 4, then 313 seen on March 6 with 252 on March 14 and 161 on March 17. There were 220 on March 19 with 353 on March 22 and 531 on March 27, then 322 seen on April 3 with 208 on April 7, 147 on April 10, 84 on April 14 and 43 on April 17. There were 87 on April 21 with 49 on April 24, 43 on April 28, 36 on May 6 and 27 to May 12. That was the end of the main spring passage. For the summer passage there were 37 on May 15 with 14 on May 20. There were 24 on May 23 with 27 to June 2, 29 on June 5 and 31 on June 10, then 29 seen on June 12 with 25 on June 16, 23 on June 23 and 18 to June 30. There were 19 on July 3 with 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. For this species the summer passage continued until October 13. Very exceptionally there was an adult with the sparse white ear tufts characteristic of the California race *P.a.albociliatus* on April 10 and April 14.*

Again this year I kept a record of all birds flying to the south in the fall and to the north in the spring. These totals are included in the numbers already quoted. For the fall passage flying to the south there were four on September 26, eight on October 10, three on November 1, four on November 4, 36 on November 7 and 23 on November 15. As the majority will arrive

in the dark I do not expect many records for this season. For the spring passage flying to the north there were 16 on March 22, 322 on March 27, four on March 31, 124 on April 3, 16 on April 10, 14 on April 14, eight on April 21 and six on April 28. That was a poor showing.

Anhinga (*Anhinga anhinga*)

Seen all year; numbers were a little higher from the late fall to the early spring. There was no evidence of breeding in the survey area this year. Early fall records: *there were 29 on June 10 with 30 on June 13, 32 on June 20 and 44 on June 24, then 34 seen on June 27 with 28 on July 1 and 27 on July 4. There were 39 on July 8 with 30 to July 15, 26 on July 22 and 15 to July 27. There were 18 on July 29 with 19 on August 2 and 20 on August 5, then 18 seen on August 12 with 13 on August 14.* For this year there were 20 on August 16 with 21 on August 19, then nine seen to August 26. There were 47 on August 29 with 17 on September 2. There were 20 on September 5 with 28 on September 9, then two seen on September 13. There were seven on September 16 with 14 on September 19 and 24 on September 26, then 21 seen on October 3 with 15 on October 7. That was the early fall passage. For the late fall passage there were 18 on October 10 with 16 on October 14 and 15 on October 17. There were 29 on October 21 with 11 on October 24 and six on October 28. There were 22 on November 1 with 31 on November 4, then 16 seen on November 7. There were 19 on November 11 with 24 on November 15, then 23 seen on November 25 with 19 on November 27. That closed the late fall passage. For the winter passage there were 21 on November 29 and December 2 with 25 on December 5, then 19 seen on December 13 with 14 on December 16. There were 16 on December 19 with 20 on December 21 and 26 on December 27, then 19 seen on December 30 with 14 on January 3. That completed the winter passage. For the early spring passage there were 25 on January 7 with 26 on January 13 and 34 on January 16, then 31 seen on January 20 with 17 on January 24. There were 33 on January 27 with 29 on February 3, 21 on February 10, 17 on February 20 and ten to February 27. That ended the early spring passage. For the late spring passage there were 18 on March 4 and March 6 with 16 to March 14, 11 on March 17, eight on March 19 and two to March 24. There were five on March 27 with six on March 31, then five seen to April 7. There were six on April 10 with eight on April 17, then five seen on April 21 with four on April 24. There were five on April 28 with 12 on May 1 and May 9, then eight seen on May 15 with six on May 20. That was the end of the late spring passage although for this year the passage really came to an end on March 24. For the summer passage there were seven on May 23 with eight on May 27, then seven seen to June 5 with two on June 10. 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. That concluded the summer passage. For the early fall passage 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.*

American Bittern (*Botaurus lentiginosus*)

A very uncommon passage migrant and winter visitor; the problem was the lack of a suitable habitat. For the early fall passage there were singles on August 22 and September 19. For the main fall passage there were singles on October 3, October 10 and October 21 with two on October 24 and October 28, then singles seen on November 7 and November 18. That closed the main fall passage. For the winter passage there was one on November 27 with two on December 2, then one seen on December 5. There was also one on January 10; this could be either a winter or an early spring record. For the main spring passage there were singles on March 17, March 27, March 31 and April 10.

Least Bittern (*Ixobrychus exilis*)

A summer visitor; there was just the suggestion of passage in the spring and the fall. During the Breeding Bird Survey a total of six pairs located, the first fledged young (two) were seen on July 17. Early fall records: *there were six on June 17 with four to June 24, three to July 4, two to July 15 and singles to August 12.* For this year there were singles on September 9, September 16, September 26 and September 30. That was the early fall passage. For the late fall passage there was one on October 17 that was it. There were no winter sightings. For the early spring passage there were singles on 12 dates from January 7 to March 4. For the main spring passage there were three on March 6 with singles to March 14. There were two on March 31 with singles to April 24. That closed the main spring passage. For the summer passage there were two on April 28 with three on May 6, then four seen on May 9 and May 15 with two on May 20 and one on May 23. There were three on May 27 and June 2 with five on June 10, then four seen to June 16 with three to June 23 and one on June 26. There were four on June 30 with singles to July 10. That completed the summer passage. For the early fall passage 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.*

Great Blue Heron (*Ardea herodias*)

A common resident with a static population; this species has yet to breed in the survey area. Early fall records: *there were 25 on July 15 with 39 on July 18, then 21 seen on July 22 with 18 on July 25. There were 26 on July 27 with 30 on July 29, then 18 seen on August 2. There were 19 on August 5 with 21 on August 12, then ten seen on August 14.* For this year there were 14 on August 16 with 17 on August 19, 18 on August 26 and 26 on August 29, then 22 seen to September 5. There were 25 on September 9 with seven on September 13. There were 13 on

September 16 with 16 on September 19, 17 on September 23, 20 on September 30 and 29 on October 3, then 21 seen to October 10. That was the early fall passage. For the main fall passage there were 37 on October 14 with 28 on October 21, 23 to November 4 and 22 on November 7. There were 34 on November 11 with 25 on November 15 and 24 on November 18. There were 35 on November 25 with 29 on November 27. That closed the main fall passage so for the winter passage there were 31 on November 29 with 42 on December 2, then 34 seen on December 9 with 24 to December 16. There were 29 on December 19 with 39 on December 27, then 32 seen on December 30 with 15 on January 3. That completed the winter passage. For the early spring passage there were 21 on January 7 with 26 on January 10 and 33 on January 13, then 27 seen on January 16 with 20 on January 20. There were 25 on January 24 with 35 on January 27, then 21 seen on February 3 with 19 on February 6. There were 31 on February 10 with 32 on February 20 and 33 on February 24, then 30 seen on March 4 with 22 on March 6. That concluded the early spring passage. For the late spring passage there were 23 on March 10 with 32 on March 14 and 36 on March 17, then 32 seen on March 19 with 28 on March 22, 27 on March 24 and 20 on March 27. There were 25 on March 31 and April 3 with 27 to April 10 and 34 on April 14, then 28 seen on April 21 with 17 on April 24. There were 36 on April 28 with 33 on May 1 and 27 on May 6. That ended the late spring passage. For the summer passage well I say summer passage but in reality the seasons do not relate to this species as it nests during the winter and the early spring. For this event there were 36 on May 9 with 31 on May 12, 30 on May 15 and 17 on May 20. There were 28 on May 23 with 39 on May 27, 40 on May 30 and 46 on June 2, then 42 seen on June 5 with 34 on June 10. There were 47 on June 12 with 58 on June 16, then 49 seen on June 19 with 45 on June 23 and 20 on June 26. There were 50 on June 30 with 25 on July 8 and 21 on July 10. That ended the summer passage. For the early fall passage 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.*

Great Egret (*Ardea alba*)

Surprisingly this was a fall passage migrant and a non-breeding summer visitor; outside of these seasons numbers were very low. Early fall records: *there were 27 on July 1 with 47 on July 4 and 60 on July 11, then 50 seen to July 18 with 19 on July 22, 16 on July 25, 12 on July 27 and 11 on July 29. There were 15 on August 2 with eight on August 12 and four on August 14.* For this year there were ten on August 16 and August 19 with six on August 26, five to September 5 and four on September 9. There were six on September 13 with five on September 16 and one on September 19. That was the early end of the early fall passage; now to the main event of the year the main fall passage. There were six on September 23 with eight on September 26, 12 on September 30, 21 on October 3, 63 on October 7 and 73 on October 10, then 62 seen on October 14 with 41 on October 17 and 14 on October 21. There were 183 on

October 24 with 127 on October 28, 46 on November 1 and 36 on November 4. There were 71 on November 7 with 51 on November 15 and 17 on November 18. There were 21 on November 25 with 95 on November 27, then 85 seen on December 2 with 15 on December 9 and one on December 13. That completed the main fall passage. For the winter passage in sharp contrast there was one from December 16 to December 21 with two on December 27, then singles seen to January 7. That could well be the worst winter passage for this species at Zellwood. For the early spring passage there were eight on January 10 with 12 on January 13, 15 on January 16 and 21 on January 20, then singles seen to February 6. There were two on February 10 with six on February 17, then singles seen to February 24. That concluded the early spring passage. For the main spring passage there were three on February 27 with four on March 4 and seven on March 6, then two seen to March 17. There were three on March 19 with singles to March 24. There were two on March 27 with four on March 31 and nine on April 7, then eight seen on April 10 with seven on April 17, six on April 24 and four on April 28. That long decline signaled the end of a passage in this case the end of the main spring passage. Everything now changed with the summer passage there were seven on May 1 and May 6 with 18 on May 9, then eight seen on May 12. There were nine on May 15 with 17 on May 20, 28 on May 27, 31 on May 30, 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. That influx lasted for nearly two months; it also covered the whole of the summer passage. For the early fall passage there were 38 on July 8 with 55 on July 10, then 20 seen on July 14 with 13 on July 17. There were 22 on July 21 with ten on July 25. There were 13 on July 28 with 19 on July 31 and 21 on August 7, then 15 seen on August 11. There were 26 on August 14 *with 21 on August 21, 12 on August 25, 11 on August 28 and seven on September 2.*

Snowy Egret (*Egretta thula*)

Again there was the marked fall passage with in this case a larger summer event; there also appeared to be a post-breeding gathering even though this species did not breed in the survey area. Early fall records: *for the post-breeding gathering there were 45 on June 24 and June 27 with 51 on July 1 and 63 on July 4, then 44 seen on July 8. There were 45 on July 11 with 52 on July 15, then 45 seen on July 22 with 36 on July 25. There were 45 on July 27 with 40 on August 2, 29 to August 14, 26 on August 16, 18 on August 19, 14 on August 22 and 11 on August 26. There were 15 on August 29 with 27 on September 2, then 25 seen on September 5 with 23 on September 13, 11 on September 19, four on September 26 and one on September 30. That was the post-breeding gathering. For the fall passage there were three on October 3 with 101 on October 7 and 106 on October 14, then 80 seen on October 21 with 74 on October 24, 67 on October 28 and 57 on November 1. There were 69 on November 4 with 30 on November 7 and 20 on November 11. There were 78 on November 15 with 19 on November 18. There were 23 on November 25 with 66 on November 27, 180 on November 29 and 205 on December 2, then*

40 seen on December 5 with one on December 9. That closed the main fall passage. For the winter passage there were five on December 13 with two on December 16 and one on December 19. There were 110 on December 21 with singles to December 30. Such one day influxes are a feature of this species. There were two on January 3 and January 7 with 11 on January 10 and 15 on January 13, then one seen on January 16. That completed the winter passage. For the early spring passage there were two on January 20 and January 24 with singles to February 3. There were three on February 6 and February 10 with two on February 17 and one on February 20. There were three on February 24 with two on February 27. That concluded the early spring passage. For the main spring passage there were seven on March 4 with four on March 6, three on March 10 and two on March 14. There were four from March 17 to March 24 with 13 on March 27, 15 on March 31 and 20 on April 3, then nine seen on April 7 with eight on April 10. There were 11 on April 14 and April 17 with 16 on April 24, then 14 seen to May 1. That was the end of the main spring passage. For the summer passage there were 17 on May 6 with 25 on May 9, 32 on May 15, 47 on May 20, 50 on May 23, 109 on May 27, 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. The count of 322 was the highest count for Zellwood but the highest count is now (2013) that of 2,585 on November 7, 2004. That was the summer passage; that was one influx. For the post-breeding gathering 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 ended the post-breeding gathering.*

Little Blue Heron (*Egretta caerulea*)

There was the suggestion of a fall passage otherwise numbers varied little through the year. Early fall records: *there were 27 on June 27 with 28 on July 1 and 36 on July 4, then 22 seen on July 8. There were 24 on July 11 with 26 on July 15, 27 to July 27 and 30 on July 29, then 19 seen on August 2 with 16 on August 5, 15 on August 14 and 11 on August 16. There were 19 on August 19 with 21 on August 22 and 23 on August 29, then 20 seen on September 2 with 18 on September 5. There were 23 on September 9 with 33 on September 16, then eight seen to September 23. That was the early fall passage. For the main fall passage there were 16 on September 26 and October 3 with 72 on October 7, then 51 seen on October 10 with 31 on October 14, 26 on October 17 and 15 on October 21. There were 163 on October 24 with 59 on October 28, 35 on November 1 and 22 on November 4. The count of 163 was the highest count for Zellwood but the highest count is now (2013) that of 735 on December 1, 2004. There were 37 on November 7 with seven on November 11. There were 12 on November 15 with 23 on November 18, then six seen on November 25. That closed the main fall passage. For the winter passage there were ten on November 27 with 31 on November 29, then 18 seen on December*

5 with 11 on December 9. There were 14 on December 13 with 26 on December 16 and 51 on December 21, then 11 seen to December 30 with ten on January 3. That completed the winter passage. For the early spring passage there were 19 on January 7 with 22 on January 13, then 19 seen on January 20 with 17 on January 27, 14 to February 10 and 11 on February 17. There were 16 on February 20 with 13 on February 24 and 12 on February 27. That concluded the early spring passage. For the late spring passage there were 13 on March 4 with 17 to March 10 and 18 on March 14, then 19 seen on March 17 and March 22 with 16 on March 24 and nine on March 27. There were 18 on March 31 with 16 on April 3, ten on April 10 and nine to April 17. There were 13 on April 21 with five on April 24. That closed the late spring passage so for the summer passage there were nine on April 28 with 12 on May 1, 14 on May 6, 15 on May 9 and 19 on May 12, then nine seen on May 15 with eight on May 20. There were 18 on May 23 with 21 on May 30, 29 on June 2 and 43 on June 10, then 41 seen on June 12 with 16 on June 16. There were 27 on June 19 with 30 on June 23, then 16 seen on June 26. That closed the summer passage. For the early fall passage there were 20 on June 30 with 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.*

Tricolored Heron (*Egretta tricolor*)

The rarest of these herons; there were very low numbers for most of the year with somewhat higher numbers for the summer passage and the post-breeding gathering. Early fall records: *there were 23 on July 1 with 26 on July 4, then 23 seen on July 8 with 17 on July 11. There were 24 on July 15 with 21 to July 22, 20 on July 27, 13 on July 29 and ten on August 2. There were 15 on August 5 with seven on August 12. There were ten on August 14 with 11 on August 16, then 13 seen on August 19 and August 26 with nine to September 2. There were 14 on September 5 with three on September 9. There were five on September 13 with seven on September 16, then three seen to September 23. There were four on September 26 with two on September 30. That was the early fall passage. For the late fall passage there were six on October 3 with seven on October 7 and October 10, then five seen to October 17 with four on October 21. There were five on October 24 with six on October 28, then three seen to November 18. That was the early end of the late fall passage. For the winter passage there were five on November 25 with six on November 27 and 13 on November 29, then eight seen on December 2 with six on December 5 and two on December 9. There were three on December 13 with four on December 16 and 38 on December 21, then three seen on December 27. Goodness knows where that party came from. There were four on December 30 with six on January 3, then four seen on January 7. That completed the winter passage. For the early spring passage there were five on January 10 with seven on January 13 and eight on January 16, then five seen on January 24 with three on January 27. There were four on February 6 with five on*

February 10 and February 17, then three seen to February 24 with two on February 27. That ended the early spring passage. For the late spring passage there were four from March 4 to March 10 with two on March 14. There were three from March 17 to March 22 with four on March 24, then seven seen on March 27 and March 31 with six on April 7 and one on April 10. There were 11 on April 14 with six on April 21 and one on April 24. That concluded the late spring passage. For the summer passage there were three on April 28 with four on May 1, six on May 6, seven to May 12 and 14 on May 15, then four seen on May 20. There were seven on May 23 with 15 on May 27, 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. That was the end of the summer passage. For the post-breeding gathering 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 closed a very weak post-breeding gathering.*

Reddish Egret (*Egretta rufescens*)

This was a vagrant. For the early fall passage there was an immature on September 9. This was the second record for the survey; there had been one on March 21, 2000.

Cattle Egret (*Bubulcus ibis*)

Present all year in variable numbers; the greatest numbers relate to the winter passage and a post-breeding gathering. Early fall records: *for a minimal post-breeding gathering there were 185 on June 20 with 240 on June 27, then 435 seen on July 1 and July 4 with 140 on July 8. There were 155 on July 11 with 225 on July 15, 232 on July 18 and 372 on July 22, then 305 seen on July 25 with 175 on July 27 and 83 on July 29. There were 130 on August 2 with 332 on August 5 and 385 on August 14, then 256 seen on August 16. There were 360 on August 19 with 700 on August 22, then 675 seen on August 26 with 475 on September 2 and 75 on September 5. That was the post-breeding gathering. For the single fall passage there were 540 on September 9 with 1,620 on September 16, then 410 seen on September 23 with 230 on September 26. There were 1,020 on September 30 with 1,000 on October 3, 520 on October 10, 475 on October 17, 175 on October 24, 67 on November 1 and 49 on November 4. There were 78 on November 7 with 170 on November 11 and 280 on November 15, then 62 seen on November 18 with 15 on November 25 and five on November 27. That closed the fall passage. For the winter passage there were 12 on December 5 with 550 on December 9, then 40 seen on December 13. There were 60 on December 16 with 537 on December 19, then 275 seen on December 21 with 215 on December 27 and ten on December 30. There were 2,050 on January 3 with 630 on January 7 and 13 on January 10. That completed the winter passage. For the early*

spring passage there were 130 on January 13 with 165 on January 16, then three seen on January 20. There were 26 on January 24 with 37 on January 27, 84 on February 3 and 300 on February 6, then 295 seen on February 17 with 98 on February 20, 66 on February 24 and 11 on February 27. That concluded the early spring passage. For the main spring passage there were 34 on March 4 with 152 on March 6 and 278 on March 10, then 150 seen on March 17 with 58 on March 19. There were 205 on March 22 with 275 on March 24, then 162 seen on March 27 with 34 on March 31. There were 280 on April 3 with 17 on April 7. There were 216 on April 10 with 260 on April 14, then 135 seen on April 17 with 12 on April 21. There were 152 on April 24 with 365 on April 28, then 24 seen on May 1 with 19 on May 6. That ended the main spring passage. For the summer passage there were 40 on May 9 with 175 on May 12, 180 on May 20, 308 on May 23 and 591 on May 27, then 460 seen on June 2 with 340 on June 5. There were 850 on June 10 with 670 on June 12 and 390 on June 16. That closed the summer passage so for the post-breeding gathering 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. 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. That ended the post-breeding gathering.

Green Heron (*Butorides virescens*)

Seen in very low numbers from August to the end of March; numbers were higher for the summer passage and the post-breeding gathering. During the Breeding Bird Survey a total of 54 pairs located; the first fledged young (two) were seen on May 23. Early fall records: *there were 17 on June 20 with 29 on June 24 and 33 on July 1, then 22 seen from July 8 to July 22 with 18 on July 27, 13 on July 29, seven on August 2, six on August 5 and three to August 16.* There were four on August 19 with three on August 26 and two to September 9. There were four on September 13 and September 16 with three to September 23. That was the early fall passage. For the late fall passage there were four on September 26 with five on October 3, then two seen to October 21 with singles to November 4. There were three from November 7 to November 18 with five on November 25, then three seen on November 27. That closed the late fall passage. For the winter passage there were three on December 2 and December 5 with two to December 13 and one on December 16. There were two on December 19 with three on December 21, then singles seen to January 3. That completed the winter passage. For the early spring passage there were four on January 10 with two on January 13 and one on January 16. There were three on January 20 and January 27 with four on February 3 and five on February 10, then one seen on February 17. There were two on February 20 with four on February 24, then two seen on February 27. That concluded the early spring passage. As this species nests

very early we go straight to the summer passage. There were three on March 4 with five on March 6, eight on March 14 and nine on March 17, then six seen on March 19. There were seven on March 22 with nine on March 24, then six seen to March 31. There were ten on April 3 and April 7 with nine to April 14 and eight on April 17. There were 14 on April 21 with 22 on April 28, then 11 seen on May 1. There were 20 on May 6 with 36 on May 9, then 22 seen on May 15 with 21 on May 20. That was the summer passage. For the post-breeding gathering there were 29 on May 23 with 47 on May 27, 48 on May 30 and 52 on June 2, then 30 seen on June 5. The count of 52 was the highest count for Zellwood but the highest count is now (2013) that of 242 on August 23, 2008. There were 43 on June 10 with 48 on June 12, then 27 seen on June 16. There were 31 on June 19 with 51 on June 23, then 22 seen on June 26 with 16 on June 30. 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. That was the end of the post-breeding gathering.*

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

A summer visitor that has not been proved to breed in the survey area; there was also a limited passage from the fall to the spring. Early fall records: *there were three on June 24 and June 27 with two on July 1 and singles on July 8. There were three on July 15 with singles to August 2. There were two on August 5 with singles to August 22.* There were three on August 26 with two to September 5. There were four on September 9 with one on September 13. There were two on September 19 with three on September 26, then one seen on September 30. That was the early fall passage. For the late fall passage there was an immature on October 14. For the winter passage there were two on November 25 and December 2 with one on December 9. There was also one on December 19. There were two on December 27 with three from January 3 to January 10. That completed the winter passage. For the early spring passage there were singles on January 16, January 20 and January 24 with three on January 27, then singles seen to February 6. There were four on February 10 with singles to February 27. That closed the early spring passage. For the main spring passage there were two on March 4 and March 6 with singles to March 22. There were seven on March 31 with one on April 3. There were four on April 21 with six on April 24, then two seen on April 28 with singles to May 12. That ended the main spring passage so for the summer passage there were two on May 30 with singles to June 10. There were 12 on June 12 with eight on June 16 and one on June 23. That was the end of the summer passage. For the early fall passage there were ten on June 26 with six on July 3, five on July 8, three on July 21 and singles to August 14.

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

A summer visitor but there was no evidence of it breeding in the survey area. Early fall records: *there were two on June 24 with singles to July 11. There were two on July 18 with seven on July 22, then two seen on July 25 with singles to August 14.* For this year there were three on August 19 with two on August 22 and singles to August 29. That was the extent of the early fall passage. For the late fall passage there was an adult on October 24. There were no winter or early spring sightings. For the late spring passage there were two on April 7 with one on April 14. There were three on April 21 with six on April 28 and May 1, then two seen on May 9 with one on May 12. That closed the spring passage. For the summer passage there was one on May 27 with seven on May 30 and 13 on June 2, then nine seen on June 5. There were 12 on June 10 with 16 on June 12, then 12 seen on June 16 with nine on June 19, six on June 23, three on June 26 and two on June 30. The count of 16 was the highest count for Zellwood but the highest count is now (2013) that of 28 on April 24, 2011. There were five on July 3 with two to July 14 and one on July 17. There were two on July 21 and July 25 with singles to August 4.

White Ibis (*Eudocimus albus*)

There were no major influxes this year instead numbers were quite low but stable through the year. Early fall records: *there were 64 on July 1 with 44 on July 4, 41 on July 11, 36 on July 18, 23 on July 25 and 11 on July 27. There were 40 on July 29 with eight on August 2, three to August 12, two on August 14 and singles to August 19.* There were two on August 22 with three on August 26 and 16 on September 9, then 13 seen on September 16 with nine on September 19 and five on September 26. That ended the early fall passage. For the main fall passage there were 38 on September 30 with 70 on October 7, 90 on October 10, 147 on October 14 and 190 on October 17, then 75 seen on October 21 with 52 on October 24. So often the rate of passage does change with the end of one and the beginning of another passage. There were 175 on October 28 with 160 on November 1 and 150 on November 4. There were 200 on November 7 with 290 on November 15, then 210 seen on November 18 with 95 on November 25. That closed the main fall passage. For the winter passage there were 130 on November 27 with 260 on November 29, then 108 seen on December 2 with 36 on December 9 and one on December 13. There was one on January 3 with 55 on January 7, 84 on January 10, 130 on January 13 and 285 on January 16. That was the winter passage. The last influx would normally belong to the early spring passage but as there were no later records I have included it in the winter passage. For the early spring passage there were no sightings until February. There was one on February 3 with later 30 on February 17; there were no later February records. That concluded the early spring passage. For the main spring passage there was one on March 10 with 37 on March 14, then six seen on March 17 with five on March 19. There were 17 on March 22 with 23 on March 24 and 193 on March 27, then 129 seen on

March 31 with 111 on April 3, 47 on April 7, 20 on April 10 and three on April 14. There were 29 on April 17 with 14 on April 21 and ten on April 24. There were 22 on April 28 with 31 on May 1, then ten seen on May 6 with three on May 9. That closed the main spring passage. For the summer passage there were 17 on May 12 with 22 on May 20, 25 on May 23 and 83 on May 27, then 54 seen on May 30. There were 61 on June 2 with 73 on June 5 and 117 on June 10, then 66 seen on June 12. There were 70 on June 16 with 82 on June 19, then 55 seen on June 23. That ended the summer passage. For the early fall passage there were 56 on June 26 with 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.*

Glossy Ibis (*Plegadis falcinellus*)

A common fall passage migrant with lesser numbers for the rest of the year; the early spring passage however is represented by a single record. Early fall records: *there were 30 on July 15 with 49 on July 18, then 18 seen on July 22 with ten on July 27 and nine on July 29. There were 29 on August 2 with 16 on August 5 and one on August 14.* For this year there were two on August 29 with seven on September 2, then five seen on September 5 with three on September 9. Later there was one on September 16. That was the end of a shortened early fall passage. For the main fall passage there was one on September 30 with 21 on October 3, then 350 seen on October 7 and October 10 with 270 on October 17 and 117 on October 21. There were 180 on October 24 with 240 on October 28, then 90 seen on November 4 with 76 on November 7. There were 94 on November 11 with 46 on November 15 and 25 on November 18. There were 70 on November 25 with 60 on November 29 and 37 on December 2. That closed the main fall passage. For the winter passage there were 55 on December 5 with 12 on December 9. There were three on December 19 with nine on December 21. There was one on January 3 with 60 on January 7 and 370 on January 13, then 285 seen on January 16. That completed the winter passage. For the early spring passage there were 25 on February 17 that was it. For the main spring passage there was one on March 6 and March 10 with four on March 17 and 22 on March 19, then eight seen on March 22 with two on March 27 and one on March 31. There were five on April 7 with two on April 14 and singles to April 21. That concluded the main spring passage. For the summer passage there were four on April 24 with 12 on May 6 and 14 on May 9, then 11 seen on May 15 with five on May 20. There were 12 on May 23 with 26 on May 27, 33 on May 30, 52 on June 2, 53 on June 10 and 105 on June 16, then 81 seen on June 19 with 17 on June 23. There were 124 on June 26 with 44 on July 3 and seven on July 8. That ended the summer passage. 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 17 with 16 on July 21 and 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.*

White-faced Ibis (*Plegadis chihi*)

This was a vagrant. For the late fall passage there was an adult on November 4 with two adults present on November 11. For the summer passage there was one in first-summer plumage on June 12.

Roseate Spoonbill (*Platalea ajaja*)

A non-breeding summer visitor; there was the suggestion of an early fall passage. Early fall records: *there were two on June 24 and June 27 with five from July 1 to July 8 and six on July 11, then nine seen on July 15 and July 18 with five to July 27 and singles to August 12. There were three on August 14 with two on August 19.* Later there were two on September 2 with one on September 5. That closed the early fall passage. There were no further sightings until the spring. For the late spring passage there was one on March 27 with two on March 31. Later there were two on April 17 with one on April 24. There was also one on May 9. That was the end of the late spring passage. For the summer passage 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 and two on July 10. The count of 30 was the highest count for Zellwood but the highest count is now (2013) that of 139 on October 2, 2011. Finally for this year there was one on August 14.

Wood Stork (*Mycteria americana*)

An irregular visitor in very low numbers; the greatest number of sightings were during the summer. Early fall records: *there were three on July 1 with five on July 8, then four seen on July 15 with two on July 18. There were three on July 22 with four on August 5.* Later there was one on August 16 with seven on August 19 and 15 on August 26, then 12 seen on August 29 with one on September 9. That was the early fall passage. For the late fall passage there were singles on September 30, October 7 and October 10 with six on October 17, then four seen on October 24 with singles to December 2. That closed the late fall passage. There were 11 on January 3; this could be either a winter or an early spring record. In any case for the early spring passage there were two on January 20 that was it. For the late spring passage there was one on April 14 with later four on May 1. For the summer passage there were three on May 23 with ten on May 27, then five seen to June 5 with three on June 10. There were 33 on June 12 with five

to June 23, three on June 26 and two on June 30. That completed the summer passage so for the early fall passage there was one on July 17 with three on July 31.

Black Vulture (*Coragyps atratus*)

A quite common passage migrant and non-breeding summer visitor; numbers were lowest from November to mid-May. Early fall records: *there were seven on June 13 with 11 on June 17, 16 on June 20, 31 on June 24 and 69 on July 1, then 35 seen on July 8 with 14 on July 11, six on July 15 and four on July 18. There were 30 on July 22 with 43 on July 27, then ten seen on July 29 with two on August 2. There were 39 on August 5 with 19 on August 14 and ten on August 16. There were 43 on August 19 with 20 on August 26 and four on August 29. There were 38 on September 2 with 12 on September 5, three on September 9 and one on September 13. There were nine on September 16 with 37 on September 19, then two seen on September 30. That was the early fall passage. For the late fall passage there were five on October 3 with 21 on October 10 and 25 on October 21, then one seen on October 28. Numbers were now much lower all the way to mid-May. There were two on November 1 and November 4 with six on November 7, then five seen to November 15. There were seven on November 25 with three on November 29 and one on December 2. That closed the late fall passage. For the winter passage there were four on December 5. Later there was one on December 16 with seven on December 19 and 17 on December 21, then seven seen on December 27 with four on December 30 and one on January 3. That completed the winter passage. For the early spring passage there were three on January 7 with 16 on January 10, then seven seen on January 13 with two on January 16 and one on January 24. There were three on February 3 with singles to February 10. There were two on February 20 with singles to February 27. That concluded the early spring passage. For the main spring passage there was one on March 4 with four on March 6 and 21 on March 14, then six seen on March 19 with two on March 22. There were seven on March 24 with six on March 27 and one on March 31. There were nine on April 3 with three on April 7 and two on April 10. There were seven on April 14 with six on April 17 and three to April 28. There were five on May 1 with four on May 6 and two on May 9. That ended the main spring passage. Numbers were higher again with the summer passage there were four on May 12 with six on May 20, ten on May 23, 31 on May 27, 39 on May 30 and 42 on June 2, then 13 seen on June 5 with two on June 10. There were three on June 12 with 20 on June 16, 62 on June 19, 74 on June 26 and 86 on June 30, then 22 seen on July 3 with 15 on July 8. There were 127 on July 10 with 65 on July 14 and two on July 17. The count of 127 was the highest count for Zellwood but the highest count is now (2013) that of 1,340 on February 28, 2007. That was the summer passage. For the early fall passage 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.*

Turkey Vulture (*Cathartes aura*)

A non-breeding resident, the greatest numbers were seen during the early fall passage. Early fall records: *there were 14 on July 11 with 18 on July 15, 33 on July 22, 55 on July 27 and 105 on August 2, then 69 seen on August 5 with 40 on August 12. There were 50 on August 14 with 169 on August 16 and 187 on August 19, then 122 seen on August 22 with 67 on August 26, 62 on August 29 and 26 on September 2. There were 39 on September 5 with 196 on September 9, then five seen on September 13. There were 42 on September 16 with 55 on September 19, then 52 seen on September 26 with 32 on September 30. That was the early fall passage. For the late fall passage there were 83 on October 3 with 32 on October 10 and 24 on October 14. There were 152 on October 17 (of these 126 were flying to the south) with 39 on October 21, 24 on October 24, 14 on October 28, 11 on November 1 and eight on November 4. Locally October 21 was the peak count of that influx. There were 22 on November 7 with 15 on November 11 and six on November 15. There were 19 on November 18 with 21 on November 25, 26 on November 27 and 38 on November 29, then 15 seen on December 2 with 11 on December 5 and ten on December 9. That was a long running late fall passage. For the winter passage there were 20 on December 13 with five on December 16. There were 19 on December 19 with 35 on December 21, then 19 seen to December 30 with 12 to January 7. That completed the winter passage. For the early spring passage there were 22 on January 10 with 24 on January 13, then seven seen to January 20. There were 15 on January 24 with 104 on February 3, then 60 seen on February 6 with 57 on February 17, 43 on February 24, 31 on February 27 and 15 on March 4. That concluded the early spring passage. For the late spring passage there were 19 on March 6 with 20 on March 10, then 18 seen on March 17 with ten on March 19. There were 13 on March 22 with 36 on March 24, then 31 seen on March 27 with 18 on March 31 and 13 to April 10. There were 16 on April 14 with 15 on April 17, 11 on April 24 and five on April 28. There were 55 on May 1 with 44 on May 9 and eight on May 12. That ended the late spring passage so for the summer passage there were 24 on May 15 with 63 on May 20, then 44 seen on May 23. There were 59 on May 27 with 88 on May 30, then 79 seen on June 2 with 30 on June 5 and 18 on June 10. There were 22 on June 12 with 63 on June 16 and 67 on June 19, then 35 seen on June 26 with 21 on June 30. That closed the summer passage. For the early fall passage 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 2. 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.*

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

This was a vagrant. For the late fall passage there were three on October 28. There had been no sightings in the 2000/2001 year but there were 20 records for the 2002/2003 year so this was the beginning of a long expansion by this species.

Fulvous Whistling-Duck (*Dendrocygna bicolor*)

A common late fall visitor; there was also a passage during the summer months. Early fall records: *For the post-breeding gathering there were two on June 17 and June 20 with six on June 24 and nine on July 1, then five seen on July 18 with two on July 22 and one on July 25. There were 14 on July 27 with five to August 14 and two on August 16. There were seven on August 19 with two on August 29 and one on September 9. There were 52 on September 13 with 35 on September 16 and six on September 26. That was the post-breeding gathering. For the main fall passage there were 34 on October 24 with 205 on October 28, then 18 seen on November 1. There were 70 on November 4 with 95 on November 7 and 115 on November 11, then 180 seen on November 15 and November 18 with 120 on November 25, 60 on November 27 and four on December 2. That completed the main fall passage. There were no winter or early spring passages. For the main spring passage there was one on April 24 with one on May 9 that was it. In contrast for the summer passage there were five on June 2 with singles to June 12. There were two on June 16 with 11 on June 23 and 17 on June 26, then 11 seen on June 30 with nine on July 3 and four on July 8. That ended the summer passage. For the post-breeding gathering 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.*

Greater White-fronted Goose (*Anser albifrons*)

This was a vagrant. For the late fall passage there were three (two adults and an immature) in the fields to the east of Laughlin Road on October 28.

Black Swan (*Cygnus atratus*)

This was an exotic. For the summer passage there was an adult on Lake Apopka on June 10.

Wood Duck (*Aix sponsa*)

A summer visitor but they were seen in every month; during the Breeding Bird Survey a total of two pairs located. A brood of three was seen from May 30 at Lake Apopka to the south of Hooper Farms Road extension. Early fall records: *there were eight on July 8 with two to July 22 and one on July 25. There were three on July 29 with singles on August 2 and August 12. For this year there was one on September 5. That was the only additional early fall record. For the*

main fall passage there were four on October 10. Later there were two on October 21 with four on October 24, then two seen on November 7 and November 15. That was the extent of the main fall passage. For the winter passage there were 23 on December 2 with two on December 9. There was one on January 3 with two on January 7 and January 13. That completed the winter passage. For the early spring passage there was one on January 27. Later there were six on February 20 and February 24 with two on February 27. That closed the early spring passage. For the main spring passage there were four on March 4 with six on March 6, then five seen on March 17 with three on March 22 and two to April 7. There were four on April 10 with two on April 14. That was the end of the main spring passage. For the summer passage there were four on May 1 with two to May 23 and one on May 27. There were four on May 30 with two to June 10. There were four on June 12 with eight on June 26, then singles seen to July 10. 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*. That was the end of the summer passage.

Gadwall (*Anas strepera*)

A very rare passage migrant; for the late fall passage there was one on November 1 with two on November 11, then one seen on November 15. There were also nine on November 18. There were no winter sightings. For the early spring passage there was one on January 24.

American Wigeon (*Anas americana*)

Another rare passage migrant; the lack of flooded fields was the problem. For the late fall passage there were four on November 1 that was it. For the late spring passage there were 16 on March 19 with two on March 24. Later there was an adult male on May 1.

American Black Duck (*Anas rubripes*)

This was a vagrant. For the late fall passage and winter passages there was one from November 11 to January 20; I did not note the location.

Mallard (*Anas platyrhynchos*)

Present all year in very low numbers; there was no evidence that they bred. Early fall records: *there were singles from June 20 to July 18 with two on July 22, then singles seen again*

to August 12. For this year there were singles from August 19 to September 2 with two from September 5 to September 16, then singles seen to September 30. That was the early fall passage. For the main fall passage there were three on October 3 and October 7 with two to October 14. There were three on October 21 with six on October 28, then three seen to November 11 with singles to November 18. There were two on November 25 with six on November 29, then two seen on December 2. That closed the main fall passage. For the winter passage there were three on December 5 with four on December 9, then two seen on December 13. There were three on December 16 and December 19 with five on December 21, then three seen on December 27. There were five on December 30 with eight on January 7, then two seen on January 10. That completed the winter passage so for the early spring passage there were three on January 13 with four on January 16 and January 24, then three seen on January 27 with two on February 10 and singles to February 24. That concluded the early spring passage. For the main spring passage there were two on February 27 with three on March 4, then singles seen to March 19. There were four on March 24 with three to April 3, two to April 24 and singles to May 1. That ended the main spring passage. For the summer passage there were three from May 6 to May 12 with five on May 15, then three seen to May 23. There were four on May 27 with five on June 2 and seven on June 10, then three seen on June 12 with two on June 16 and one on June 19. There were four on June 23 with singles to June 30. That closed the summer passage. For the early fall passage there were singles on July 14 and July 21 with six from July 25 to July 31, then five seen on August 4 with 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.*

Mottled Duck (*Anas fulvigula*)

A quite common summer resident with lower numbers for the other seasons although there did appear to be a minor winter passage. During the Breeding Bird Survey a total of 12 pairs located; broods of young were first seen from April 28 to July 3. The largest broods were of six and seven. Early fall records: *there were ten on July 1 with 61 on July 4, then 16 seen on July 8. There were 33 on July 11 with 49 on July 15, then 42 seen on July 22 with 25 on July 27, 24 on July 29, nine on August 2 and seven on August 5. There were 22 on August 12 with 18 on August 14, 13 on August 19 and seven on August 22. There were 21 on August 26 with 19 on August 29, 16 on September 2, 15 on September 5 and three on September 9. There were 17 on September 13 with 27 on September 16, then singles seen to September 23. There were 18 on September 26 with 17 on September 30 and eight on October 3. That was the early fall passage. For the late fall passage there were 20 on October 7 with 18 on October 10, five on October 14 and two on October 17. There were 12 on October 21 with six on October 28 and two on November 1. There were six from November 4 to November 15 with eight on November 18, then seven seen to November 27. That closed the late fall passage. For the winter passage*

there were 18 on November 29 with nine on December 2. There were 12 on December 5 with 19 on December 9, 21 on December 16 and 24 on December 19, then 19 seen on December 21 with 18 on December 30, 17 on January 7, ten on January 10 and five on January 13. That completed the winter passage. For the early spring passage there were seven on January 16 with eight on January 20 and January 24, then five seen on February 3 with four on February 6. There were six on February 10 with two on February 17. There were three on February 20 with five to February 27 and seven on March 4, then six seen on March 6. That concluded the early spring passage. For the late spring passage there were seven on March 10 with two on March 14. There were five from March 17 to March 22 with seven on March 24 and March 27, then six seen on March 31 with five to April 10. There were seven on April 14 with two on April 17. That closed the late spring passage. For the summer passage there were five on April 21 with ten on April 24 and 22 on April 28, then 18 seen on May 6 with 17 on May 9 and 12 on May 12. There were 17 on May 1 with 12 on May 20. There were 13 on May 23 with 31 on May 27, then 17 seen on May 30. There were 27 on June 2 with 30 on June 5 and 44 on June 10, then 32 seen on June 12 with 21 on June 16, 16 on June 23 and three to June 30. There were eight on July 3 with seven to July 10. There were 17 on July 14 with seven on July 17. That ended the summer passage. For the post-breeding gathering there were 11 on July 21 with 23 on July 25, 37 on July 28 and 67 on July 31, then 56 seen to August 14 *with 22 on August 18.*

Blue-winged Teal (*Anas discors*)

A very common late fall passage migrant with much lower numbers during the winter and spring passages. Early fall records: *there were single adult males in breeding plumage on June 24 and July 4.* For this year there were five on August 22 with 35 on August 29 and 68 on September 2, then 27 seen on September 5 with three on September 9. There were 39 on September 13 with 50 on September 16, then four seen on September 30. That was the early fall passage. For the main fall passage there were 62 on October 3 with 240 on October 14, then seven seen on October 21 with four on October 24. There were 3,500 on October 28 and November 1 with 1,500 on November 4, 850 on November 11, 550 on November 18, 360 on November 25, 320 to November 29, 41 on December 2, eight on December 5, two on December 9 and one on December 13. There was no incoming winter influx to cover the declining main fall passage influx and this caused the main fall passage to over-run. For the winter passage there was one on December 16 with three on December 19, then two seen on December 21 with one on December 27. There were four on December 30 with six on January 3, eight to January 10 and nine on January 13, then eight seen on January 16 with five on January 20. The late start to the winter passage may have caused it to over-run although the late start normally has no such effect. So for the early spring passage there were 11 on January 24 with 14 to February 6 and 17 on February 10, then one seen on February 17. There were four on February 20 with 14 on February 24, then ten seen on February 27. That concluded the

early spring passage. For the main spring passage there were 51 on March 4 with 38 on March 6, 27 on March 10 and 20 on March 14. There were 38 on March 17 with 84 on March 22, 134 on March 24 and 205 on March 27, then 22 seen to April 3 with 18 on April 10 and 12 on April 14. There were 25 on April 17 with 11 on April 21, seven on April 24, five on April 28 and two on May 9. That was the end of the main spring passage. For the summer passage there was an adult male in breeding plumage on June 2 with two males present on June 5. For the early fall passage there were three on August 7.

Cinnamon Teal (*Anas cyanoptera*)

This was a vagrant. For the late fall passage there was an adult male from November 1 to November 27.

Northern Shoveler (*Anas clypeata*)

This was an uncommon passage migrant; there was a single winter record. For the early fall passage there were five on September 13. For the main fall passage there were three on October 14 and October 21 with nine on October 28, then eight seen on November 4 with seven to November 15, six on November 18, five on November 27 and three to December 2. That closed the fall passage. For the winter passage there was one on December 21 that was it. For the early spring passage there were singles on January 24 and January 27. For the main spring passage there were four on March 19 with singles to March 24. There were 24 on April 10 with 15 on April 17 and five on April 21. That closed the main spring passage. For the early fall passage there was one at the Sod Farm on July 21 and July 25.

Northern Pintail (*Anas acuta*)

A very uncommon passage migrant and winter visitor; the majority of the sightings were during the main fall passage. For the main fall passage there were two on October 28 with three on November 1, six on November 4 and seven on November 7, then four seen on November 11 with three on November 15 and one on November 18. There were three on November 25 and November 27 with one on November 29. That closed the main fall passage. For the winter passage there were singles on December 2 and December 5 with three on December 9. There were no later winter records. For the early spring passage there was one on January 10 with two on January 27.

Green-winged Teal (*Anas crecca*)

A quite common fall passage migrant; there were minimal numbers seen during the spring passage. For the early fall passage there were 20 on September 16 that was it. For the main fall passage there were four on October 14 with one on October 24. There were 12 on November 1 with six on November 4. There were nine on November 7 with 150 on November 11 and 380 on November 18, then 250 seen on November 25 with 240 on November 27, 200 on November 29 and 170 on December 2. That completed the main fall passage. For the winter passage there was one on December 30; there were no other sightings. The early spring passage was no better there were three on February 6 with one on February 10. For the main spring passage there were two on February 27 with one on March 4. There were two from March 6 to March 19 with singles to March 27.

Redhead (*Aythya americana*)

An uncommon winter visitor and late spring passage migrant. For the winter passage there was a male on December 30. On January 3 a party of 18 flew to the south down the side of Lake Apopka. The count of 18 is still (2013) the highest count for Zellwood. Finally for the winter passage there were two on January 7 with one on January 10. There were no records for the early spring passage. For the late spring passage there was a male on March 24 with two males on March 27 and then a male was seen on April 3.

Ring-necked Duck (*Aythya collaris*)

An uncommon passage migrant and winter visitor; there was a single record for the early spring passage. For the late fall passage there were 44 on October 28 with later 11 on November 15 and one on November 18. There were four on November 27 with one on November 29. That was the late fall passage. For the winter passage there were two on December 5 with singles on December 9 and December 13. There were 61 on December 16 with two on December 19. That was the extent of the winter passage. For the early spring passage there was one on January 16 that was it. For the main spring passage there was one on March 4 with 16 on March 10, then two seen on March 24 with one on March 27. Finally there was a late individual on April 28.

Greater Scaup (*Aythya marila*)

A very uncommon passage migrant and winter visitor; the winter passage was by far the strongest event. For the late fall passage there were singles on November 11, November 18,

November 25, November 27 and November 29. For the winter passage there was one on December 2 with two from December 5 to December 19, then singles seen to January 3. That completed the winter passage. For the early spring passage there were two on January 10 with three on January 13, then two seen on January 16. For the late spring passage there was one on March 24 with two on March 27, then one seen on April 7.

Lesser Scaup (*Aythya affinis*)

A quite common passage migrant and winter visitor; the greatest numbers were from mid-December to mid-March. Exceptionally a male summered this year. For the late fall passage there were singles on November 1 and November 4 with two to November 11 and five on November 15, then three seen to November 29. That was the extent of the late fall passage. For the winter passage there were seven on December 2 with 13 on December 5, 19 on December 9, 28 on December 13, 53 on December 19, 61 on December 21, 101 on December 27, 119 on January 3 and 150 on January 10, then 85 seen on January 13 with 84 on January 16 and 48 on January 20. This single influx covered the whole of the winter passage and part of the early spring passage. For the early spring passage this event continued there were 88 on January 24 with 133 on January 27, then 94 seen on February 6 with 82 on February 10 and 60 on February 17. There were 69 on February 20 with 70 on February 24 and March 4, then 49 seen on March 6. That concluded the early spring passage. For the late spring passage there were 69 on March 10 with 56 on March 14, 54 on March 17, 37 on March 19, 12 on March 22, nine on March 24 and singles to March 31. That event really ended on March 19. There were seven on April 3 with two to April 21, then singles seen to April 28. There were two from May 1 to May 12. That ended the late spring passage. For the summer passage there was an adult male present from at least May 15 to August 7. This individual was not seen during the next survey year.

Bufflehead (*Bucephala albeola*)

This was a vagrant. For the late fall passage there were three on November 7.

Hooded Merganser (*Lophodytes cucullatus*)

A quite common winter visitor and spring passage migrant; there was a single fall record. For the late fall passage there was one on November 18. For the winter passage there were 16 on December 2 with one on December 5. There were two on December 9 with seven on December 16, 22 on December 19 and 25 on December 27, then 12 seen on December 30

with 11 to January 10 and two on January 13. That completed the winter passage. For the early spring passage there were four on January 16 with five on January 20 and nine on January 24, then five seen on January 27 with four on February 3. There were seven on February 6 with eight on February 17, then four seen on February 24 with three on February 27. That closed the early spring passage. For the late spring passage there were five on March 4 with six on March 6, then two seen on March 19 that was it.

Red-breasted Merganser (*Mergus serrator*)

An uncommon passage migrant and winter visitor; there were no records for the early fall and early spring passages. For the late fall passage there were four on November 1. For the winter passage there was a male on December 27, December 30 and January 3. For the late spring passage there was a female on May 6.

Ruddy Duck (*Oxyura jamaicensis*)

A passage migrant and winter visitor that was only seen in small numbers; during the first four years I only counted the ducks that were close to the shore of Lake Apopka. For the late fall passage there were five on November 4 with 55 on November 7, then 23 seen on November 11 with nine on November 15. There were 30 on November 18 with 79 on November 25 and 106 on November 29, then 57 seen on December 2. That closed the late fall passage. For the winter passage there were 80 on December 5 with 97 on December 9, then 44 seen to December 21 with 15 on December 27, 12 on December 30 and one on January 7. That completed the winter passage. For the early spring passage there were four on January 10 with three on January 16, two to January 27 and singles to February 6. There were six on February 20 and February 27 with four on March 4. That concluded the early spring passage. For the main spring passage there were 160 on March 17 with 18 on March 24 and 16 on March 27. There were 18 on March 31 with 29 on April 10, then 16 seen on April 14 with 11 on April 24. That was the main spring passage. Finally for the summer passage there was an adult male in breeding plumage on May 23, May 27 and May 30.

Osprey (*Pandion haliaetus*)

Present all year in increasing numbers however it was not until 2002/2003 that the numbers really started to climb. Early fall records: *there were 16 on July 4 with 33 on July 8 and 34 on July 15, then 20 seen on July 18. There were 29 on July 22 with 30 on July 25 and 33 on July 27, then 24 seen on July 29 with 19 on August 2. There were 27 on August 5 with 19 on*

August 12 and ten on August 14. For this year there were 21 on August 16 with 13 on August 19, ten on August 22 and eight on August 26. There were 11 on August 29 with nine on September 2 and seven on September 5. There were eight on September 9 with 12 on September 13, then ten seen on September 19 with four on September 23. That was the end of the early fall passage. For the main fall passage there were 12 on September 26 with 13 on September 30, then 12 seen on October 3 with nine on October 7. There were 16 on October 10 with 13 to October 21 and ten on October 24. There were 15 on October 28 with 13 on November 1, 12 on November 7 and 11 on November 11. There were 15 on November 15 and November 18 with 11 on November 25. There were 12 on November 27 with 15 on November 29 and 21 on December 5, then eight seen on December 9. That closed the main fall passage. For the winter passage there were 13 on December 13 with 18 on December 16, 21 on December 21 and 23 on December 27, then 16 seen on December 30 with 12 on January 3 and nine on January 7. That completed the winter passage. For the early spring passage there were 11 on January 10 with 14 on January 13 and 19 on January 16, then 13 seen on January 20 with ten on January 24. There were 15 on January 27 with 14 on February 3 and 12 on February 6. There were 24 on February 10 with 19 on February 20 and 17 on February 24. That was the extent of the early spring passage. For the late spring passage there were 21 on February 27 and March 4 with 22 on March 10, then 18 seen on March 17 with 13 on March 22 and seven on March 24. There were 11 on March 27 with 16 on March 31, 18 on April 3 and 23 on April 7, then 14 seen on April 14 with 11 on April 17. There were 13 on April 21 with 19 on April 24, then 21 seen on May 1 and May 6 with 17 on May 9 and 16 on May 12. That ended the late spring passage. For the summer passage there were 22 on May 15 with 33 on May 23, then 22 seen on May 27 with 13 on May 30 and 11 on June 2. There were 15 on June 5 with 12 on June 10 and 11 on June 12. There were 14 on June 16 with 22 on June 19, 24 on June 23 and 31 on June 26, then 22 seen on July 3 with 19 to July 10. That was the summer passage. For the early fall passage 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.*

Swallow-tailed Kite (*Elanoides forficatus*)

Both 2001 and 2002 had very low numbers of kites in the early fall; that was corrected in 2003. There were also minimal spring and summer passages. Early fall records: *for the post-breeding gathering there were 17 on June 24 with two on June 27. There were 12 on July 1 with 22 on July 4, then nine seen on July 8 with two on July 11. There were 14 on July 15 with 34 on July 18, then 20 seen on July 22 with four on July 23. There were 40 on July 25 with 17 on July 27. There were 23 on July 29 with 29 on August 5, then five seen on August 14 with four on August 16, three on August 19 and one on August 22. Finally for the post-breeding gathering there were three on August 26.* For the spring passage there were 25 on April 14 with three on April

21 and one on May 6. There were two on May 9 with seven on May 12, then five seen on May 15 with two on May 20. That completed the spring passage. For the summer passage there were seven on May 23 with five on May 27 and four on May 30. There were 22 on June 2 (perhaps this represented the return of birds that had failed to breed this year) with four to June 12 and one on June 19. That closed the summer passage. 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 later records.

Snail Kite (*Rostrhamus sociabilis*)

This was a vagrant. For the early fall passage there was a juvenile on August 14; it was flying to the north but the location was not noted.

Bald Eagle (*Haliaeetus leucocephalus*)

Seen throughout the year but in small numbers; during the Breeding Bird Survey a single pair located. Early fall records: *there were singles from June 20 to July 18 with two on July 22, then singles seen to July 29. There were also two on August 2 and August 14.* For this year there were two from August 16 to September 9 with one on September 13. There were eight on September 16 with seven on September 19, four on September 23, three on September 30 and two on October 3. That was the early fall passage. For the late fall passage there were two on October 7 with four on October 10 and six on October 14, then five seen on October 21 with two to October 28. There were three on November 1 and November 7 with four on November 11, then three seen to November 25 with one on November 27. That closed the late fall passage. For the winter passage there were seven on November 29 with three on December 5 and one on December 9. There were two on December 13 with three to December 21, four on December 27 and seven on January 3, then two seen to January 10. That completed the winter passage. For the early spring passage there were six on January 13 with one on January 16. There were two on January 24 with four on January 27, five on February 3, nine on February 6 and 11 on February 10, then ten seen on February 20 with six to February 27. That was the end of the early spring passage. For the main spring passage there were nine on March 4 with three on March 6 and two on March 10. There were five on March 14 with three to March 19. There were six on March 22 with 12 on March 27 and 20 on April 3, then seven seen on April 7 with four on April 10. The count of 20 was the highest count for Zellwood but the highest count is now (2013) that of 109 on November 13, 2005. There were nine on April 14 with ten on April 17, then six seen on April 24 with two to May 6. That concluded the main spring passage so for

the summer passage there were three on May 9 and May 15 with five from May 20 to May 30, then four seen on June 2 with two on June 5 and one on June 10. There were two on June 12 with four on June 16 and seven on June 19, then three seen on June 23 with one on June 26. 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 from August 14 to September 2 with four on September 4, then three seen to September 11 with two on September 15. In this instance I do not think there was an early fall passage rather the summer passage continued to October.

Northern Harrier (*Circus cyaneus*)

Seen in rather low numbers this year; the majority were seen between mid-October and mid-January. Early fall record: *there was an adult female on August 14*. The adults tend to come south before the juveniles a trait shared by the Blue-winged Teal. For this year there were singles on September 2 and September 9 with three on September 13, then two seen to September 19. There were three on September 23 with four on September 26, then three seen on September 30. That was the early fall passage. For the main fall passage there were five on October 3 and October 7 with nine on October 10, then seven seen to October 17. There were nine on October 21 with 11 on October 24, 13 to November 1 and 18 on November 4, then 13 seen on November 7. There were 15 on November 11 with 19 on November 15 and 20 on November 18, then 14 seen on November 25 with 13 on November 27, 11 on November 29 and six on December 2. That closed the main fall passage. For the winter passage there were 32 on December 5 with 14 on December 9 and seven on December 13. There were 11 on December 16 with 13 on December 19, then 12 seen on December 27 with nine on December 30. There were 13 on January 3 with nine on January 7. That completed the winter passage. For the early spring passage there were 13 on January 10 with 12 on January 13, 11 on January 20, ten on January 27, eight on February 3 and seven to February 10. That influx lasted a month; it also marked the end of the heaviest passage. The month long decline indicated that an event was coming to an end. There were nine on February 17 with seven on February 20 and six on February 24. That concluded the early spring passage. For the late spring passage there were nine on February 27 with six on March 4 and five on March 6. There were seven on March 10 and March 17 with six on March 19 and five on March 22. There were nine on March 24 with six on March 27 and five on March 31. There were seven on April 3 with five to April 10. There were six on April 14 with five on April 21, three to May 1 and two on May 9. That ended the late spring passage. Again there was an early fall record; there was an adult female on August 4.

Sharp-shinned Hawk (*Accipiter striatus*)

A passage migrant and winter visitor in very low numbers; there were two very early fall sightings. Early fall records: *there were singles on July 22 and July 29*. For this year there was one on August 29. Later there were singles on September 13 and September 23 with two on September 30 and October 7, then singles seen to October 14. There were two on October 17 and October 21 with five on October 28 and November 4, then three seen on November 7 with two to November 18 and singles to November 27. That was the fall passage. For the winter passage there were two from November 29 to December 13 with singles to December 19. There were two on December 21 and December 30 with one on January 3. That completed the winter passage. For the early spring passage there were three on January 7 with four on January 13, then three seen on January 16 with two to January 27. There were three on February 3 with two to February 24 and singles to March 4. That closed the early spring passage so for the late spring passage there were singles on March 14 and March 17 with two on March 19, then three seen on March 22 and March 24 with two on March 27 and singles to April 17. That was the end of the main passage. Finally for the late spring passage there were singles on May 6 and May 15.

Cooper's Hawk (*Accipiter cooperii*)

Present all year although sightings were limited in April and May; during the Breeding Bird Survey a total of three pairs located. There was also a significant post-breeding gathering. Early fall records: *for the post-breeding gathering there were three on June 27 and July 4 with singles to July 11. There were four on July 15 with five on July 22, then four seen to July 27. There were six on July 29 and August 2 with seven to August 12, eight on August 16 and nine on August 22, then seven seen to August 29. There were 12 on September 2 with four on September 9 and three to September 16. There were six on September 19 and September 23 with five on September 26 and two on September 30. That ended the post-breeding gathering. For the main fall passage there were four on October 3 and October 7 with five on October 10, then three seen on October 14 with two on October 17. There were four on October 21 and October 24 with five on October 28, six to November 4 and seven on November 7, then five seen to November 27 with four on November 29 and two to December 5. That closed the main fall passage. For the winter passage there were four on December 9 with two on December 13 and singles to December 27. There were three from December 30 to January 7 with one on January 10. That completed the winter passage. For the early spring passage there were two on January 13 and January 20 with three to February 3 and four on February 6, then three seen on February 10 with two to February 24 and singles to March 4. That concluded the early spring passage. For the late spring passage there were two on March 10 and March 17 with three on March 19, then one seen on March 24. That was a very short late spring passage. For the*

summer passage there were three on April 14 with one on April 24. There was also one on May 6 with later singles from May 27 to June 12. That finished the summer passage. For the post-breeding gathering there were two from June 19 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.

Red-shouldered Hawk (*Buteo lineatus*)

A common resident and fall passage migrant; during the Breeding Bird Survey a total of six pairs located. Early fall records: *there were three on July 11 with five on July 15, then three seen on July 18. There were four on July 22 with five on July 25, six on July 29 and seven on August 5, then four seen on August 12. There were six on August 14 with nine on August 16 and 11 on August 19, then seven seen on August 22. There were nine on August 26 with 11 on August 29, then ten seen on September 2 with nine on September 9 and two on September 13. There were ten on September 16 with nine to September 30. That was the early fall passage.* For the main fall passage there were 14 on October 3 with seven on October 7 and five on October 10. There were 14 on October 14 with seven on October 17 and six on October 21. There were nine on October 24 with six on October 28 and three on November 1. There were 11 on November 4 with 13 to November 15 and 15 on November 18, then 11 seen on November 27 with nine on November 29, seven on December 2, six on December 5 and five on December 9. That closed the late running main fall passage. For the winter passage there were 11 on December 13 with two on December 16. There were eight on December 19 with nine on December 21 and December 30, then three seen on January 3. That completed the winter passage. For the early spring passage there were five on January 7 with nine to January 13 and 11 on January 20, then eight seen on January 24 with six to February 3. There were seven on February 6 with eight on February 17, then five seen on February 20 with four on February 24 and one on February 27. That concluded the early spring passage. For the late spring passage there were three on March 4 with four on March 6, then three seen on March 10 with one on March 17. There were seven on March 19 with five to March 27, three on April 3 and two on April 7. That ended the late spring passage. For the summer passage there were three on April 10 with five on April 14, then four seen to April 24 with three to May 20 and one on May 23. There were four on May 27 with two to June 2. That closed the summer passage so for the post-breeding gathering there were five on June 5 with three to June 16 and two to June 23. 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*.

Broad-winged Hawk (*Buteo platypterus*)

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

Swainson's Hawk (*Buteo swainsoni*)

This was a vagrant. For the late fall passage there was a juvenile light morph on November 25.

Red-tailed Hawk (*Buteo jamaicensis*)

A common resident; there was little evidence of passage. During the Breeding Bird Survey a total of six pairs located; a juvenile was first seen on June 2. Early fall records: *there were three on June 24 and June 27 with five from July 1 to July 15, seven on July 18 and nine on July 25, then six seen to August 2. There were eight on August 5 with seven to August 14.* For this year there were 13 on August 16 with 12 on August 22 and ten on August 26. There were 11 on August 29 with 18 on September 2, then 12 seen on September 5 with nine on September 9 and six on September 13. There were seven on September 16 with 18 on September 19, then 12 seen on September 23 with ten on September 26. That was the early fall passage. For the main fall passage there were 11 from September 30 to October 7 with 13 on October 14, then 11 seen on October 17 with ten on October 21. There were 16 on October 24 with 15 on October 28 and 11 on November 1. There were 12 on November 4 and November 7 with 13 to November 18, then 20 seen on November 25 and November 27 with 18 on November 29, 17 on December 2 and 16 on December 5. That closed the main fall passage. For the winter passage there were 17 on December 9 with 14 on December 13 and 11 on December 16. There were 18 on December 19 with 19 on December 21 and December 27, then 18 seen on December 30 with 12 to January 7. During this influx there was one at the Sand Farm that showed the characteristics of the eastern Canadian form on December 27 and December 30. That completed the winter passage. For the early spring passage there were 18 on January 10 with 25 on January 16, then 17 seen on January 20 with 13 on January 24. There were 19 on January 27 with 17 on February 3, 13 on February 6 and 12 on February 10. There were 19 on February 17 with 17 on February 24 and 14 to March 4. That concluded the early spring passage. For the late spring passage there were ten on March 6 with 17 on March 10 and March 14, then 16 seen on March 17 with ten on March 19. There were 11 on March 22 with 12 on March 24, then eight seen to March 31. There were 11 on April 3 and April 7 with 15 on April 14, then 12 seen on April 21 with ten on April 24, nine on May 1, eight on May 6 and seven on May 9. That ended the late spring passage. For the summer passage there were ten on May 12

with eight on May 15 and six to May 23. There were seven on May 27 with nine on May 30 and 12 on June 2, then six seen on June 5 with three on June 10. There were nine on June 12 with eight on June 19 and four to June 26. That closed the summer passage. For the post-breeding gathering there were six on June 30 and July 8 with 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.*

American Kestrel (*Falco sparverius*)

A quite common fall and winter passage migrant; numbers were lower during the spring passages. Early fall record: *there was an adult male on July 15.* For this year there was also an adult male from August 26 to September 9. There were singles on September 13 and September 16 but I did not record their age or sex. There were three on September 19 with four on September 23, six on September 26, eight on September 30, 19 on October 7 and 20 on October 10, then 15 seen to October 17. There were 16 on October 21 with 19 on October 24, then 16 seen on November 1 with nine on November 4 and seven on November 7. There were 13 on November 11 and November 18 with 14 on November 25, then 11 seen on November 27. That closed the fall passage. For the winter passage there were 12 on November 29 with 18 on December 2, then 13 seen to December 16 with nine on December 19. There were 11 on December 21 with 12 on December 27 and 13 on December 30, then 11 seen on January 3 with nine to January 10. That completed the winter passage. For the early spring passage there were nine on January 13 and January 16 with 11 on January 20, then ten seen on January 27 with six to February 6. There were eight on February 10 with 11 on February 17, then ten seen on February 20 with five on February 24. That concluded the early spring passage. For the main spring passage there were eight on February 27 with nine on March 4 and 12 on March 6, then nine seen to March 14 with seven on March 17. There were ten on March 19 with six on March 22. There were seven on March 24 with 15 on March 27, then six seen on April 3 with five on April 7 and two on April 14. That was the main spring passage. There were no summer sightings. For the early fall passage there was a juvenile on July 10.

Merlin (*Falco columbarius*)

An uncommon passage migrant and winter visitor; there were normally only singles seen. For the late fall passage there was one on September 26 with two on September 30 and three on October 10, then two seen on October 14 with singles on October 17, October 21 and October 24. There were two on October 28 and November 4 with singles on November 7, November 15, November 25 and November 27. That closed the late fall passage. For the winter

passage there were singles on December 2, December 16, December 27 and January 7. That completed the winter passage. For the early spring passage there were singles on January 13 and January 20; there were no February sightings. For the main spring passage there were singles on March 4, March 22, March 27 and April 10 with two on April 17.

Peregrine Falcon (*Falco peregrinus*)

A rare passage migrant; there was a single spring record. For the late fall passage there were singles on September 26, September 30, October 3, October 10, October 17 and October 21 with two on October 24. Finally for the late fall passage there was one on November 4. There were no winter sightings. For the late spring passage there was one on March 27.

Ring-necked Pheasant (*Phasianus colchicus*)

This was an exotic; it was however one of the most beautiful birds seen during the year. This was an adult male of the race *P.c.torquatus*. It took up residence at the junction of Laughlin Road and the McDonald Canal from May 6, 2002 to April 30, 2003. It visited the Pole Road extension on February 12.

Wild Turkey (*Meleagris gallopavo*)

This was a vagrant. There was a gray morph by Lake Apopka to the south of the Lust Road pump house from March 17 to March 27.

Northern Bobwhite (*Colinus virginianus*)

A resident; during the Breeding Bird Survey a total of 89 pairs located with the first brood (4) being seen on June 5. Early fall records: *there were 25 on July 8 with 23 on July 11, eight to July 27, six on July 29 and four on August 2. There were six on August 5 with eight on August 12, then six seen on August 16 with three on August 19. There were four on August 22 with six on August 26, then three seen on August 29 and September 5 with singles to September 13. There were three from September 19 to September 26 with four on October 3, then two seen on October 7. That was the early fall passage. For the late fall passage there were two on October 10 and October 17 with singles to November 11. There were two on November 27 with one on November 29. That closed the late fall passage. For the winter passage there were singles from December 2 to December 16 with two on December 19, then*

singles seen to January 3. That completed the winter passage. For the early spring passage there were singles on January 13 and January 16 with 12 on January 20, then five seen on January 27 with singles to February 6. There were two on February 10 with singles to February 24. That concluded the early spring passage. For the main spring passage there was one on March 6 with two from March 10 to March 24, then one seen on March 27. Now the birds started to call. There were eight on March 31 with ten on April 7, 16 to April 24 and 17 on April 28, then 11 seen on May 1 with eight on May 6. That ended the main spring passage so for the summer passage there were 23 on May 9 with 18 on May 15 and 13 on May 20. There were 26 on May 23 with 31 on May 27, 36 on June 2 and 48 on June 5, then 34 seen on June 12 with 29 on June 16 and 19 on June 19. The count of 48 was the highest count for Zellwood, but the highest count is now (2013) that of 105 on June 1, 2008. There were 42 on June 23 with 15 on June 26 and 12 on June 30. That was the end of the summer passage. For the early fall passage there were 16 on July 3 with 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.*

King Rail (*Rallus elegans*)

For this year it was a summer visitor with a few out of season records; during the Breeding Bird Survey a total of two pairs located. A single chick was seen on July 8. For the late fall passage there was one on October 7. There were no winter sightings. For the early spring passage there were singles on February 10, February 17 and February 24. There were no sightings for the late spring passage. For the summer passage there were singles on ten dates from May 20 to 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. The count of four was the highest count for Zellwood but the highest count is now (2013) that of 523 on August 23, 2006.

Virginia Rail (*Rallus limicola*)

A very uncommon passage migrant and winter visitor; they preferred the canals and shore of Lake Apopka to any marsh. For the late fall passage there were singles on October 14, October 28, November 1, November 7 and November 25. For the winter passage there were singles on December 21 and December 30. For the early spring passage there were singles on January 13 and January 16. Finally for the late spring passage there was one on March 14.

Sora (*Porzana carolina*)

A quite common passage migrant and winter visitor; numbers after January were much lower. For the late fall passage there were two on September 26 with 22 on September 30, then 20 seen on October 3 with 17 on October 7 and 11 on October 10. There were 39 on October 14 with six on October 17 and four on October 21. The count of 39 was the highest count for Zellwood but the highest count is now (2013) that of 415 on November 28, 2008. That shows just how useful the Sand Farm Cattail Marsh was I say was as with the drought in 2012 it was then totally dry. There were 12 on October 24 and November 1 with 15 on November 7 and 21 on November 11, then 12 seen on November 18 with nine on November 25. That closed the late fall passage. For the winter passage there were 12 on November 27 with 18 on November 29 and 20 on December 2, then six seen on December 5. There were seven on December 9 with 12 on December 13, 14 on December 19 and 26 on December 21, then 17 seen on December 30 with five on January 3. There were 22 on January 7 with 11 on January 10. That completed the winter passage. For the early spring passage there were 15 on January 13 with 18 on January 16 and 22 on January 20, then eight seen to January 27 with three on February 3. There were six on February 6 with 13 on February 10 and 14 on February 17, then ten seen on February 24 with two on February 27. That concluded the early spring passage. For the late spring passage there were eight on March 4 with seven on March 6 and five on March 10. There were eight on March 14 with seven on March 17, six to March 24 and three on March 27. There were five on March 31 with eight on April 3, then four seen to April 14 with two to April 24 and one on April 28. There were no later records.

Purple Gallinule (*Porphyrio martinica*)

A common summer visitor with a minor passage in the fall; during the Breeding Bird Survey a total of 40 pairs located. The first brood (three) was seen on May 9 and the latest broods (two of two) were seen on September 9, 2001. Early fall records: *there were 14 on June 24 with 15 on July 1, then four seen on July 4. There were seven on July 8 with 13 on July 11, then two seen to July 18. There were four on July 22 and July 27 with three to August 5 and two on August 12. There were five on August 14 with eight on August 16, then three seen on August 19 with two to August 29 and one on September 2. There were five on September 5 with six on September 9 and September 16, then four seen to September 26 with three on September 30 and one on October 3. That was the early fall passage. For the late fall passage there were two on October 7 and October 17 with one on October 28; singles then seen from November 15 through the winter to January 10. For the early spring passage there were singles on February 24, February 27, March 4 and March 6. For the main spring passage there was one on March 22 with two on March 27, then singles seen to April 3. There were two on April 7 with eight to April 17 and 15 on April 24, then ten seen to May 1 with seven to May 9. That ended the main*

spring passage. For the summer passage there were 13 on May 12 with five on May 15 and three on May 20. There were eight on May 23 with nine on May 27, ten on May 30 and 47 on June 2, then 31 seen on June 5 with 21 on June 10. 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 to July 21 and two on July 25. That long decline says that the passage was coming to an end in this case that meant that the summer visitors had just drifted away – there was no post-breeding gathering. That was the end of the summer passage. For the early fall passage there were six from July 28 to August 7 with three 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.*

Common Gallinule (*Gallinula galeata*)

A common resident and a noticeable fall and winter passage migrant. During the Breeding Bird Survey a total of 146 pairs located, the first brood (four) was seen on April 24. Early fall records: *for the post-breeding gathering there were 95 on July 8 with 99 on July 11 and 166 on July 15, then 127 seen on July 22 with 122 on July 25 and 120 on July 27. There were 129 on July 29 with 153 on August 2 and 156 on August 5, then 130 seen on August 12 with 105 on August 14.* For this year there were 133 on August 16 with 135 on August 19 and 136 on August 22, then 123 seen on August 26. There were 132 on August 29 with 136 on September 2 and 146 on September 5, then 112 seen on September 9. That ended the post-breeding gathering. For the fall passage there were 133 on September 13 with 140 on September 16, then 93 seen on September 19. There were 95 on September 23 with 118 on September 26, 149 on September 30, 204 on October 3, 213 on October 7 and 223 on October 14, then 190 seen on October 21 with 169 on October 28 and 158 on November 1. There were 203 on November 4 with 160 on November 11 and 158 on November 15. There were 184 on November 18 with 117 on November 25. That was the fall passage. For the winter passage there were 127 on November 27 with 206 on November 29, then 123 seen on December 2 with 119 on December 5 and 113 on December 9. There were 130 on December 13 with 120 on December 19, 108 on December 27 and 100 on December 30. There were 182 on January 3 with 146 on January 7. That completed the winter passage. For the early spring passage there were 171 on January 10 with 225 on January 13, then 146 seen on January 20 with 115 on January 27, 91 on February 3 and 71 on February 6. There were 137 on February 10 with 113 on February 20, 102 on February 24 and 97 on February 27. That concluded the early spring passage; numbers were now much lower for the rest of the survey year. For the late spring passage there were 157 on March 4 with 125 on March 6, 95 on March 10 and 74 on March 14. There were 80 on March 17 with 93 on March 19 and 106 on March 22, then 79 seen on March 27 with 78 on April 3, 74 on April 7, 64 on April 10, 58 on April 14, 55 on April 17 and 36 on April 21. That long decline indicated the end of the late spring passage so for the summer passage there were 69 on April 24 with 52 on May 1 and 50 on May 6. There were 53 on May 9 with 82 on May 12, then 72

seen on May 15 with 71 on May 20 and 54 on May 23. There were 97 on May 27 with 112 on May 30, 127 on June 2 and 130 on June 5, then 125 seen on June 12 with 93 on June 16 and 45 on June 19. There were 125 on June 23 with 111 on June 26, 87 on July 3 and 38 on July 8. That closed the summer passage. For the post-breeding gathering 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.

American Coot (*Fulica americana*)

A common fall passage migrant but numbers were low through the winter and the spring passages; there were no summer sightings. Early fall records: *there were singles on June 20, June 24, June 27, July 1, July 4 and July 15*. That was the extent of the early fall passage. For the main fall passage there were 56 on October 10 with one on October 14. There were 27 on October 17 with 430 on October 21 and 555 on October 24, then 200 seen on October 28. There were 205 on November 1 with 350 on November 4, 375 on November 7 and 515 on November 15, then 340 seen on November 18. There was one on November 25 with seven on November 27, then five seen on November 29. That closed the main fall passage. For the winter passage there were eight from December 2 to December 13 with 24 to December 27, 26 on December 30 and 32 on January 3, then 21 seen on January 7 with 17 on January 10, 12 on January 13 and eight on January 16. That completed the winter passage. For the early spring passage there were 17 on January 20 with 16 on January 27, 12 on February 3 and one on February 6. There were 26 on February 10 with 18 on February 20 and 12 on February 24. That concluded the early spring passage. For the main spring passage there were 18 on February 27 with 29 on March 4, then 17 seen on March 6 with six on March 10. There were 13 on March 14 with 25 to March 24, 28 to March 31 and 32 on April 3, then four seen to April 10. There were 15 on April 14 with one on April 17. There were nine on April 21 with 11 on April 24, then six seen on April 28 with three to May 6 and two on May 9. Finally for the main spring passage there were six on May 12. There were no summer records. For the early fall passage there was one on July 3.

Limpkin (*Aramus guarauna*)

Seen occasionally from October to early February and again in the early fall. Early fall records: *there were two on July 4 with one on July 18*. Unfortunately I did not note locations this year so I have no idea how many birds involved in the following. For the main fall passage there were two on October 17 and October 21 with three on November 1 and November 7, then two seen on November 11 with singles to November 18. There were three on November 25 and

November 27 with two on November 29 and one on December 2. That closed the main fall passage. For the winter passage there was one on December 30 that was it. For the early spring passage there were singles on January 13, January 16, January 27, February 6 and February 10. Now there was a major break in the sightings. For the late spring passage there was one on May 9. There were no summer sightings but as this species breeds in the winter all these seasons are meaningless. For the early fall passage there were singles on June 23 and July 10 with two on July 14, then one seen on July 17.

Sandhill Crane (*Grus canadensis*)

An uncommon fall passage migrant with a few winter sightings; there were no records of passage to the north in the spring. Early fall records: *there were four on July 4 and July 11 with singles on July 15 and July 22*. For this year there was one on September 5 with four on September 9 and five on September 16, then two seen on September 19. That was the early fall passage. For the main fall passage there were four flying to the south on November 7. There were 29 in the area on November 15 with one likewise on November 18. A total of 104 flew to the south on November 25. This was the highest count for Zellwood but the highest count is now (2013) that of 375 on January 16, 2009 (these were in the area). A total of 65 also flew to the south on November 29. That closed the main fall passage. For the winter passage there were in the area two on December 16 with 20 on December 21, then one seen on January 3. Flying to the south there were 55 on January 7; that was an exceptionally late record. In the area there were also three on January 13. That completed the winter passage. For the early spring passage there were two on February 24 that was it. For the late spring passage there was one on March 14. There were no summer records. For the early fall passage there were two on June 30.

Black-bellied Plover (*Pluvialis squatarola*)

An uncommon passage migrant and winter visitor, the greatest activity was in the spring. Early fall records: *there were singles on July 25 and August 14, the latter was an adult in breeding plumage*. Those were the only records for the early fall passage. For the main fall passage there were singles on October 21, October 28, November 18, November 25, November 27 and November 29. For the winter passage there were singles on December 9, December 13, December 16, December 19 and December 21. For the early spring passage there were singles on January 16 and January 20. For the main spring passage there was one on March 4. Later there were five on May 6 with four in breeding plumage on May 9. That completed the main spring passage so for the summer passage there was one in winter/first summer plumage on May 30 with three on June 10, then two seen on June 16. These were all in first-summer/winter

plumage. That was the summer passage. For the early fall passage there was one on August 7 with three on August 11, *then one seen on August 18*. I did not record plumage/age for these fall sightings.

American Golden-Plover (*Pluvialis dominica*)

This was a vagrant. For the early fall passage there was an adult in partial summer plumage on September 16 with for the late fall passage four (there were no plumage details) on October 14.

Semipalmated Plover (*Charadrius semipalmatus*)

With the low water levels in Lake Apopka there was a major spring passage this year; numbers in the fall were much lower. Early fall records: *there were two on July 27 with three on August 2, then five seen on August 5 and August 12* with two on August 16. There were four on August 19 with 14 on August 22, then nine seen on August 26 with three on August 29. There were five on September 2 with four on September 5 and one on September 9. There were three on September 13 with five on September 16. That closed the early fall passage. For the spring passage there were five on April 17 with six on April 21, nine on April 24, 35 on April 28, 39 on May 1, 44 on May 6, 102 on May 12 and 134 on May 15, then 63 seen on May 23 with one on May 30. The water level in Lake Apopka had risen. The count of 134 is still (2013) the highest count for Zellwood; this record has stood for ten years now. Finally for the spring passage there were four on June 10; one of them was in first-summer plumage. For the early fall passage 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 to August 21*.

Piping Plover (*Charadrius melodus*)

This was a vagrant. For the late spring passage there was one in first-summer plumage on the mud just to the north of the Lust Road pump house on May 20. This was the first record for the survey but there was one previously on August 18, 1974. There is a description in Appendix B.

Killdeer (*Charadrius vociferus*)

A common winter and early spring passage migrant; numbers were lower for the rest of the year. During the Breeding Bird Survey a total of 11 pairs located, a brood of three was first seen on May 1. Early fall records: *there were five on June 27 with eight on July 1 and 66 on July 4, then nine seen on July 8. There were 16 on July 11 with 38 on July 15, then 13 seen on July 18 with seven on July 22 and two on July 25. There were seven on July 27 with eight on July 29 and 16 on August 2, then four seen to August 12. There were eight on August 14 with nine on August 16, ten to August 22 and 12 on August 29, then 11 seen on September 2 with six on September 5, three on September 9 and one on September 13. There were four on September 16 and September 23 with five on September 26, then four seen on September 30 with two on October 3. That was the early fall passage. For the main fall passage there were three on October 7 with 13 on October 14 and 35 on October 21, then 14 seen on October 24. There were 27 on October 28 with 52 on November 1 and 64 on November 7, then 61 seen on November 11 with 27 on November 15 and 26 on November 18. That closed the main fall passage. For the winter passage there were 44 on November 25 with 151 on November 27 and 161 on December 2, then 57 seen on December 5 with 40 on December 9. There were 53 on December 13 with 65 on December 16, 77 on December 19, 87 on December 27, 93 on December 30 and 361 on January 3, then 109 seen on January 7 with 75 on January 10. That completed the winter passage. For the early spring passage there were 144 on January 13 with 354 on January 16, then 93 seen on January 24 with 57 on January 27. There were 75 on February 3 with 172 on February 6, then 120 seen on February 17 with 102 on February 20. There were 416 on February 24 with 32 on February 27. That concluded the early spring passage. For the late spring passage there were 85 on March 4 with 96 on March 6, then 35 seen on March 10 with 13 on March 14, 12 on March 17, five on March 22, four on March 27 and two to April 3. There were five on April 7 with four on April 10 and three to April 17. That ended the late spring passage. For the summer passage there were five on April 21 and April 24 with nine on May 1, 11 on May 6 and 12 on May 12, then six seen to May 20. There were 14 on May 23 with 16 on May 27 and 20 on May 30, then 11 seen on June 2 with ten on June 5. There were 16 on June 10 with 11 on June 12, nine on June 19 and seven on June 23. That closed the summer passage. For the early fall passage 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.*

Black-necked Stilt (*Himantopus mexicanus*)

A common summer visitor; during the Breeding Bird Survey a total of 30 pairs located, the first young (two) were seen on June 23. Early fall records: *there were 23 on July 8 with 35 on July 15, then 28 seen on July 22 with 16 on July 27, 13 on July 29, 11 to August 5 and six on August 12. There were seven on August 14 with eight on August 16, 11 on August 19, 13 to August 29 and 16 on September 2, then 12 seen on September 5 with nine on September 9 and six on September 13.* That was the end of the early fall passage. For the late fall passage there was one on October 14 that was it. There were no winter or early spring sightings. For the main spring passage there were two on March 17 with 24 on March 22, then 20 seen on March 24 with nine on March 27. There were 18 on March 31 with 25 on April 3 and 38 on April 7, then 23 seen on April 14 with 17 on April 17. That ended the main spring passage so for the summer passage there were 27 on April 21 with 33 on April 28, 35 on May 6, 51 on May 9 and 53 on May 15, then 22 seen on May 20. 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 for some six weeks. That was the end of the summer passage. 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 22. There were no later fall records.*

American Avocet (*Recurvirostra americana*)

An occasional visitor this year; the majority of sightings were during the summer months. For the early fall passage there were two on September 9. For the late fall passage there was one on October 21. There were no sightings for the winter or early spring passages. For the main spring passage there was one on March 14. For the summer passage there was one on May 23 with two on May 27, then singles seen on May 30, June 2, June 10, June 12, June 16, June 19 and June 23. That closed the summer passage. For the early fall passage there was one at the Sod Farm on July 21.

Greater Yellowlegs (*Tringa melanoleuca*)

Present from July to May in low numbers, there were indications of passage in the fall. Early fall records: *there was one on June 17. Later there were singles on July 8 and July 11 with four on July 15 and eight on July 18, then three seen on July 25 with two on July 27 and one on July 29. There were three on August 2 with one on August 5.* For this year there was one on August 16 with two on August 19 and August 22, then singles seen to September 9. There were two on September 13 with 12 on September 16, then seven seen on September 19 with one on

September 26. That was the early fall passage. For the main fall passage there were 24 on September 30 with one on October 7. There were two on October 10 with three on October 14 and 11 on October 17, then seven seen on October 24 with four to November 1 and three to November 7. There were five on November 11 with four on November 18 and singles to November 27. That closed the main fall passage. For the winter passage there were two on November 29 with later one on December 19. There were also singles on December 30, January 3 and January 10. That completed the winter passage. For the early spring passage there were singles on January 27 and February 24 that was it. For the main spring passage there were two on March 27 with singles on April 7 and April 21. There were six on April 24 with ten on May 1 and May 6, then three seen on May 9 with two to May 20 and one on May 30. That completed the main spring passage. There were no summer sightings. For the early fall passage 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.*

Lesser Yellowlegs (*Tringa flavipes*)

A quite common passage migrant; unlike the last species there were no winter sightings. Early fall records: *there were 25 on July 4 with one on July 11. There were three on July 15 with five on July 18 and seven on July 25, then six seen on August 2 with one on August 5.* For this year there was one on August 19 with two on August 22, three on September 9, six on September 13 and 94 on September 16, then 28 seen on September 19 with 22 on September 30. That was the early fall passage. For the late fall passage there were 23 on October 7 with 58 on October 14, then 55 seen on October 17 with 30 on October 21, 23 on October 24, 13 on October 28, ten on November 1, eight on November 7, two on November 11 with singles to November 18. This month long decline indicated the end of a passage and that there had probably been no arrivals after October 14. That was how the late fall passage ended. There were no further sightings until the spring. For the early spring passage there were three on January 13 with later one on February 24; that was the extent of that passage. For the main spring passage there were seven on March 22 with 14 on March 27, then three seen on March 31. There were five on April 7 with 24 on April 10, then 14 seen on April 17 with one on April 21. There were 18 on April 24 with 26 on May 1, then eight seen on May 9 with four to May 20 and one on May 23. That closed the main spring passage. For the early fall passage 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.*

Solitary Sandpiper (*Tringa solitaria*)

An uncommon fall passage migrant; there were a few spring sightings. Early fall records: *there were singles on July 18, July 22, August 2, August 5 and August 12.* For this year there were singles on August 16, August 26, September 2 and September 16. That closed the early fall passage. There were no further sightings until the spring. For the spring passage there was one on March 19. Later there was one on April 21 with seven on April 24, then three seen on May 1 with one on May 6. That was the extent of the spring passage. For the early fall passage 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.

Willet (*Tringa semipalmata*)

This was a vagrant. Early fall record: *there were four on July 4.* For this year and the late spring passage there were also four on April 24.

Spotted Sandpiper (*Actitis macularius*)

A quite common spring passage migrant with lesser numbers in the fall; most sightings were along the shore of Lake Apopka. Early fall records: *there were singles on July 11 and July 22.* For this year there were singles on August 16 and August 29 with two on September 5, then singles seen on September 9, September 19 and October 10. That closed the early fall passage. For the spring passage there were singles on April 17 and April 21 with two to April 28, six on May 1, seven on May 9 and 13 on May 15, then 12 seen on May 23 with three to May 30 and two on June 2. The count of 13 is still (2013) the highest count for Zellwood. That completed the spring passage. For the early fall passage there were singles on July 25, July 28 and July 31 with two on August 4, August 7 and August 11.

Upland Sandpiper (*Bartramia longicauda*)

This was a vagrant. Early fall records: *there were singles on July 27, August 2 and August 5 with two on August 14.* For this year there was one on September 5. That completed the early fall passage.

Ruddy Turnstone (*Arenaria interpres*)

Normally this would be a vagrant but with the extensive area of mud along the shore of Lake Apopka in the spring of 2002 this became a quite common passage migrant! For the early fall passage there were two on September 16 with one on September 19. Now to the spring passage; there were singles in breeding plumage on April 24 and April 28 with eight on May 6, then six seen on May 15 with five on May 20 and one on May 23. The latter was in breeding plumage. For the intermediate records I have no information on their plumage. The count of eight is still (2013) the highest count for Zellwood.

Red Knot (*Calidris canutus*)

This was a vagrant. For the early fall passage there was one on September 16. For the spring passage there was also one on May 15.

Sanderling (*Calidris alba*)

This should be a vagrant but there was a noticeable spring passage. For the early fall passage there was an adult in breeding plumage on August 29. For the spring passage there were four in either winter or first-summer plumage on May 6. There was one in partial breeding plumage on May 12. Finally there were five on May 20, three were in breeding plumage and the other two were in either winter or first-summer plumage.

Semipalmated Sandpiper (*Calidris pusilla*)

A common passage migrant; with the extensive areas of mud in 2002 there was a major spring passage. Early fall records: *there was one on July 4 with ten on July 22 and 130 on August 2, then 70 seen on August 5 with 20 on August 16 and one on August 19.* There were four on August 22 with 14 on August 26, 135 on September 2 and 240 on September 5, then 12 seen on September 9. There were 60 on September 13 with 150 on September 16, then 17 seen on September 19 with six on September 26 and one on September 30. That completed the fall passage. For the spring passage there was one on April 17 with two on April 24, 23 on April 28, 80 on May 1, 90 on May 6, 595 on May 12, 1,150 on May 15 and 1,540 on May 23, then 20 seen on May 27 with 19 on May 30 and 12 on June 5. The latter were in breeding plumage. Finally for the spring passage there were 22 on June 10 with six on June 12. These were all in winter or first-summer plumage. The count of 1,540 is still (2013) the highest count for Zellwood. For the early fall passage 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.*

Western Sandpiper (*Calidris mauri*)

A passage migrant in low numbers; there were only six spring records. Early fall records: *there were three on July 8 with six on July 22, nine on July 27 and 12 on August 2, then six seen on August 5 with one on August 12.* For this year there were two on August 16 with singles on August 26 and August 29. There were 19 on September 2 with 12 to September 13. There were 40 on September 16 with six on September 26 and three on September 30. That closed the early fall passage. For the late fall passage there was one on October 17 with two on October 28. For the spring passage there were two on March 22. Later there were two on May 1 with eight on May 12 and 14 on May 20, then two seen on May 23. That completed the spring passage. For the early fall passage 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.*

Least Sandpiper (*Calidris minutilla*)

A common passage migrant with smaller numbers during the winter; there were no summer sightings. Early fall records: *there were two on July 4 with four on July 8, then three seen to July 22 with two on July 25. There were nine on July 27 with 90 on August 2, then 80 seen on August 5 with five on August 12 and one on August 14.* For this year there were four on August 16 with nine on August 19, 60 on August 22, 61 on August 29 and 480 on September 2, then 330 seen on September 5 with 40 on September 9. There were 142 on September 13 with 270 on September 16, then 85 seen on September 26 with 71 on October 3, 42 on October 7 and three on October 10. That was the early fall passage. For the late fall passage there were 40 on October 14 with 45 on October 17 and 48 on October 28, then 38 seen on November 4 with 12 on November 7. There were 51 on November 11 with 68 on November 18, then 31 seen on November 27 with one on December 5. That closed the late fall passage. For the winter passage there was one on December 19 with three on December 21, then one seen on December 27. There were three on December 30 with 20 on January 3. That completed the winter passage. There were no records for the early spring passage. For the main spring passage there were 43 on March 22 with 25 on March 27 and one on March 31. There were 13 on April 3 with 62 on April 7, then 19 seen on April 10. There were 30 on April 14 and April 17 with 138 on April 24, then 135 seen on May 1 with 115 on May 6 and 29 on May 9. There were 52 on May 12 with 135 on May 15, then ten seen on May 20 with four on May 23 and one on May 30. There were

also eight in breeding plumage on June 10 with two likewise on June 12. That ended the main spring passage. There were no summer records. For the early fall passage 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.*

White-rumped Sandpiper (*Calidris fuscicollis*)

This was another rare migrant that became a commoner spring migrant with the extensive areas of mud at Lake Apopka. For the early fall passage there was one on September 5 with four on September 13 and eight on September 16, later one seen on October 3. For the spring passage there were two on May 6 with seven on May 9, then three seen on May 12 with two on May 15. There were three on May 20 with 37 on May 23, then four seen on May 27. The count of 37 was the highest count for Zellwood but the highest count is now (2013) that of 118 on May 21, 2011. There were five on May 30 with eight on June 10, then two seen on June 12. The June sightings related to adults in breeding plumage.

Baird's Sandpiper (*Calidris bairdii*)

This was a vagrant. For the early fall passage there was a juvenile on September 13, location not noted.

Pectoral Sandpiper (*Calidris melanotos*)

A common fall passage migrant; exceptionally there were no spring records. Early fall records: *there were singles on July 15 and July 22 with eight on July 27 and 15 on August 2, then three seen on August 5. There were seven on August 14 with one on August 16.* There were two on August 19 with 22 on September 2 and 26 on September 5, then 20 seen on September 9 with 17 on September 13. There were 690 on September 30 with 90 on September 19 and 73 on September 26. The count of 690 was the highest count for Zellwood but the highest count is now (2014) that of 965 on September 12, 2008. There were 126 on September 30 with 24 on October 3 and one on October 7. That was the early fall passage so for the late fall passage there were two on October 10 with eight on October 14, then four seen to October 21 with three on October 28 and one on November 1. Later there was one on November 18. That completed the late fall passage. There were no winter or spring sightings. For the early fall passage there were two on July 14 and July 17 with six on July 25 and 21 on July 28, then seven

seen on August 4 with five on August 7. There were eight on August 11 with 12 on August 14 and 14 on August 18, then nine seen on August 25 with two on August 28.

Dunlin (*Calidris alpina*)

An uncommon fall passage migrant; there were no winter or spring records. For the late fall passage there were two on October 14 with four on October 21, then two seen on October 24. There were four on October 28 and November 1 with three on November 4 and later one on November 18.

Curlew Sandpiper (*Calidris ferruginea*)

This was a real vagrant. For the late spring passage there was an adult in breeding plumage on the mud just to the north of the Lust Road pump house on May 6.

Stilt Sandpiper (*Calidris himantopus*)

A quite common passage migrant; early fall records: *there were ten on July 8 with nine on July 15 and one on July 22. There were six on July 25 with eight on July 27 and 18 on August 2, then one seen on August 12.* For this year there were six on August 16 with eight on September 16, then one seen on September 19. That was the end of the early fall passage. For the main fall passage there were three on September 30 with eight on October 3, then one seen on October 14. There were 35 on October 17 with 16 on October 21, 14 on October 24, five on October 28 and singles to November 4. That closed the main fall passage. There were no winter or early spring records. For the main spring passage there were singles from March 22 to March 27 with three on March 31, then singles seen to April 21. There were three on May 1 with 15 on May 6 and 111 on May 9, then 65 seen on May 12 with 54 on May 15, 13 on May 20 and three on May 23. That completed the main spring passage. For the early fall passage 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

Buff-breasted Sandpiper (*Tryngites subruficollis*)

An uncommon fall passage migrant; in later years it became a vagrant with the loss of suitable habitat when the Sod Farm closed. Early fall record: *there was one on July 29.* For this year there were two on September 16 with three on September 26, then singles seen on

September 30 and October 3. That closed the fall passage. For the early fall passage in the following year there was one on August 4.

Ruff (*Philomachus pugnax*)

This was a vagrant. For the early fall passage there was a female on September 16, location not noted.

Short-billed Dowitcher (*Limnodromus griseus*)

An uncommon passage migrant; there was a stronger passage in the spring. Early fall record: *there was an adult on July 15*. For this year there was one on August 16 with three on August 19. That was the early fall passage. For the late fall passage there were three on October 21 with one on October 24. For the late spring passage there was one on March 27. Later there were 14 on April 17 with two on April 28. There were 21 on May 6 with 12 on May 9 and three to May 15. The party of three on May 15 was in breeding plumage. In winter plumage or perhaps more likely first-summer plumage there were nine on June 10 with three on June 12. That closed the late spring passage. For the early fall passage there was an adult in breeding plumage on July 28. There was also one on August 4 with three on August 11, *four on August 18 and 19 on August 21, then four seen on August 25 with two to September 2*.

Long-billed Dowitcher (*Limnodromus scolopaceus*)

A quite common fall passage migrant; there were no winter sightings and just three records for the spring passage. For the late fall passage there were six on October 14 with 120 on October 17 and 220 on October 21, then 107 seen on October 24 with 16 on October 28 and two on November 1. There were 40 on November 4 with one on November 7. There were 16 on November 18 with one on November 25. That closed the late fall passage. For the late spring passage there were three on March 24 with two on March 27. Later there were five on April 24. That was the extent of the late spring passage. For the early fall passage there was an adult in breeding plumage on July 28.

Wilson's Snipe (*Gallinago delicata*)

An uncommon passage migrant; numbers were especially low during the winter passage. For the early fall passage there were singles on September 9 and September 13 with

two on September 16 and 32 on September 26, then 16 seen on September 30 with 14 on October 3. That was the end of the early fall passage. For the main fall passage there were 19 on October 7 with 24 on October 14, 37 on October 17, 42 on October 24 and 67 on October 28, then two seen on November 1. There were four on November 4 with 11 on November 7, 29 on November 15 and 82 on November 18, then 27 seen on November 27 with 11 on December 2 and three on December 5. That closed the main fall passage. Numbers now exceptionally low so for the winter passage there were four on December 9 with six on December 13, then two seen to December 19 with singles to December 27. There were four on December 30 with 15 on January 3, then two seen on January 7. That completed the winter passage; numbers now higher again so for the early spring passage there were four on January 10 and January 13 with 13 on January 16, 21 on January 20 and 96 on January 27, then 14 seen on February 6 with three on February 17, two on February 20 and one on February 24. That concluded the early spring passage. There was such a sharp contrast between the main fall passage and the winter passage and the winter passage and the early spring passage; it is patterns like this that caused me to limit the winter passage to a period of four to five weeks. For the late spring passage there were 19 on February 27 with five on March 4 and two on March 6. There were eight on March 14 with 12 on March 17, then ten seen on March 22 with three on March 24 and one on March 27. There were ten on March 31 with four on April 3 and singles to May 1. That ended the late spring passage.

American Woodcock (*Scolopax minor*)

An uncommon passage migrant and winter visitor; sightings were from Canal Road at first light. For the fall passage there were singles on September 26, November 15, November 25 and November 27. For the winter passage there were three on December 5 with two to December 19 and one on December 21. There were three on December 27 with singles to January 7. That completed the winter passage. For the early spring passage there were two on January 10 with seven on January 13, then three seen on January 16 with two on January 20 and one on January 24. The count of seven was the highest count for Zellwood but the highest count is now (2013) that of 12 on December 7, 2005. There were also four on February 6 with one on February 17. That ended the early spring passage.

Wilson's Phalarope (*Phalaropus tricolor*)

This was a vagrant. For the early fall passage there was one on August 29 with two on September 2, then one seen on September 16.

Red Phalarope (*Phalaropus fulicarius*)

This was a vagrant. For the early fall passage there was an adult in winter plumage in a flooded field at the junction of the Lake Level Canal and the McDonald Canal on September 16. This is the only record for Zellwood. There is a description in Appendix B.

Laughing Gull (*Larus atricilla*)

A late spring passage migrant and a non-breeding summer visitor; there were only a few records for the other seasons. Early fall records: *there were two on July 8 with singles to July 23. There were three on July 27 with one on August 2. There were seven on August 12 with one on August 14.* For this year there were singles on September 5 and September 13 (these were juveniles). That was the early fall passage. For the main fall passage there were 57 (not aged) on November 7, then five seen on November 11 with four on November 18. That closed the main fall passage. For the winter passage there were singles on December 2 and December 5. Later there was one on December 30. That completed the winter passage. For the early spring passage there was one on February 10 that was it. For the main spring passage there were flying to the east over Lake Apopka the following adults in breeding plumage: there were three on March 24 with one on April 10, 59 on April 14, 27 on April 17, one on April 21, ten on April 28 and one on May 9. That concluded the main spring passage. For the summer passage in the area there were four adults on May 12 with two (one adult) on May 15. There were five (three adults) on May 20, with nine (one adult) on May 23 and 24 (six adults) on May 27, then 13 (one adult) seen on May 30 with eight (one adult) on June 2 and five (one adult) on June 5. There were also 21 (one adult) on June 10. All those not identified as adults were in first-summer plumage. The following were all in first-summer plumage: there were 17 on June 12 with 16 on June 16, four on June 19, two to June 26 and one on July 3. That ended the summer passage. For the early fall passage there was a juvenile on July 10 with an adult on July 31. Finally there was one not aged on August 4.

Bonaparte's Gull (*Larus philadelphia*)

A spring passage migrant; there was a heavy passage this year. For the early spring passage there were five on December 27 with 32 on January 3, 209 on January 7 and 404 on January 10, then 53 seen on January 13 with 43 on January 16, 19 on January 24, five on January 27 and two on February 3. The count of 404 was the highest count for Zellwood but the highest count is now (2013) that of 1,013 on January 17, 2010. There were five on February 6 with ten on February 10. Later there were four on February 20 with 67 on February 24 and 124

on February 27, then 31 seen on March 4 with 18 on March 6. That completed the early spring passage. For the late spring passage there was one on March 24 with seven on March 27.

Ring-billed Gull (*Larus delawarensis*)

There were small numbers for the fall and winter passages; much larger numbers were seen during the spring passages. Early fall record: *there were three on July 25, one was an adult.* For the main fall passage there were two on October 28 with 12 to November 11, 14 on November 15 and 23 on November 18, then 21 seen on November 27 with five on November 29. That closed the main fall passage. For the winter passage there were 35 on December 2 with 11 on December 9 and six on December 13. There were 18 on December 16 with three on December 19. That was the early closure of the winter passage. For the early spring passage there were nine on December 21 with 96 on December 27, 138 on December 30, 153 on January 3 and 628 on January 7, then 620 seen on January 10 with 495 on January 13, 325 on January 20, 62 on January 24 and eight on January 27. There were 17 on February 3 with 509 on February 6, then 62 seen on February 10. There were 891 on February 17 with 850 on February 20, 550 on February 27, 395 on March 4 and 15 on March 6. That concluded the early spring passage. For the late spring passage there were 24 on March 10 with 21 on March 17 and 14 on March 19. There were 56 on March 22 with 68 on March 24, then 18 seen on March 31 with 12 on April 3. There were 122 on April 7 with one on April 14. There were two on April 17 with singles to April 28.

Exceptionally this year there was an early morning passage to the west or north-west over the Sand Farm. There were 280 on January 20 with 509 on February 6, 62 on February 10 and 41 on February 17; all these were thought to be adults in breeding plumage. On April 7 a total of 122 flew to the east these were all in first-summer plumage. All these totals are included in the numbers given earlier.

Herring Gull (*Larus argentatus*)

An uncommon passage migrant and winter visitor; there were two records for the summer passage. For the late fall passage there were two from November 15 to November 27 with one on November 29. That closed the late fall passage. For the winter passage there were singles on December 2, December 5, December 9, December 16, December 21, December 27 and December 30 with two on January 3 and three on January 7. There were no sightings on January 10. That completed the winter passage. For the early spring passage there were two on February 6 with singles on February 20 and February 27. That was the early spring passage.

There were no records for the late spring passage. For the summer passage there were singles in first-summer plumage on May 27 and June 23.

Lesser Black-backed Gull (*Larus fuscus*)

This was a vagrant. For the winter passage there was one in first-winter plumage on December 16.

Gull-billed Tern (*Geochelidon nilotica*)

An irregular non-breeding spring and summer passage migrant, only adults recorded. For the spring passage there were singles on April 21, May 1, May 9, May 12 and May 15. For the summer passage there were three on May 30 with singles on June 2 and June 23.

Caspian Tern (*Hydroprogne caspia*)

A non-breeding summer visitor and an early fall passage migrant; at other seasons it was only seen if at all in very low numbers. Early fall records: *there were 17 on July 8 with 24 on July 11, then 20 seen on July 15. There were 22 on July 18 with 29 on July 22, 30 on July 25 and 36 on July 27, then 24 seen on July 29 with seven on August 2. There were ten on August 5 with 15 on August 12, then ten seen to August 19. There were 12 on August 22 with 17 on August 29, 21 on September 2, 23 on September 5 and 34 on September 13, then singles seen to October 3.* That was the early fall passage. It was also the end of any significant passage. For the late fall passage there were two on October 10 with later three on November 1 and one on November 4. That was the late fall passage. The winter passage was even worse; there was one on December 16 with two on January 3. For the early spring passage there were singles on January 13 and January 16 with two from January 24 to February 3, then one seen on February 6. There were two on February 10 with 21 on February 20, then three seen on February 24 with two on February 27 and one on March 4. That concluded the early spring passage. For the main spring passage there were four on March 10 with three on March 17 and one on March 19. There were two on March 22 with four on March 24, then three seen on March 27 with two on March 31. There were seven on April 3 with three on April 7. There were five on April 10 with 18 on April 14, 23 on April 17 and 25 on April 21, then three seen on April 24. That completed the main spring passage. For the summer passage there were 43 on April 28 with 44 on May 1, 53 on May 6 and 86 on May 9, then 85 seen on May 12 with 48 on May 15 and 35 on May 20. Now I started to note any adults in breeding plumage; the balance were in first-summer plumage. There were 49 on May 23 with 23 (five adults) on May 27, 19 (three adults) on May 30 and two

on June 2. There were four on June 5 with seven (one adult) on June 10, then two seen on June 12. There were four (one adult) on June 16 with seven on June 19 and 12 (two adults) on June 23, then five seen on June 30. That ended the summer passage. For the early fall passage there was one on July 14.

Royal Tern (*Thalasseus maxima*)

This was a vagrant. For the late spring passage there were adults in breeding plumage on May 9 and May 12. For the early fall passage there was an adult in winter plumage on July 10.

Sandwich Tern (*Thalasseus sandvicensis*)

This was a vagrant. Early fall records: *there were singles in first-summer plumage on July 1, July 4 and July 15*. In the following year during the summer passage there were singles in first-summer plumage on June 12 and June 23.

Common Tern (*Sterna hirundo*)

A comparatively common passage migrant; there were areas of mud for them to loaf on so more than normal were identified. Early fall records: *there was one in first-summer plumage on June 24 with single adults in breeding plumage on July 11 and July 15. There were also singles in first-summer plumage on July 23 and August 14*. For this year there were four on September 16 with two on September 19 and September 30. These birds were not aged. That closed the early fall passage. For the late fall passage there were singles (not aged) on October 10 and November 15. For the late spring passage there were five (three in first-summer and two in breeding plumage) on April 7 with later singles in first-summer plumage on April 28 and May 1. The count of five was the highest count for Zellwood but the highest count is now (2013) that of 103 on October 31, 2007. There were three adults in breeding plumage on May 12 with one in first-summer plumage on May 20. Finally for the late spring passage there were three adults in breeding plumage on June 10.

Arctic Tern (*Sterna paradisaea*)

This was a vagrant. Early "fall" record: *there was one in first-summer plumage on June 17, 2001*. For this year there were two adults in breeding plumage sitting on the mud near the

Lust Road pump house on May 23, 2002. The mud must have been too hot for them as they were lifting their feet alternatively.

Forster's Tern (*Sterna forsteri*)

Present all year, there was a marked late fall and winter passage; this was also a non-breeding summer visitor. Early fall records: *there were 40 on June 13 with 37 on June 20, 34 to June 27, eight on July 4, seven on July 11, four on July 15 and two on July 18. There were five on July 22 with 20 on July 23, then 18 seen on July 25 with 16 on July 20, 11 on August 2, six on August 5, five on August 14, two to August 19 and singles to August 29.* There were three from September 2 to September 13 with 18 on September 16, then one seen on September 19. That was the early fall passage. For the main fall passage there were 13 on September 30 with 26 on October 10, then singles seen to October 24. There were two on November 11 with 86 on November 15, then 52 seen on November 25 with 14 on November 27 and five on November 29. That closed the main fall passage. For the winter passage there were 16 on December 2 with 108 on December 5, then 21 seen on December 9. There were 49 on December 13 with 260 on December 16, then 89 seen on December 21 with 17 on December 27. There were 20 on December 30 with 52 on January 3, then 12 seen on January 7 with seven on January 10 and six on January 13. That completed the winter passage. For the early spring passage there were 14 on January 16 with 19 on January 24, then two seen on January 27. There were seven on February 3 with eight on February 6, nine on February 10 and 29 on February 17, then 21 seen on February 24 with 17 on February 27, 13 on March 4, 12 on March 6, six on March 10, two on March 14 and one on March 17. The early spring passage over-ran this year so for the late spring passage there were two on March 19 with singles to April 7. In reality it was not so much that the early spring passage over-ran it was that there was no incoming late spring influx to hide the decline of the earlier passage. There were ten on April 10 with two to April 17. From this point on all were in first-summer plumage unless I indicate otherwise. There were three (one adult in breeding plumage) on April 21 with eight (two adults in breeding plumage) to May 1, 11 on May 6 and 13 (two adults in breeding plumage) on May 9, then 12 seen on May 12. That finished the late spring passage so for the summer passage there were 13 (one adult in breeding plumage) on May 15 with 14 on May 20 and 16 on May 23, then nine seen on May 27 with eight on May 30 and five on June 2. There were six on June 5 with 12 on June 10, then 16 seen on June 16 and June 19 with ten on June 23, eight on June 26 and two to July 14. That closed the summer passage. For the early fall passage there was an adult in breeding plumage on July 17. Later sightings were not aged. There was one on July 31 with two on August 11.

Least Tern (*Sternula antillarum*)

A non-breeding summer visitor; whilst there were extensive areas of mud along the shore of Lake Apopka individuals in first-summer plumage noted. Early fall records: *there were 32 on June 17 with 29 on June 20, 15 on June 24, six on June 27 and singles to July 4. There were two on July 8 and July 11 with 11 on July 15, then two seen on July 23 with one on July 25.* There were no sightings for the fall passage this year. For the summer passage there were two on April 24 with nine on May 6 and 17 on May 9, then 12 seen on May 12 with seven on May 15, five on May 20, two on May 23 and one on May 27. These birds were loafing on the mud near the Lust Road pump house. In first-summer plumage there was one on May 9 with two on May 12, then one seen on May 15. These counts are included in the totals already detailed. There were two adults on June 2 and June 10 with singles to June 19. That completed the summer passage. For the early fall passage there were two on June 23 with five on June 26 (one was a juvenile), 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.

Black Tern (*Chlidonias niger*)

A passage migrant in small number; I again in the spring/summer separated the adults from those in first-summer plumage. Early fall records: *in first-summer plumage there was one on May 31 with two on June 3 and eight (four adults in breeding plumage) on June 10, then four seen on June 13. There were five on June 17 with six on June 20 and seven on June 27, then five seen on July 1. There were seven (two adults in breeding plumage) on July 4 with five on July 8 and a juvenile on July 15. With returning adults in winter plumage it was not possible to sort out those in first-summer plumage from this point.* For this year there was one on August 19 with 11 on August 26, then five seen on August 29. Later there were 26 on September 16 with 16 on September 19. That completed the early fall passage. There were no further sightings until the spring. For the spring passage there was one in breeding plumage on May 9 with five (one in first-summer plumage) on May 15, then singles in first-summer plumage seen on May 20 and May 23. That was the spring passage. For the summer passage there were singles in first-summer plumage on June 10, June 16 and June 23. For the early fall passage there were six on July 31 with nine on August 7. Five were in breeding plumage on July 31 with seven on August 7. The others were either individuals in first summer plumage or adults that had already changed into winter plumage, I suspect the former.

Black Skimmer (*Rynchops niger*)

An uncommon non-breeding summer visitor; I did not separate out any adults from those in first-summer plumage. Early fall records *there were 13 on July 1 with 16 on July 4, then five seen on July 8 with three on July 15 and two on July 22. There were three on July 23 with ten on July 25 and July 29, then eight seen on August 5.* For this survey year and the summer passage there were three on May 1 with two on May 23. There were nine on May 27 with one on June 2. There were seven on June 10 with 16 on June 12, then 12 seen on June 16. There were no later records.

Rock Pigeon (*Columba livia*)

A non-breeding spring and summer visitor it doubtless bred in the township of Zellwood. Early fall records: *there were five on June 27 with 11 on July 4, then three seen on July 8 with two on July 11.* There was one on September 2 with two on September 5 and September 19, then one seen on September 26. That ended the early fall passage. For the late fall passage there was one on November 11 that was it. The winter passage was no better there were four on December 19. For the early spring passage there was one on January 16, again that was the only record. For the main spring passage in contrast there were four on February 27 with two on March 4. Later there was one on March 27 with two on March 31, four on April 3, ten on April 10 and 16 on April 17, then six seen on April 28 with five on May 1 and three on May 9. That completed the main spring passage. For the summer passage there were four on May 15 with three on May 20, two to May 30 and one on June 2. There were two on June 5 with six on June 12, then four seen on June 19 with two on June 30. That ended the summer passage. For the early fall passage there were four on July 3 with five on July 10. Later there was one on August 4.

Eurasian Collared-Dove (*Streptopelia decaocto*)

A resident in very small numbers but there was the suggestion of a fall passage; during the Breeding Bird Survey a single pair located on territory. This was on the northern border. Early fall records: *there were four on July 11 with singles to July 18. There were four on July 22 with 12 on July 25, then three seen on July 29 with two on August 2. There were six on August 5 with four on August 14, three on August 16 and two on August 19.* There were three on August 22 with five on August 26, eight on September 2 and 18 on September 5, then five seen on September 9 with two to September 16 and one on September 19. There were nine on September 23 with six on September 26, four on September 30 and two on October 3. That was the early fall passage. For the late fall passage there were 20 on October 7 with 13 on October

14, four to October 21, three to November 4 and one on November 7; whilst the count of 20 was a high count the highest count is now (2013) that of 36 on June 7, 1999. There were two on November 11 with nine on November 15, then singles seen to November 27. That closed the late fall passage. For the winter passage there were six on November 29 with one on December 2. There were two on December 5 with four on December 9 and December 16, then two seen on December 19 with singles to January 7. That completed the winter passage. For the early spring passage there were two on January 10 with five on January 13, then three seen on January 20 with two on January 24. There were four on January 27 with three on February 3 and one on February 6. There were seven on February 10 with three on February 20 and one on February 24. That concluded the early spring passage. For the late spring passage there were two on February 27 and March 4 with five on March 6, then one seen on March 10. There were three on March 14 with five on March 17, then three seen to March 27 with singles to April 7. There were two on April 10 with three from April 14 to May 1, then one seen on May 6. That ended the late spring passage. For the summer passage there were ten on May 9 with five on May 12, two on May 15 and one on May 20. There were three on May 23 and May 27 with six on May 30, then three seen on June 5 with two on June 10 and one on June 12. There were three on June 19 with five on June 26, then two seen on June 30 with one on July 3. That was the summer passage. For the early fall passage there were two on July 8 with nine on July 10, then two seen to July 17. There were eight on July 21 with two to August 11 and one on August 14.

White-winged Dove (*Zenaida asiatica*)

Seemingly a non-breeding summer visitor and a fall passage migrant. Early fall records: *there was one on July 8 with eight on July 22, then four seen on July 29 with three on August 2. There were four on August 5 with singles to August 22.* There were three flying to the east on August 26 with in the area three on August 29 and two on September 2. Singles flew to the east on September 5 and September 9 with 24 flying to the south-east on September 19. The count of 24 was the highest count for Zellwood but the highest count is now (2013) that of 35 on August 12, 2009. That was the early fall passage. For the late fall passage there were two on October 14. There were no winter or early spring sightings. For the main spring passage there were singles on March 27, April 14 and April 28 that was it. For the summer passage there were two on May 23 with four on May 27, then one seen on May 30. There were two on June 12 with singles to June 30. That appeared to be the end of the summer passage. For the early fall passage there were two on July 3 with flying to the east seven on July 8 and four on July 10. The direction then reversed with eight flying to the west on July 14 with two likewise on July 17. In the area there was one on July 21 with three on July 31, then singles seen on August 4 and August 7. Finally two flew to the east on August 11. It is normal for the majority to be recorded as flying to the east or south-east.

Mourning Dove (*Zenaida macroura*)

A common visitor to the area with in some years a massive post-breeding gathering; during the Breeding Bird Survey a total of 23 pairs located, that at the most might equate with a population of 70 birds. Early fall records: *for the post-breeding gathering there were 93 on May 4 with 132 on May 6, 142 on May 8, 329 on May 14, 542 on May 20, 640 on May 24, 770 on May 31, 900 on June 7 and 1,180 on June 10, then 605 seen on June 17 with 405 on June 20. There were 1,245 on June 24 with 1,815 on June 27, then 1,082 seen on July 1. There were 1,510 on July 4 with 2,120 on July 8, then 1,905 seen on July 11 with 1,685 on July 15 and 122 on July 18. The count of 2,120 was the highest count for Zellwood but the highest count is now (2013) that of 2,370 on July 30, 2008. There were 159 on July 22 with 870 on July 25 and 1,390 on July 27, then 1,155 seen on July 29 with 615 on August 2, 480 on August 5. 465 on August 14, 280 on August 16, 117 on August 19 and 85 on August 22. That was the end of this mega post-breeding gathering. Once again the long decline in numbers from July 29 indicated that an event was coming to an end. The very low counts on July 18 and July 22 indicate that there really was a break between the two influxes; a single low count does not do that. For the early fall passage there were 179 on August 26 with 506 on September 2, then 370 seen on September 5 with 64 on September 9 and 59 on September 13. There were 191 on September 16 with 339 on September 19, then 153 seen on September 26 with 25 on September 30. That ended the early fall passage. For the late fall passage there were 309 on October 3 with 200 on October 7 and 32 to October 14. There were 148 on October 17 with 73 on October 24 and 44 on October 28. There were 78 on November 1 with 227 on November 4, then 14 seen on November 7 with 11 on November 11. Numbers were now very low until the post-breeding gathering started on May 15. There were 36 on November 15 with 66 on November 18, then 16 seen on November 25 with four on November 27. That closed the late fall passage. For the winter passage there were ten on November 29 with 23 on December 2 and 39 on December 5, then 25 seen on December 13 with 14 on December 19 and ten on December 21. There were 56 on December 27 with 72 on January 3, then 26 seen on January 7. That completed the winter passage. For the early spring passage there were 39 on January 10 with 114 on January 13, then 55 seen on January 16 with 34 on January 20. There were 35 on January 24 and January 27 with 40 on February 3, 70 on February 10, 75 on February 17 and 106 on February 20, then 23 seen on February 24 with 11 on February 27. That concluded the early spring passage. As this species nested very early there was no late spring passage so we go straight to the summer passage; there were 21 on March 4 with 36 on March 6, then 23 seen on March 10. There were 29 on March 14 with 45 on March 17 and 120 on March 19, then 109 seen on March 22 with 52 on March 24. There were 64 on March 27 with 86 on March 31 and 228 on April 3, then 71 seen on April 10 with 34 on April 14. There were 54 on April 17 with 94 on April 21, then 64 seen on April 24. There were 90 on April 28 with 122 on May 1, then 92 seen on May 6 with 68 on May 9 and 38 on May 12. That closed the summer passage. The post-breeding gathering was a minor event this year there were 62 on May 15 with 139 on May 20, then 120 seen on May 23. There*

were 133 on May 27 with 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. That was the end of the post-breeding gathering.*

Common Ground-Dove (*Columbina passerina*)

Present in some numbers from late April to the end of August; whilst present for the rest of the year numbers were very low. During the Breeding Bird Survey a total of 98 pairs located. Early fall records: *there were 31 on July 1 with 52 on July 8, then 21 seen on July 15 with ten on July 18. There were 28 on July 22 with 11 on July 25. There were 15 on July 27 with 23 on July 29, then six seen on August 2. There were 21 on August 5 with 30 on August 12 and 37 on August 14, then 30 seen on August 16 with 25 on August 19 and 22 to August 26. There were 27 on August 29 with 28 on September 2, then 22 seen on September 9 with two on September 13. There were four on September 16 with 16 on September 19, then nine seen on September 26 with six on September 30 and three on October 3. That was the early fall passage. For the late fall passage there were eight on October 7 with 14 on October 14, then seven seen to October 24 with two on October 28. There were five on November 1 with seven on November 4, then four seen on November 7. There were five on November 11 with seven on November 18 and 13 on November 25, then three seen on November 27 with one on November 29. That closed the late fall passage. For the winter passage there were 11 on December 2 with three to December 9 and two on December 13. There were three on December 16 and December 21 with four on December 27, then three seen to January 3 with one on January 7. That completed the winter passage. For the early spring passage there were ten on January 10 with three on January 16 and two on January 20. There were six on January 24 with three on January 27. There were six on February 3 with 13 on February 10, then six seen on February 17 with four on February 20. That concluded the early spring passage. For the main spring passage there were nine on February 24 with ten on March 4, 14 on March 10 and 16 on March 17, then 11 seen on March 19 with nine to March 24. There were ten on March 27 with 12 on March 31, then nine seen to April 7. There were 13 on April 10 with nine on April 14 and eight on April 17. That closed the main spring passage so for the summer passage there were 17 on April 21 with 21 on April 24 and 35 on April 28, then 28 seen on May 1 with 25 on May 6 and 24 on May 9. There were 39 on May 12 with 22 on May 15, 14 on May 20 and ten on May 23. There were 19 on May 27 with 34 on May 30 and 63 on June 2, then 27 seen on June 5 with ten on June 10. There were 19 on June 12 with 29 on June 16 and 30 on June 19, then 29 seen on June 23 with 28 on June 30, 24 on July 3 and 23 on July 8. That closed the summer passage. For the early fall passage 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 to September 8 and seven on September 11.

Black-billed Cuckoo (*Coccyzus erythrophthalmus*)

This was a vagrant. For the late fall passage there was one on October 7, location not noted.

Yellow-billed Cuckoo (*Coccyzus americanus*)

A spring passage migrant and summer visitor; during the Breeding Bird Survey a total of 26 pairs located. The first fledged young (two) were seen on June 23. Early fall records: *there were five on July 1 with four on July 8, three to July 22 and one on July 29.* For this year there were singles on August 22 and September 5. There were no later fall records. For the spring passage there was one on April 17 with three on April 21, four on April 28, six on May 6 and 12 on May 12, then five seen on May 15 with two to May 23. That completed the spring passage. For the summer passage there were three on May 27 with seven on May 30, then six seen on June 2 with five on June 5 and four to June 12. There were six on June 16 with ten on June 23, then one seen on June 26. That ended the summer passage so for the early fall passage 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. The count of 12 was the highest count for Zellwood but the highest count is now (2013) that of 52 on June 8, 2006. There were two on July 17 with three on July 21, then two seen to August 4 with singles to August 14.

Barn Owl (*Tyto alba*)

A resident in any derelict buildings on the property; during the Breeding Bird Survey a total of four pairs located. Normally one to two seen regularly through the year but there were higher counts of four on January 16, six on January 20, four on April 17, three on April 21, three on April 28, three on May 12, three on June 23, three on July 14, four on August 4 and three on August 14. There was no evidence of any passage.

Eastern Screech-Owl (*Otus asio*)

Almost certainly a quite common resident in the wooded borders but as I do not use recordings all I have is casual observations. For the early fall passage there were singles on September 9 and September 23. There were no late fall or winter records. For the early spring passage there were singles on February 3 and February 17. For the main spring passage there were singles on March 14, March 17 and March 19. There was also one on May 9 this could be either a main spring passage record or it could relate to the summer passage. There were no later records.

Great Horned Owl (*Bubo virginianus*)

A resident in the wooded borders; during the Breeding Bird Survey a total of nine pairs located. As with the Barn Owl one to two seen regularly through the year there were higher counts of three on August 19, four on August 26, three on September 2, three on September 9, four on September 16, three on September 23, three on September 30, three on October 21, three on October 28, three on December 9, three on February 6 and three on March 17. Whilst the bulk of the higher counts were in August and September there was no pattern to these higher counts.

Barred Owl (*Strix varia*)

Another resident in the wooded borders; during the Breeding Bird Survey a total of two pairs located. For some unknown reason this was a terrible year for this species, I suspect I just did not start the survey at a location where this species was present. For the early fall passage there were singles on August 19, August 26, September 30 and October 3. There were no late fall or winter records. For the early spring passage there were two on January 24. For the main spring passage there were two on March 14 with one on March 31. There was one on April 10 with two on April 28, then one seen on May 12. That closed the main spring passage. For the summer passage there was one on June 2 that was it. For the early fall passage there were singles on June 30, July 3, July 14, July 17, August 4 and August 7 with two on August 14, *then one seen on August 18.*

Short-eared Owl (*Asio flammeus*)

This was a vagrant. For the late fall passage there was one on November 15.

Common Nighthawk (*Chordeiles minor*)

A summer visitor, there was an early fall passage; during the Breeding Bird Survey a total of eight pairs located. Early fall records: *there were two on July 15 with three on July 22 and five on July 25, then singles seen to July 29. There were three on August 2 with four on August 5, then two seen on August 12.* For this year there were four in the area on August 16 with flying to the south: 28 on August 22, 18 on August 26 and 26 on August 29. There were also two in the area on September 2. A total of 12 flew to the south on September 5 with 52 in the area on September 9, then one seen on September 13. There were three on September 16 in the area with three flying to the south on September 19. That completed the early fall passage. There were no further sightings until the spring. For the spring passage there were three on April 14 with two to April 24 and one on April 28. There were six on May 1 with four on May 6 and two on May 9. That was the spring passage. For the summer passage there were four on May 12 and May 15 with one on May 23. There were two on May 27 with five on May 30 and six on June 2, then four seen on June 10 with two on June 12. There were five on June 16 with two to July 3 and one on July 8. That ended the summer passage. For the early fall passage there were two from July 10 to July 28 with singles on July 31 and August 4.

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

A summer visitor, there was evidence of a separate spring passage; during the Breeding Bird Survey a total of five pairs located. Early fall records: *there were singles on July 4, July 11 and August 5.* For this year there were singles on August 22 and August 29 with two on September 2, then one seen on September 5. That was the early fall passage. For the late fall passage there were singles on September 30, October 3 and October 10 that was it. For the spring passage there was one on March 24 with six on April 7 and eight on April 10, then seven seen to April 17. There were nine on April 21 with five on April 24, four on April 28, three to May 6 and two on May 9. The count of nine was the highest count for Zellwood but the highest count is now (2013) that of 16 on May 23, 2004. That was the end of the spring passage. For the summer passage there were three on May 12 and May 20 with four on May 27, then three seen on May 30 with singles to June 5. There were also singles on June 23 and June 26 with two on June 30. That ended the summer passage. For the early fall passage singles seen on July 3 and July 21.

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

An uncommon passage migrant and winter visitor; it was however likely that its crepuscular habits caused it to be under-counted. For the early fall passage there were singles

on September 2, September 5, September 9, September 13, September 19, September 23, September 26 and September 30. Very exceptionally the individual noted on September 2 was singing. That was the early fall passage. For the late fall passage there were singles on October 3, October 7, October 10, October 14, October 17 and October 21. That was the end of the late fall passage. For the winter passage there were singles on December 5, December 9, December 13 and January 7. There were no records for the early spring passage. For the main spring passage there were two on March 10 with singles on March 14, March 17 and April 7.

Chimney Swift (*Chaetura pelagica*)

A fall passage migrant; numbers were much lower during the spring and summer passages. This species will have bred in the Township of Zellwood. Early fall records: *there were three on June 17 with four on June 24, five on June 27 and seven on July 1, then one seen on July 4. There were three on July 8 with eight on July 11, then singles seen to July 18. There were two on July 25 and July 27 with three on July 29 and six on August 2, then four seen on August 12 with two on August 14.* For this year there were 27 on August 16 with 55 on August 22, then ten seen on August 29 with one on September 2. There were three on September 5 with 49 on September 9, then nine seen on September 13 with three on September 16. There were 67 on September 19 with 71 on September 26 and 106 on September 30, then 15 seen on October 3 with six on October 7. There were 365 on October 10 with ten on October 14 and two on October 21. That was a single fall passage. For the spring passage there was one on March 22 with later eight on April 3 and April 10, then six seen on April 17 with four on April 21. There were seven on April 24 with four on April 28 and three on May 1. That ended the spring passage so for the summer passage there were seven on May 6 with 15 on May 9, then 11 seen on May 12 with ten on May 15 and eight on May 20. There were ten on May 23 with four on May 27 and three on May 30. There were ten on June 2 with seven to June 12 and three on June 16. That closed the summer passage. For the early fall passage 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 and 20 on August 11, then four seen on August 21.

Ruby-throated Hummingbird (*Archilochus colubris*)

This was a vagrant. Early fall record: *there was one on July 29.* For this year and the late fall passage there was one on October 24.

Belted Kingfisher (*Megaceryle alcyon*)

A passage migrant and winter visitor; the greatest numbers were seen during the winter and early spring passages. Early fall records: *there were singles on July 18, August 5 and August 12*. For this year there were two on August 22 and August 26 with one on September 2. There were four on September 5 with five on September 9, then four seen to September 26 with one on September 30. That was the early fall passage. For the main fall passage there were eight on October 3 with three on October 7 and two on October 10. There were eight on October 14 with two on October 17. There were three on October 21 with five on October 24, then six seen on November 1 and November 4 with five on November 7 and four to November 18. That closed the main fall passage. For the winter passage there were five on November 25 with six to December 2 and nine on December 5, then eight seen on December 9 with six on December 13 and five on December 16. There were 11 on December 19 with nine to December 27, eight on January 3 and five on January 7. That completed the winter passage. For the early spring passage there were 11 on January 10 with nine to January 20, seven to January 27 and six on February 3. There were nine on February 6 with 14 on February 10, then ten seen on February 20 with six on February 24 and five on February 27. That concluded the early spring passage. For the late spring passage there were eight on March 4 with nine on March 6, then six seen on March 10. There were seven on March 14 with nine on March 17, then five seen on March 19. There were six on March 22 with eight on March 24, then six seen on March 27 with five on March 31 and four on April 3. There were five on April 7 with singles to April 17. There were also two on April 21. That ended the late spring passage. There were no summer sightings this year. For the early fall passage there were singles on July 21, July 31 and August 4 with two on August 7, then one seen on August 14.

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

An uncommon early fall passage migrant; exceptionally there was a spring record this year. For the early fall passage there was an immature on August 29 with single adults on September 2, September 9 and September 30. For the late spring passage there was an adult on May 23. For the early fall passage there was an adult on July 31. It is a pity that I did not record their locations.

Red-bellied Woodpecker (*Melanerpes carolinus*)

A common resident in the wooded borders but they can turn up anywhere; during the Breeding Bird Survey a total of 56 pairs located. Early fall records: *there were ten on July 1 with 11 from July 4 to July 11, then eight seen on July 15. There were ten on July 18 with 12 on July*

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

Yellow-bellied Sapsucker (*Sphyrapicus varius*)

This was a vagrant that is the lack of access to any of the border woods speaking. For the fall passage there was one on November 7. For the early spring passage there was one on January 7 with two on January 20.

Downy Woodpecker (*Picoides pubescens*)

A resident in the wooded borders; there was just the suggestion of passage in the fall and the early spring. During the Breeding Bird Survey a total of 37 pairs located. Early fall

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

Hairy Woodpecker (*Picoides villosus*)

This was a vagrant. There was one on November 27; this was probably a fall passage migrant.

Northern Flicker (*Colaptes auratus*)

A resident in the wooded borders; during the Breeding Bird Survey a total of 12 pairs located. Early fall records: *there were three on July 8 with two on July 15 and one on July 22. There were three on July 25 and July 29* with two to August 16 and one on August 19. There were two on August 22 and August 29 with three on September 9, then singles seen to September 19. There were two on September 23 with three on September 26 and September 30, then two seen on October 3 with one on October 7. That was the early fall passage. For the late fall passage there were three on October 10 with eight on October 17, then three seen on October 24 with singles to November 1. The count of eight was a joint high count as there were also eight on October 19, 1999 however the highest count is now (2014) that of 16 on October 8, 2006. There were two on November 4 with three on November 11, five on November 18 and six on November 25, then five seen on November 29 with four on December 2 and two on December 5. That closed the late fall passage. For the winter passage there were three on December 9 with four to December 16 and five on December 19, then three seen to December 27 with two to January 3. That completed the winter passage. For the early spring passage there were four from January 7 to January 13 with five on January 16 and January 24, then four seen to February 17 with three on February 20, two on February 24 and one on February 27. That concluded the early spring passage. For the late spring passage there were three on March 4 with four on March 10, then three seen to March 17 with two on March 19. There were three on March 22 and March 24 with four on March 27, then three seen on April 3 with singles to April 10. There were two on April 14 with singles to April 21. There were three on April 24 with one on April 28. That was the late spring passage. For the summer passage there were two on May 1 and May 6 with three on May 9, then singles seen to May 15. There were two on May 20 with singles to June 19. There were two on June 23 with singles to July 8. That closed the summer passage so for the early fall passage there were two on July 10 with singles to August 4. There were two on August 7 and August 11 with one on August 14.

Pileated Woodpecker (*Dryocopus pileatus*)

A resident in the wooded borders; during the Breeding Bird Survey a total of ten pairs located. There was little to suggest a pattern of influxes rather one to three seen regularly through the year. There were higher counts of four on September 26, March 6, March 27, June 16, July 14, July 21 and on August 7.

Eastern Wood-Pewee (*Contopus virens*)

An uncommon passage migrant; with access to the interior of the border woodland numbers would be higher. For the early fall passage there were singles on September 5 and September 9 with two on September 19, then one seen on October 7. For the spring passage there was one on April 17.

Acadian Flycatcher (*Empidonax virescens*)

A rare fall passage migrant, the same comment applies here. Early fall record: *there was one on August 5*. For this year there were singles on August 29, September 30 and October 3. That was the early fall passage.

Least Flycatcher (*Empidonax minimus*)

In later years with the road going to the west from the Sand Farm Bridge that area became the prime site for this species but in 2001/2002 that road did not exist. In the next year the Sand Farm and the woods along the side of Lake Apopka became the prime sites. For this year it was the northern border from Canal Road to Laughlin Road. This basically meant that this species was widespread along the borders where there were willows and water. For the fall passage there were two on the northern border on November 7 and November 11 with one on November 15. There was one on the eastern border (site now unknown) on November 11, November 18 and November 25. There was also one on the northern border on November 25. There was one by Lake Apopka to the south of the Hooper Farms Road on November 27 and November 29. That came to a total of five birds for the fall passage. For the winter passage there was one on the northern border from December 2 to December 21. There was one by Lake Apopka to the south of the Hooper Farms road extension on December 9. There was one by the Hooper Farms Road gate on December 30. That made a total of three for the winter passage. For the early spring passage there was one on the northern border on January 10. There was one by the Lust Road gate on January 16. There was one on the northern border on January 20 and January 24 with two on January 27, then one seen there on February 6. There was one by Lake Apopka to the north of the Lust Road pump house from January 20 to February 24. There were two at the Sand Farm on January 27. Finally for the early spring passage there was one on the southern border on February 3. That came to eight birds. For the late spring passage there was one on the eastern border on March 4. On the northern border there was one on March 6 with two from March 10 to March 22. Later there was one there on April 17 and April 21. That came to four birds making for an overall total of 20 birds. The highest

daily count was that of five on January 27. That was also the highest count for Zellwood but the highest count is now (2013) that of 23 on December 19, 2007.

Eastern Phoebe (*Sayornis phoebe*)

A common fall passage migrant with lower numbers during the winter; there was the suggestion of a somewhat stronger passage in the early spring. For the fall passage there were four on October 3 with six to October 10, 31 on October 14, 74 on October 17, 89 on October 21 and 163 on October 24, then 112 seen on October 28. There were 117 on November 1 with 151 on November 4 and 171 on November 7, then 147 seen on November 11 with 56 on November 15. There were 152 on November 18 with 151 on November 25 and 98 on November 27. There were 156 on November 29 with 139 on December 2 and 75 on December 5. That closed the fall passage. For the winter passage there were 95 on December 9 with 78 on December 13, 69 on December 19 and 60 on December 21. There were 78 on December 27 and December 30 with 32 on January 3. That completed the winter passage. Every year seems to have a different end date to this passage, the commonest date this year has to be December 3. For the early spring passage there were 45 on January 7 with 97 on January 10, then 94 seen on January 13 with 93 on January 16, 86 on January 20 and 67 on January 24. There were 102 on January 27 with 74 on February 3 and 64 on February 6. There were 87 on February 10 with 39 on February 17. There were 43 on February 20 with 59 on February 24, then 29 seen on February 27. That concluded the early spring passage. For the late spring passage there were 44 on March 4 with 52 on March 6, then 47 seen on March 10 with 34 on March 14, 15 on March 17, 12 on March 19, three on March 24, two to April 3 and one on April 7.

Vermillion Flycatcher (*Pyrocephalus rubinus*)

This was a vagrant. For the late fall passage there was one on October 17. For the early spring passage there was one on February 10. Finally for the main spring passage there were two on March 4 with one on March 6. The count of two is still (2013) the highest count for Zellwood. These were all females or immature females. I did not record their locations.

Ash-throated Flycatcher (*Myiarchus cinerascens*)

For this year it was a quite common passage migrant and winter visitor. For the late fall passage there was one at Potter's Farm on November 1 and November 7 with two there to December 21. There were two by the Hooper Farms Road gate on November 25. There was also singles on the eastern border on November 25 and November 27. That closed the late fall

passage; there were five birds in all. For the winter passage at Potter's Farm the two continued to be seen to December 21, then one seen there on December 27. So there were no new winter passage sightings. For the early spring passage there was one at Potter's Farm on January 7 and January 10 with two from January 13 to January 20. There was one by the Lust Road gate from January 13 to February 20. There was one by Lake Apopka north of the Lust Road pump house from January 13 to February 10. There were two by the Hooper Farms Road gate from January 16 to January 27. There were two by Lake Apopka to the south of the Hooper Farms Road extension on January 16 and January 20. There was one on the eastern border on January 24 and January 27. There was one at Potter's Farm on January 27 with two on February 3. These Potter's Farm sightings all came from the ditch that runs to the east to Laughlin Road. I used to walk this track every day so it would be hard to miss this species. Over the years this has continued to be a favored site for these birds. That completed the early spring passage; there were a total of 11 individuals. For the late spring passage there was one on the eastern border on March 4 and March 6. There was one by the Lust Road gate on March 10. There was one by Lake Apopka to the north of the Lust Road pump house from March 14 to March 24. There was one by Lake Apopka to the south of the Hooper Farms Road extension on March 14. There was one on the eastern border on March 17 and March 19. There was one by Lake Apopka to the south of Hooper Farms Road extension on March 27. There was one by the Lust Road gate on March 31 and April 7. There was one at Potter's Farm on April 7. There was one by Lake Apopka to the south of the Hooper Farms Road extension on April 10 and April 14. Finally there was one at Potter's Farm on April 17. This came to a total of ten birds making a total of 26 birds for the year. The highest daily count was that of nine on January 20. This was the highest count for Zellwood but the highest count is now (2013) that of 16 on December 14, 2007. It is exceptionally hard to identify just how many birds there were. All these sites I visited daily and I often had a good idea as to which bush or tree a bird would be in. I think the breaks that I showed here were real.

Great Crested Flycatcher (*Myiarchus crinitus*)

A quite common passage migrant and summer visitor; all the sightings were from the wooded borders. During the Breeding Bird Survey a total of 25 pairs located. Early fall records: *there were three on July 4 with six on July 8 and nine on July 11, then two seen to July 25 with one on July 27. There were five on July 29 with six on August 5, then two seen on August 12 with one on August 14.* For this year there were four on August 16 with singles to August 22. There were two on August 26 with five on August 29, then two seen to September 5 with one on September 9. Later there were singles on September 26 and October 3. That closed the early fall passage; there were no later fall or winter records. For the spring passage there were singles on March 24 and March 27 with four on March 31 and six on April 3, then three seen on April 7 with one on April 10. There were two on April 14 with four on April 17 and 12 on April

21, then seven seen on April 24 with four on April 28. There were 14 on May 1 with eight on May 6, seven on May 12, six on May 15 and five on May 20. That completed the spring passage. For the summer passage there were eight on May 23 with nine on May 30, then five seen on June 5 with three on June 12 and two on June 16. That ended the summer passage. For the early fall passage there were three on June 19 and June 26 with 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*.

Tropical Kingbird (*Tyrannus melancholicus*)

This was a vagrant. For the winter passage there was one on the southern border on December 9. It was with a flock of Western Kingbirds in the trees lining the lake.

Cassin's Kingbird (*Tyrannus vociferans*)

This was a vagrant. An individual returned again for the third winter, it had been first seen on December 4, 1999. This year it was present from December 2 to April 3. It used to roost with the Western Kingbirds but it would travel daily to an isolated tree one mile out in the fields at the junction of Hooper Farms Road and Airport Road. Late in its stay it moved closer to Lake Apopka and on some visits I found it on the bank of the lake.

Western Kingbird (*Tyrannus verticalis*)

A common late December to April visitor, the majority were seen between Lust and Hooper Farms Road. For the late fall passage there were singles on October 28, November 1, November 18 and November 27. That closed the late fall passage. For the winter passage there were six on December 2 with seven on December 9, then six seen on December 13 with one on December 16. There were 20 on December 21 with 52 on December 30, then 42 seen on January 10 with 13 on January 13. That completed the winter passage. For the early spring passage there were 43 on January 16 with 54 on January 20 and 72 on January 27, then 58 seen on February 3 with 35 on February 10, three on February 17 and two on February 20. The count of 72 is still (2013) the highest count for Zellwood. That concluded the early spring passage. For the late spring passage there were 13 on February 24 with 24 on March 10 and 33 on March 14, then 28 seen on March 19 with 21 on March 24 and 19 on March 27. There were 22 on March 31 with 16 on April 3 and 11 on April 7. There were 34 on April 10 with 25 on April 17, 19 on April 21, nine to April 28, seven on May 1, two on May 6 and one on May 9. That was the best year (up to 2014) for this species.

Eastern Kingbird (*Tyrannus tyrannus*)

An uncommon passage migrant; numbers were very low this year. Early fall records: *there were three on June 24 with seven on July 8, then three seen on July 11 with one on July 15. Later there were two on July 27 with one on August 14.* For this year there were three on August 19 with seven on August 26, then singles seen to September 2. A total of 12 flew to the south on September 5. In the area there were two on September 16 with one on September 26. That closed the early fall passage. For the spring passage there were singles on March 19, March 31 and April 14 with three on April 17. Later there were singles on May 1 and May 9. That completed the spring passage. There were no summer sightings this year. For the early fall passage there were two on July 3 with singles on July 8, July 10, July 25 and August 4.

Gray Kingbird (*Tyrannus dominicensis*)

There were more records than normal so perhaps it moved up from vagrant to rare passage migrant. Early fall record: *there was one on August 2.* For the late fall passage there were two on October 17. For the late spring passage there was one on March 27 and March 31. Later there was one on May 15. There were no early fall sightings.

Scissor-tailed Flycatcher (*Tyrannus forficatus*)

An uncommon spring passage migrant; they roosted with the Western Kingbirds across CR 437 from Hooper Farms Road. For the early spring passage there were singles on January 16 and January 20 with two from January 24 to February 10, then one seen on February 24. For the main spring passage there were three on March 10 with one on March 17. There were two on March 19 with four on March 24 and five on March 31, then two seen on April 3 with one on April 7. The count of five was the highest count for Zellwood but the highest count is now (2014) that of eight on December 11, 2005. There were three on April 10 with two to April 21 then singles seen on April 24, April 28 and May 6.

Loggerhead Shrike (*Lanius ludovicianus*)

A resident along the northern and eastern borders; there was the suggestion of passage during the early fall and the early spring passages. During the Breeding Bird Survey a total of six pairs located; the first fledged young (one) was seen on June 19. Early fall records: *there were five on June 17 with four to June 24. There were five on June 27 with six on July 1 and eight on July 8, then three seen to July 18. There were six on July 22 with seven on July 27, then three seen on July 29. There were four on August 2 with eight on August 5, then five seen on August*

12. *There were six on August 14* with nine on August 16, then seven seen on August 19 with five on August 22. There were six on August 26 and August 29 with 12 on September 2, then ten seen on September 9 with six on September 13 and two on September 16. There were seven on September 19 with ten on September 23, then six seen on September 26 with four on September 30. That was the early fall passage. For the late fall passage there were five on October 3 with eight on October 7, then seven seen on October 10 with six on October 14. There were seven on October 17 with four on October 21. There were five on October 24 with nine on October 28 and November 1, then six seen on November 7 with three on November 11. There were four on November 15 and November 18 with five to November 27 and six on November 29, then four seen on December 2. That closed the late fall passage. For the winter passage there were seven on December 5 with six on December 13, five on December 19 and four on December 21. There were seven on December 27 with six on December 30 and five to January 7. That completed the winter passage. For the early spring passage there were six on January 10 with four to January 16. There were seven on January 20 with 11 on January 24 and 18 on February 3, then five seen on February 6 with four on February 10 and one on February 17. That really had the look of a passage. The count of 18 is still (2014) the highest count for Zellwood. There were three on February 20 with four on February 24, then two seen on February 27. That concluded the early spring passage. This species nested so early we go straight to the summer passage. For the summer passage there were three from March 4 to March 17 with two to March 22. There were four on March 24 with two to March 31. There were three on April 3 with five on April 7 and April 10, then two seen on April 14. There were three on April 17 with four on April 21, then three seen to April 28. There were four on May 1 with three to May 9 and one on May 12. There were two on May 15 with five on May 20 and May 23, then four seen to June 2 with three on June 5 and one on June 10. That ended the summer passage. For the early fall passage 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 and three on August 14.

White-eyed Vireo (*Vireo griseus*)

A resident and passage migrant; both the spring and the fall passages were much reduced this year. During the Breeding Bird Survey a total of 13 pairs located. The first fledged young was seen on June 30. Early fall records: *there were two on June 20 and June 24 with three on July 1, then singles seen to July 8. There were two on July 11 and July 15 with singles to July 27. There were two on July 29 with singles to August 14.* For this year there were singles from August 19 to August 26 with three on August 29, then two seen on September 2 with one on September 5. There were five on September 9 with two on September 13 and one on September 16. Now the main passage started; as usual it covered what would normally be the

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

Yellow-throated Vireo (*Vireo flavifrons*)

This was a rare passage migrant. For the early fall passage there were singles on August 19 and September 9. For the late spring passage there were two on April 3 with one on April 10. The count of two is still (2014) the highest count for Zellwood. For the early fall passage there was one on July 31.

Blue-headed Vireo (*Vireo solitarius*)

An uncommon passage migrant and winter visitor, the lack of access to woodland is the problem. For the late fall passage there were two on October 17 with singles on October 21, October 24, November 4, and November 11. For the winter passage there was one on November 29 with three on December 9 that was it. For the early spring passage there were

two on January 10 with three on January 16 and January 20, then singles seen to January 27. There were three on February 3 with two to February 10. There were three on February 17 with singles on February 27 and March 4. That closed the early spring passage. Finally for the late spring passage there was one on March 27.

Red-eyed Vireo (*Vireo olivaceus*)

An uncommon passage migrant; sightings were limited to the wooded borders. Early fall records: *there were singles on July 8, August 5 and August 12.* For this year there were singles on August 16 and August 19 with two to September 2, three to September 19 and four on September 26, then one seen on October 3. That was the early fall passage; there were no later fall records. For the late spring passage there were singles on March 27 and April 3 with two on April 7. Later there was one on May 1. That completed the late spring passage. For the early fall passage 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.*

Blue Jay (*Cyanocitta cristata*)

A resident in the wooded borders but they can turn up anywhere; there was only a minor fall passage this year. During the Breeding Bird Survey a total of 49 pairs located. Early fall records: *there were seven on June 20 with 12 on June 24 and 14 on June 27, then 13 seen to July 8 with 11 on July 15 and six on July 18. There were 12 on July 22 with 17 on July 27, then 16 seen on July 29 with 15 on August 5, 14 on August 14, 13 on August 19 and seven on August 22.* There were 16 on August 26 with 12 on August 29 and seven on September 2. There were 21 on September 5 with 26 on September 9, then seven seen on September 13. There were 11 on September 16 with 17 on September 19, 25 on September 23, 31 on September 26 and 33 on October 3, then 28 seen on October 7 with 26 on October 14, 24 on October 17, 21 on October 24, 16 on November 1, 13 on November 4, 12 on November 7, 11 on November 11 and six on November 15. That decline went on for over a month. There were eight on November 18 with ten on November 25, then eight seen to November 29. That closed the single fall passage. For the winter passage there were 12 on December 2 with five on December 5. There were seven on December 9 with eight on December 13, then seven seen on December 19 with six on December 21. There were eight on December 27 and December 30 with singles to January 7. That completed the winter passage. For the early spring passage there were 13 on January 10 with 14 on January 13, 16 to January 20 and 22 on January 27, then 20 seen on February 3 with 14 on February 6, 11 on February 10 and ten to February 20. There were 21 on February 24 with seven on February 27. That was the early spring passage. For the main spring passage

there were 11 on March 4 with 19 on March 6, then 18 seen on March 10 with 13 on March 14. There were 16 on March 17 with 17 on March 19, then nine seen on March 22. There were 12 on March 24 with 19 on March 27 and April 3, then 14 seen on April 10 with 13 on April 14. There were 16 on April 17 with 14 on April 21, 13 on April 24 and 12 on April 28. That ended the main spring passage. For the summer passage there were 14 on May 1 with 17 on May 6, 23 on May 9 and 25 on May 12, then 18 seen on May 15 with eight on May 20 and seven on May 23. There were 16 on May 27 with 17 on May 30 and June 2, then 14 seen on June 5 with five on June 10. There were seven on June 12 with eight on June 16 and 12 on June 23, then six seen on June 26. 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. That closed the summer passage so for the early fall passage 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.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

This was a vagrant. For the late spring passage there were two adults at the Lust Road gate on April 17. This was the first record for Zellwood. All the later records have been from the Sand Farm and elsewhere on the northern border.

American Crow (*Corvus brachyrhynchos*)

For this year this was an early fall and spring passage migrant. Early fall records: *there were singles on June 17 and July 11*. For this year there were two on August 16 with one on August 26. There were two on September 9 and September 16 with one on September 19. There were three on September 23 with two on September 26 and one on September 30. That was the early fall passage. For the late fall passage there were three on October 7 with two on October 14 and singles on October 17 and November 11. For the winter passage there were singles on December 2, December 27 and December 30. For the early spring passage there was one on January 10 with two on January 13, then singles seen on January 16, January 27 and February 6. There were three on February 10 with singles on February 17 and February 20. There were three on February 24 with one on February 27. That closed the early spring passage. For the main spring passage there was one on March 4 with two on March 6 and four on March 10, then one seen on March 14. There were two on March 22 and March 27 with singles to April 3. There were also two on April 7. There was one on April 21 with two from April 24 to May 1, then one seen on May 6. That completed the main spring passage. For the summer passage there were two on May 9 with later one on May 30. There were two on June 19 with three on June 23. That ended the summer passage. For the early fall passage there was one on July 21.

Fish Crow (*Corvus ossifragus*)

A resident; however there was a major invasion during the spring: during the Breeding Bird Survey a total of four pairs located. Early fall records: *for the post-breeding gathering there were 29 on June 24 with three on June 27. There were 11 on July 1 with 38 on July 4 and 195 on July 8, then 176 seen on July 15 with 83 on July 18 and three on July 22. There were 404 on July 25 with 730 on July 27, then 220 seen on July 29 with 38 on August 5 and one on August 14.* This post-breeding gathering did not occur in 2002 even though it has happened in most years since. For the early fall passage there were 32 on August 16 with two on August 26, then singles seen to September 23. There were seven on September 26 with one on September 30. That was the early fall passage. For the main fall passage there were three on October 3 with 11 on October 7, then singles seen to October 21. There were ten on October 24 with eight on November 4, seven on November 7, five on November 11 and one on November 15. There were two on November 18 with 55 on November 25, then 28 seen on November 27 with five on November 29. That closed the main fall passage. For the winter passage there were 14 on December 2 with 15 on December 9 and 49 on December 16, then 37 seen on December 19 with 15 on December 21 and one on December 27. There were ten on December 30 with 20 on January 3, then 18 seen on January 7. That completed the winter passage. Now the main event started as for the spring passage there were 19 on January 10 with 98 on January 13, 183 on January 20 and 4,400 on January 27, then 3,350 seen on February 3 with 1,028 on February 10, 270 on February 17 and 160 on February 20. The count of 4,400 is still (2013) the highest count for Zellwood. There were 2,560 on February 24 with 4,330 on February 27, then 1,100 seen on March 4 with 73 on March 6. There were 485 on March 10 with 2,085 on March 14, then 300 seen on March 19 with 56 on March 24 and 30 to March 31. That concluded the spring passage. As this is such an early nester we go straight to the summer passage. For the summer passage there were 93 on April 3 with 17 on April 7, 15 on April 14, 12 on April 17, 11 on April 24, seven to May 6 and three on May 9. There were six on May 12 and May 15 with 13 on May 20 and 100 on May 23, then 13 seen to May 30 with seven on June 2. That ended the summer passage. The remnant post-breeding gathering started here. There were 14 on June 5 and June 10 with 50 on June 16, then eight seen on June 19. There were 42 on June 23 with 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 also six on August 7 and August 14. That ended the post-breeding gathering. On August 11 a total of 110 flew very fast as if driven to the east. This was another type of passage that was restricted to this species.

Purple Martin (*Progne subis*)

A non-breeding summer visitor and passage migrant; there was a minor post-breeding gathering this year. Early fall records: *for the post-breeding gathering there were 44 on June 7 with 51 on June 10, then 39 seen on June 13. There were 43 on June 17 with 161 on June 20, 168 on June 27 and 370 on July 1, then 152 seen on July 4 with 140 on July 8. There were 156 on July 11 with 68 on July 15 and 38 on July 18. There were 140 on July 22 with 20 on July 25, 13 on July 27 and eight on July 29. That was the end of the post-breeding gathering. For the early fall passage there were 12 on August 2 with 16 on August 5 then three seen on August 16 with one on August 19. There were 12 on September 5 with two to September 13. Finally for the early fall passage there were six on September 19. For the early spring passage there were two from February 3 to February 10 with three on February 17, then two seen on February 24 with one on February 27. There was no late spring passage as this species nests very early. For the summer passage there were three on March 6 with singles to March 14. There were four on March 19 and March 22 with five on March 24 and seven on April 3, then singles seen to May 20. That ended the summer passage. For the post-breeding gathering 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. That closed the post-breeding gathering. For the early fall passage there was one on July 8 with two on July 10, then singles seen on July 14 and later on August 7.*

Tree Swallow (*Tachycineta bicolor*)

A passage migrant and winter visitor; the greatest numbers were seen during the spring passages. Early fall record: *there was a juvenile on July 22. For this year there were two on August 19 with singles to September 2. There were seven on September 9 with two on September 13 and one on September 16. That was the extent of the early fall passage. For the main fall passage there were three on September 26 with 28 on September 30, 62 on October 3 and 680 on October 10, then 48 seen on October 14 with 42 on October 17. There were 515 on October 21 with 33 on October 24. There were 43 on October 28 with 267 on November 1, then 176 seen on November 4 with 122 on November 11 and 20 on November 15. There were 41 on November 18 with 121 on November 25, 204 on November 27 and 274 on December 2, then 82 seen to December 9. That closed the main fall passage. For the winter passage there were 190 on December 13 with 35 on December 16. There were 67 on December 19 with 70 on December 21, then ten seen on December 27. There were 28 on December 30 with 44 on January 3, 46 on January 7, 51 on January 10 and 135 on January 13, then 54 seen on January 16. That completed the winter passage; for the early spring passage there were 68 on January 20 with 370 on January 24, then 113 seen on January 27 with 66 on February 3. There were 410*

on February 6 with 690 on February 17, then 470 seen on February 20 with 165 on February 24. That ended the early spring passage. For the main spring passage there were 1,035 on February 27 with 680 on March 6, 365 on March 14 and 220 on March 17. There were 320 on March 19 with 950 on March 22 and 1,290 on March 27, then 94 seen on March 31 with 31 on April 3 and eight on April 7. There were 180 on April 10 with 515 on April 14, then five seen on April 17 with three on April 21 and singles to April 28. There were two on May 1 with singles to May 12. There were three on May 15 with singles to May 23. That was the main spring passage. Although I have split them the two spring passages could equally have been treated as a single event. For the early fall passage there were two on July 3.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

An uncommon passage migrant; there were more sightings in the fall than the spring. Early fall records: *there were singles on July 15, July 22 and July 25 with three on July 27, then singles seen on July 29 and August 2.* For this year there was one on August 16 with two from August 26 to September 5 and four on September 16. That was the end of the early fall passage. For the late fall passage there was one on September 26 with two on September 30, then one seen on October 7. There were six on October 10 with singles on October 14 and October 17. That closed the late fall passage. For the spring passage there were two on March 17 with five on April 3, then singles seen on April 7, April 14, April 21, May 1 and May 9. There were three on May 23 with one on May 27. That closed the spring passage. I am now treating June sightings as part of the fall passage. For the early fall passage there were five on June 12 with one on July 3.

Bank Swallow (*Riparia riparia*)

A common fall passage migrant; there were much lower numbers seen during the spring passage. Early fall records: *one summered this year as there was an adult from June 13 to at least July 15, this was at the Lust Road Barn Swallow colony.* For the early fall passage there were three on July 18 and July 22 with singles to July 29. There were two on August 2 with three to August 16, 12 on August 19, 64 on August 26 and 145 on September 2, then 50 seen on September 5 with 48 on September 9, 43 on September 13, ten on September 16 and one on September 19. The count of 145 was the highest count for Zellwood but the highest count is now (2014) that of 265 on August 20, 2008. There were two on September 23 and September 26 with 22 on September 30, then singles seen on October 3, October 7 and October 10. That completed the early fall passage. There were no further sightings until the spring. For the spring passage there were singles on April 3, May 1 and May 9 with 13 on May 20, then three seen on

May 23 with two on May 27. That was the spring passage. For the early fall passage there were singles on July 25, July 28, August 11 and August 14.

Cliff Swallow (*Petrochelidon pyrrhonota*)

An uncommon fall passage migrant; there were three spring records. Early fall records: *there were three on July 8 with singles on July 22 and July 29. There were also two on August 12.* For this year there were two on August 16 with four on August 19, then two seen on August 22. There were three on August 26 with one on September 2. There were two on September 5 with singles on September 9 and September 16. There were four on September 19 with ten on September 23 and 18 on September 26, then one seen on September 30. That closed the early fall passage. For the late fall passage there was a juvenile on October 10. For the late spring passage there were singles on April 28 and May 6 with three on May 20 that was it. For the early fall passage there were three on July 17 with two on July 21.

Barn Swallow (*Hirundo rustica*)

A summer visitor and passage migrant; the greatest numbers were seen during the early fall passage. During the Breeding Bird Survey a total of 44 pairs located; the first fledged young (one) was seen on May 12. Early fall records: *there were 117 on July 15 with 308 on July 22, then 191 seen on July 27 with 35 on July 29. There were 92 on August 2 with 144 on August 5, 161 on August 12 and 341 on August 16, then 244 seen on August 19.* The sightings on August 16 and August 19 relate to birds flying to the south. Also flying to the south were 298 on August 22 with 392 on August 26, then 320 seen in the area on August 29. Also in the area there were 1,450 on September 2 with 465 flying to the south on September 5. There were no more records of birds flying to the south. There were 360 on September 9 with 500 on September 13, then 350 seen on September 16 with 70 on September 19 and ten on September 23. That was the end of the early fall passage. For the late fall passage there were 48 on September 26 with 480 on September 30, then 410 seen to October 10 with 225 on October 14, 120 on October 21, 34 on October 28 and 26 on November 1. There were 82 on November 4 with 17 on November 7. That closed the late fall passage. There were no winter sightings. For the spring passage there was one on March 6 with five on March 10, 18 on March 14, 31 on March 19, 32 on March 22, 44 to April 3 and 65 on April 7, then 58 seen on April 14 with 29 to April 21. That concluded the early spring passage. For the summer passage there were 37 on April 24 with 63 on April 28, then 45 seen on May 1 with 32 on May 6. There were 39 on May 9 with 56 on May 12 and 65 on May 20, then 54 seen on May 27 with 43 on May 30. There were 75 on June 2 with 71 on June 5 and 62 on June 10. There were 90 on June 12 with 82 on June 19, 76 on June 23 and 50 on June 26. That was the end of the summer passage. For the early fall passage there

were 103 on June 30 with 65 on July 3. 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, 17 on August 4 and five on August 7. Also on August 4 a total of 30 flew to the south with 28 likewise on August 7. A total of 66 flew to the south on August 11 *with 95 on August 18 and 478 on August 21; these also flew to the south. For this influx there were also 830 in the area on August 25 with 167 on August 28 and 65 on September 2.*

Carolina Chickadee (*Poecile carolinensis*)

This was a vagrant. For the winter passage there was one on December 27. For the early fall passage there was one on August 11. I did not note their locations.

Tufted Titmouse (*Baeolophus bicolor*)

A resident in the wooded borders; during the Breeding Bird Survey a total of nine pairs located. Early fall records: *there were two on June 20 and July 1 with singles to August 12. There were three on August 14 with singles to September 2. There were three on September 9 with singles to September 23. There were two on September 26 with singles to October 3. That was the early fall passage. For the main fall passage there were four on October 10 with two to October 21 and singles to November 1. There were two on November 4 and November 7 with three on November 15, then two seen to November 25. There were four on November 27 with two to December 2 and one on December 5. That closed the main fall passage. For the winter passage there were two from December 9 to December 16 with singles to December 27. There were three on December 30 with one on January 3. That completed the winter passage. For the early spring passage there were two on January 7 and January 10 with three on January 13 and January 20, then two seen to January 27. There were four on February 3 with three on February 6 and two to February 17. There were three on February 20 with singles to February 27. That concluded the early spring passage. For the late spring passage there were two on March 4 and March 10 with one on March 14. There were two on March 17 and March 22 with one on March 24. There were two on March 27 with singles to April 3. There were three on April 7 with one on April 10. There were two on April 14 with three on April 17, then two seen to April 28 with one on May 1. That ended the late spring passage so for the summer passage there were singles from May 6 to May 23 with four on May 27, then three seen on May 30. There were four on June 2 and June 10 with three on June 12, two on June 16 and one on June 19. There were two on June 23 and June 26 with five on June 30, then one seen on July 3. That closed the summer passage. For the early fall passage there were singles from July 8 to July 21. There were also two from July 25 to August 14.*

Carolina Wren (*Thryothorus ludovicianus*)

A common resident, there was nothing to suggest passage. During the Breeding Bird Survey a total of 162 pairs located. Early fall records: *there were 30 on July 1 with 25 on July 4, 23 on July 11, 19 on July 15 and 12 on July 18. There were 35 on July 22 with 57 on July 27 and 59 on July 29, then 39 seen on August 5 with 33 on August 12 and 31 on August 14.* For this year there were 34 on August 16 with 31 on August 19 and 24 to August 26. There were 29 on August 29 with 36 on September 2, then 31 seen on September 5 with 30 on September 9 and 13 on September 13. There were 15 on September 16 with 27 on September 19 and 29 on September 26, then 24 seen on September 30 with 23 on October 3, 21 on October 7, 19 to October 14, 17 on October 17, 14 on October 21, 13 on October 28 and ten on November 1. That decline lasted nearly two months; there was no incoming influx to cover up the decline. This really shows that this is a resident as that long decline followed the gradual cessation of song in the fall. There were 11 on November 4 with 15 on November 7 and 18 on November 11, then 13 seen on November 18 with nine on November 25. That closed the single fall passage. For the winter passage there were ten on November 27 with 16 on November 29, then 15 seen on December 2 with five on December 5. There were 21 on December 9 with 15 on December 13 and ten on December 16. There were 18 on December 19 with 15 on December 21 and six on December 27. There were 25 on December 30 with eight on January 3. That completed the winter passage. For the early spring passage there were 14 on January 7 with 23 on January 10, 26 on January 13, 29 on January 20 and 35 on January 24, then 29 seen to February 3 with 24 on February 6. There were 33 on February 10 with 32 on February 20, 28 on February 24 and 11 on February 27. That ended the early spring passage. For the main spring passage there were 26 on March 4 with 34 on March 6 and 58 on March 10, then 51 seen on March 14 with 36 on March 17. There were 62 on March 19 with 31 to March 31 and 23 to April 7. The count of 62 was the highest count for Zellwood but the highest count is now (2014) that of 103 on April 24, 2003. There were 33 on April 10 with 34 on April 14 and 42 on April 17, then 41 seen on April 21 with 32 on April 24. That concluded the main spring passage. For the summer passage there were 36 on April 28 with 37 on May 1 and 44 on May 9, then 38 seen on May 12 with 32 on May 15, 28 on May 20 and 27 on May 23. There were 32 on May 27 with 44 on May 30, then 41 seen on June 2 with 40 on June 5, 31 on June 12, 27 on June 16 and 25 on June 19. There were 31 on June 23 with 16 on June 26. That was the summer passage so for the early fall passage 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.*

House Wren (*Troglodytes aedon*)

A very common fall passage migrant; there were decreasing numbers through to the spring. For the fall passage there were singles on September 26 and September 30 with ten on October 3, 26 on October 7, 119 on October 14, 208 on October 21 and 219 on October 24, then 161 seen on October 28. There were 207 on November 1 with 238 on November 4 and 282 on November 7, then 239 seen on November 11 with 98 on November 15. There were 242 on November 18 with 200 on November 25, 175 on November 29, 133 on December 2 and 86 on December 5. That closed the fall passage. For the winter passage there were 147 on December 9 with 75 on December 13. There were 83 on December 16 with 106 on December 19, then 67 seen on December 27 with 66 on December 30 and 21 on January 3. That completed the winter passage. For the early spring passage there were 38 on January 7 with 86 on January 10, 99 to January 16, 105 on January 20 and 107 on January 27, then 75 seen on February 6 with 74 on February 10, 47 on February 17 and 39 on February 20. There were 66 on February 24 with 27 on February 27. That concluded the early spring passage. For the late spring passage there were 48 on March 4 with 57 on March 6, 78 on March 10, 84 on March 14, 88 on March 17 and 95 on March 19, then 64 seen on March 22. There were 68 on March 24 with 94 on March 27, then 92 seen on April 3 with 81 on April 7, 49 on April 10, 42 on April 14, nine on April 17, five on April 21, three on April 24, two on May 1 and one on May 9.

Sedge Wren (*Cistothorus platensis*)

This was the rarest of the three migrant wrens; numbers were steady to late January after which they gradually declined. For the fall passage there were two from October 21 to October 28 with three on November 1, seven on November 4 and 13 on November 7, then 11 seen to November 18 with six on November 25. There were seven on November 27 with 22 on November 29, then eight seen on December 2. That was the fall passage. For the winter passage there were ten on December 5 with 18 on December 9, then 16 seen on December 13 with 11 on December 16, ten on December 19, nine on December 21 and six on December 27. There were ten on December 30 with three on January 3. That completed the winter passage. For the early spring passage there were seven on January 7 and January 10 with ten on January 13 and 11 on January 16, then eight seen on January 20 with six on January 24. There were 12 on January 27 with ten on February 3, nine to February 10, six on February 17, four to February 24, three to March 6 and one on March 10. That was the end of the over-running early spring passage. For the late spring passage there were four on March 14 with five on March 17, then four seen on March 19 with two on March 24. There were six on March 27 with five on April 3 and two on April 7. There were five on April 10 with six on April 14, then three seen on April 21 with two on April 24 and one on May 1.

Marsh Wren (*Cistothorus palustris*)

A passage migrant and winter visitor; each of these wrens was different the highest numbers for this species occurred during the winter and the early spring passages. For the fall passage there were singles on October 3 and October 10 with six to October 21 and seven on October 28, then six seen to November 7 with five on November 11 and three on November 15. There were six on November 18 with ten on November 25, 15 on November 27 and 22 on November 29, then 18 seen on December 2 with seven on December 5. That closed the fall passage. For the winter passage there were 15 on December 9 with seven on December 13 and four on December 16. There were 15 on December 19 with 19 on December 21 and 26 on December 27, then 15 seen on December 30 with three on January 3. That completed the winter passage. For the early spring passage there were 16 on January 7 with 26 on January 13 and January 16, then 21 seen on January 20 with seven on January 24. There were 33 on January 27 with 14 on February 3 and five on February 6. There were 17 on February 10 with 14 on February 17, eight on February 24, four on February 27 and three on March 4. That concluded the early spring passage. For the late spring passage there were four on March 6 with five on March 10, then three seen to March 17. There were four on March 19 with six on March 24, then five seen to March 31. There were six on April 3 with seven on April 10 and 11 on April 14, then four seen on April 17 with two on April 21. There were five on April 24 with two on May 1.

Ruby-crowned Kinglet (*Regulus calendula*)

A quite common passage migrant and winter visitor; in this instance the heaviest passage was during the early spring passage. For the fall passage there were singles on October 3, October 10 and October 17 with three on October 21 and October 24, then two seen on November 1 with one on November 4. There were five on November 7 and November 11 with nine on November 18, then seven seen to November 27. That closed the fall passage. For the winter passage there were eight on November 29 and December 2 with seven on December 9, four on December 13 and three on December 16. There were eight on December 19 and December 21 with nine on December 27, then eight seen on December 30 with two on January 3. That completed the winter passage. For the early spring passage there were six on January 7 with 13 on January 10 and 14 on January 16, then 12 seen on January 20 with eight to February 6, seven to February 17 and two on February 20. There were ten on February 24 with eight on February 27 and seven on March 4. That was the early spring passage. For the late spring passage there were ten on March 6 with 11 on March 14, then six seen to March 19 with four on March 22. There were seven on March 24 and March 27 with two on March 31 and one on April 7.

Blue-gray Gnatcatcher (*Polioptila caerulea*)

A common passage migrant and winter visitor; there were no summer sightings. Early fall records: *there were singles on June 27, July 1, July 29 and August 5 with ten on August 12, then eight seen on August 14* with six on August 19, three on August 22 and two on August 26. There were ten on August 29 with eight on September 2. There were nine on September 5 with 12 to September 16, 30 to September 23, 43 on September 26 and 62 on October 3, then 54 seen on October 10 with 51 on October 17, 38 on October 21, 36 on October 24 and 24 on October 28. There were 38 on November 1 with 44 on November 4 and 53 on November 7, then 41 seen on November 11 with 36 on November 18, 34 on November 25 and 31 on November 27. That was the end of the fall passage. For the winter passage there were 41 on November 29 with 45 on December 2 and December 5, then 40 seen on December 9 with 36 on December 13 and 17 on December 16. There were 52 on December 19 with 53 on December 21, then 40 seen on December 30 with 17 on January 3. That completed the winter passage. For the early spring passage there were 37 on January 7 with 66 on January 10, 68 on January 13 and 73 on January 16, then 72 seen on January 20 with 51 on January 24 and 45 on January 27. There were 54 on February 3 with 58 on February 10, then 56 seen on February 20 with 46 on February 24 and 35 on February 27. That closed the early spring passage. For the late spring passage there were 55 on March 4 with 37 on March 6, 32 on March 10, nine on March 14, three on March 17, two on March 19 and one on March 24. That was a very sharp cut off to the core of the late spring passage. For that passage there were also two on March 27 with singles to April 14. There were two on April 28 with one on May 1. There were two from May 9 to May 15 with singles to May 23. That was the end of the late spring passage. There were no summer sightings. For the early fall passage there were singles on June 23 and 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*.

Veery (*Catharus fuscescens*)

An uncommon early fall passage migrant; there was one on September 5 with 11 on September 26, then three seen on October 7. The count of 11 was the highest count for Zellwood but the highest count is now (2014) that of 12 on October 2, 2002.

Gray-cheeked Thrush (*Catharus minimus*)

An uncommon late fall passage migrant there were singles on September 30, October 3 and October 24.

Swainson's Thrush (*Catharus ustulatus*)

This was the commonest of these migrant thrushes. For the early fall passage there were singles on September 16 and September 23 with 36 on September 26, then two seen on October 3 and October 7. The count of 36 is still (2014) the highest count for Zellwood. Exceptionally there was a spring record as there was one on April 24.

Hermit Thrush (*Catharus guttatus*)

An uncommon passage migrant; for the late fall passage there were singles on October 24 and November 18. There were no winter records this year. For the early spring passage there were singles on January 20 and January 24.

Wood Thrush (*Hylocichla mustelina*)

This was a vagrant. For the late fall passage there was one on October 3.

American Robin (*Turdus migratorius*)

A quite common passage migrant and winter visitor; there was only a minor fall passage. For the fall passage there were 13 on November 7 with 28 on November 18, then one seen on November 25. For the winter passage there were 51 on November 27 with 52 on December 2, then six seen on December 5 with three on December 9. There were 86 on December 13 with 365 on December 16, then 113 seen on December 19 with 92 on December 21 and 23 on December 27. There were 97 on December 30 with 2,820 on January 3, then three seen on January 7. The count of 2,820 was the highest count for Zellwood but the highest count is now (2014) that of at least 240,000 on December 29, 2006. That completed the winter passage. For the early spring passage there were 42 on January 10 with 70 on January 13 and 570 on January 20, then 520 seen on January 27 with 137 on February 3, 48 on February 6 and 32 on February 10. There were 51 on February 17 with 17 on February 20 and seven on February 24. That closed the early spring passage. For the late spring passage there were 22 on February 27 with 30 on March 4, 36 on March 10 and 42 on March 14, then three seen to March 22. There were no later records.

Gray Catbird (*Dumetella carolinensis*)

A passage migrant and winter visitor; the greatest numbers were seen during the fall passage. Early fall records: *there were singles on June 20, July 8 and July 29.* For this year there was one on September 16 with nine on September 26, 11 on September 30, 55 on October 3, 81 on October 7, 84 on October 10 and 93 on October 14, then 71 seen on October 17. There were 92 on October 21 with 148 on October 24, then 47 seen on October 28 with 25 on November 1. The count of 148 was the highest count for Zellwood but the highest count is now (2014) that of 713 on October 17, 2008. There were 56 on November 4 with 93 on November 11, then 81 seen on November 18 with 47 on November 25, 44 on November 29, 36 on December 2 and 29 on December 5. That closed the fall passage so for the winter passage there were 85 on December 9 with 56 on December 13, 46 on December 19 with 25 on December 21. There were 42 on December 27 with 44 on December 30, then 17 seen on January 3 with 15 on January 7. That completed the winter passage. For the early spring passage there were 42 on January 10 with 39 on January 13 and 29 on January 16. There were 60 on January 20 with 53 on January 27, 28 on February 3, 27 on February 10 and 20 on February 17. There were 29 on February 20 with 54 on February 24, then seven seen on February 27. That was the early spring passage. For the main spring passage there were 34 on March 4 with 62 on March 10, then 41 seen on March 17 with 16 on March 19. There were 21 on March 22 with 26 on March 24, 49 on March 27, 58 on April 3, 72 on April 7, 84 on April 10, 91 on April 14 and 96 on April 21, then 59 seen on April 24 with 22 on May 1 and two May 6. That ended the main spring passage. There were no summer sightings. For the early fall passage there were singles on August 4 and August 14.

Northern Mockingbird (*Mimus polyglottos*)

A common resident; there did appear to be a post-breeding gathering and a fall passage. During the Breeding Bird Survey a total of 62 pairs located; the first fledged young were seen on May 30. Early fall records: *for the post-breeding gathering there were 18 on June 17 with 19 on June 20, 35 on June 24 and 51 on June 27, then 42 seen on July 4 with 41 on July 8, 39 on July 11, 35 on July 15, 23 on July 18 and 15 on July 22. There were 22 on July 25 with 35 on July 27, then 21 seen on July 29 with ten on August 2. That finished the post-breeding gathering so for the early fall passage there were 24 on August 5 with 16 on August 12 and 13 on August 14.* For this year there were 21 on August 16 with 23 on August 22 and 31 on August 26, then 27 seen on September 2 with 20 on September 5. There were 30 on September 9 with 13 on September 13. There were 24 on September 16 with 33 on September 19, then 29 seen on September 23. That was the end of the early fall passage. For the main fall passage there were 32 on September 26 with 34 on September 30 and 50 on October 7, then 44 seen to October 14 with 35 on October 21, 27 on October 24 and 12 on October 28. There were 31 on November 1 with

22 on November 4, 18 on November 7, 16 on November 11 and 13 on November 15. There were 18 on November 18 with 16 on November 27 and ten on November 29. That closed the main fall passage. For the winter passage there were 18 on December 2 with 11 on December 5. There were 12 on December 9 with 13 on December 13 and 17 on December 16, then 12 seen on December 19 with nine on December 21. There were 15 on December 27 with 13 on December 30, eight on January 3 and seven on January 7. That completed the winter passage. For the early spring passage there were 14 on January 10 with 19 on January 13, 25 on January 20 and 31 on January 24, then 22 seen on February 3 with 16 on February 10 and 11 on February 17. There were 12 on February 20 with 15 on February 24, then four seen on February 27. That concluded the early spring passage. For the main spring passage there were eight on March 4 with 17 on March 6, 32 on March 10 and 39 on March 17, then 26 seen on March 19 with 15 on March 22. There were 28 on March 24 with 31 on March 27, then 28 seen on March 31 with 18 on April 3. There were 22 on April 7 with 23 on April 14 and 28 on April 21, then 20 seen on April 24. That ended the main spring passage. For the summer passage there were 23 on April 28 with 26 on May 1, 30 on May 9, 35 on May 12, 37 on May 20 and 40 on May 27, then 37 seen on May 30 with 24 on June 2 and 15 on June 5. There were 19 on June 10 with 23 on June 12, then 18 seen on June 16 with 16 on June 19. That closed the summer passage. For the post-breeding gathering there were 37 on June 23 with 16 on June 26 and 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. That was the end of the post-breeding gathering.*

Brown Thrasher (*Toxostoma rufum*)

A resident in the vine draped scrub; there was a significant fall passage and a minor post-breeding gathering. During the Breeding Bird Survey a total of 20 pairs located. Early fall records: *for the post-breeding gathering there were eight on July 1 with ten on July 4 and 20 on July 8, then nine seen on July 11 with six on July 18 and three on July 22. There were eight on July 25 with ten on July 27, then seven seen on July 29 with six on August 2. There were 17 on August 5 with eight on August 12, seven to August 16, six on August 22 and two on August 26.* That ended the post-breeding gathering so for the early fall passage there were nine on August 29 and September 2 with 11 on September 5, then six seen on September 9 with one on September 13. There were seven on September 16 with 12 on September 19, then ten seen to September 26 with nine on September 30. That was the early fall passage. For the late fall passage there were 15 on October 3 with 23 on October 7, then 15 seen on October 14 with six on October 17. The count of 23 was the highest count for Zellwood but the highest count is now (2014) that of 74 on October 8, 2008. There were seven on October 21 with 12 on October 24 then five seen on November 1 with two on November 4 and one on November 7. The fall

passage really ended on October 24. There were two on November 15 with three on November 18, then one seen on November 25. That closed the late fall passage. For the winter passage there were two on November 27 with four on November 29, then two seen to December 5 with singles to December 13. There were two on December 16, December 19 and December 21 with singles to January 7. That completed the winter passage. For the early spring passage there were two on January 10 and January 16 with three on January 20, then one seen on January 24. There were two on January 27 with three on February 3 and four on February 10, then three seen on February 24 with singles to March 6. That concluded the early spring passage. For the main spring passage there were four on March 10 with five on March 17, then three seen on March 22 with two on March 24. There were three on March 27 with four on March 31, then three seen to April 10 with two on April 14. There were three on April 17 and April 21 with two on April 24. There were four on April 28 with three to May 6. That was the end of the main spring passage. For the summer passage there were four on May 9 with three on May 12 and one on May 15. There were two on May 20 with three on May 23, four to June 2 and five on June 5, then one seen on June 10. There were three on June 12 with four on June 16, then singles seen to June 23. That closed the summer passage. For the post-breeding gathering there were three from June 30 to July 8 with two to July 14 and 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 four on August 14.

European Starling (*Sturnus vulgaris*)

A resident, a passage migrant and a winter visitor; there was also a significant post-breeding gathering. During the Breeding Bird Survey a total of 11 pairs located. Early fall records: *for the post-breeding gathering there were 21 on May 20 with 45 on May 24, 130 on May 27, 187 on May 31, 218 on June 3, 308 on June 7, 470 on June 10, 775 on June 17, 785 on June 24 and 850 on June 27, then 604 seen on July 4 with 395 on July 8. The count of 850 would have been the highest count for Zellwood but read on. That was a major long-lasting influx. There were 775 on July 11 with 174 on July 15, 129 on July 18 and 55 on July 22. There were 242 on July 25 with 13 on July 27, 12 on August 2, eight on August 12 and three on August 14.* The post-breeding gathering really came to an end after July 25. So for the early fall passage there were ten on August 16 with six on August 19 and four on August 22. There were seven on August 26 with one on August 29. There were three on September 2 with five on September 5, then three seen on September 9. There were four on September 13 with 19 on September 16, then singles seen to September 23. That was the early fall passage. For the main fall passage there were 11 on September 26 with 15 on September 30, 150 on October 3 and 260 on October 7, then 122 seen on October 10 with 110 on October 17 and three on October 21. There were 26 on October 24 with 114 on October 28, then 51 seen on November 1 with 24 on November 4, 21 on November 7 and 13 on November 11. There were 27 on November 15 with

two to November 25 and one to November 29. That closed the main fall passage. For the winter passage there were 12 on December 2 with 18 on December 5, 30 on December 9, 38 on December 16 and 119 on December 21, then seven seen on December 27. There were 24 on December 30 with 130 on January 3, then 66 seen on January 7 with two on January 10. That completed the winter passage. For the early spring passage there were ten on January 13 with 28 on January 16, then 13 seen on January 20 with five on January 24. There were 32 on January 27 with 49 on February 3, then 25 seen on February 10 with 19 on February 17 and three on February 20. There were 21 on February 24 with six to March 4 and five on March 6. That concluded the early spring passage. For the summer passage (this is a very early nester) there were seven on March 10 with one on March 14. There were three on March 17 with eight on March 19, then seven seen to March 31 with three on April 7 and two to April 17. There were four on April 21 with 11 on April 24, then five seen on April 28 with three on May 1. There were ten on May 6 with nine on May 9, eight on May 12 and seven on May 15. That ended the summer passage. 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 August 31. The post-breeding gathering came to an end after July 17. The count of 860 was the highest count for Zellwood but the highest count is now (2014) that of 2,040 on July 13, 2007. For the early fall passage there were four on August 4 with five on August 7, then singles seen to August 14.

American Pipit (*Anthus rubescens*)

A spring passage migrant; there were lesser numbers for the fall and winter passages. For the fall passage there were three on November 7 with 12 on November 11, 38 on November 18 and 102 on November 25, then 50 seen on November 29 with 11 on December 2. That was the fall passage. For the winter passage there were 57 on December 5 with 52 on December 9, 27 on December 16, five on December 19, four to December 27 and two on December 30. That completed the winter passage. For the early spring passage there were 25 on January 3 with 76 on January 7 and 257 on January 13, then 25 seen on January 20 with 17 on January 24. There were 41 on January 27 with 170 on February 6, then 150 seen on February 10 with 125 on February 20, 115 on February 24, 110 on February 27 and 25 on March 4. That closed the early spring passage. For the late spring passage there were 89 on March 6 with 185 on March 10, then 25 seen on March 14 with nine on March 19 and two to March 24.

Cedar Waxwing (*Bombycilla cedrorum*)

A spring passage migrant, there were a few winter records. For the winter passage there were singles on December 13, December 19, December 21 and December 27 with 12 on January 3. For the early spring passage there was one on January 27. There were also two on February 24 and February 27. The early spring passage was only a little stronger than the winter passage. For the main spring passage there were 25 on March 4 and March 6 with five on March 10. There were 12 on March 14 with 21 on March 17 and 32 on March 19, then five seen to March 27 with two on March 31. There were 21 on April 3 with 48 on April 10, then ten seen to April 21 with one on April 24. There were 23 on April 28 with 111 on May 1 and 134 on May 6, then 100 seen on May 9 with eight on May 12.

Blue-winged Warbler (*Vermivora pinus*)

This was a vagrant. For the early fall passage there was one on August 14.

Tennessee Warbler (*Vermivora peregrina*)

A rare early fall passage migrant there was one on September 5 with three on September 26, then one seen on September 30.

Orange-crowned Warbler (*Vermivora celata*)

A passage migrant and winter visitor; the greatest numbers were seen during the early spring passage. For the late fall passage there were two on November 4 and November 7 with three to November 15 and seven on November 18, then four seen on November 25 with three on November 27. That was the late fall passage. For the winter passage there were six on November 29 with seven on December 2, then three seen on December 5. There were five on December 9 with seven on December 13, then two seen on December 16. There were six from December 19 to December 27 with seven on December 30, then three seen on January 3. That completed the winter passage. For the early spring passage there were seven on January 7 with ten on January 10 and 15 on January 13, then 13 seen on January 20 with six on January 24. There were seven on January 27 with ten on February 3, then nine seen to February 10 with five on February 17 and four on February 20. That closed the early spring passage. For the late spring passage there were eight on February 24 with nine on March 4, then seven seen on March 6 with six on March 14, two on March 17 and one on March 19.

Nashville Warbler (*Vermivora ruficapilla*)

This was a vagrant. For the late fall passage there were singles on October 10 and November 27. I did not note their location.

Northern Parula (*Parula americana*)

A summer visitor and passage migrant; they were only seen in very low numbers. During the Breeding Bird Survey a total of six pairs located. Early fall records: *there were singles on July 1 and August 12*. For this year there was one on August 22 with two on September 5 and three on September 9, then one seen on September 16. That was the early fall passage. For the late fall passage there were singles on October 3 and October 10 with three on October 14. There were no winter sightings. For the early spring passage there was one on February 10. For the main spring passage there were two on March 4 with three on March 6 and ten on March 10, then eight seen on March 14 with five on March 19, three on March 24, two to March 31 and one on April 3. That closed the main spring passage. For the summer passage there were singles from April 7 to April 17 with three on April 24 and May 1, then two seen on May 9 with singles to May 30. There were two on June 2 with singles to June 26. There were nine on June 30 with singles to July 10. That ended the summer passage. For the early fall passage 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*.

Yellow Warbler (*Dendroica petechia*)

A surprisingly common early fall passage migrant. Early fall records: *there was one on July 11 with two on July 22, seven on July 27 and 22 on August 2, then 19 seen on August 5 with nine on August 12 and five on August 14*. For this year there were 71 on August 16 with 43 on August 19, 17 on August 22, 16 on August 26 and 12 on August 29. The count of 71 was the highest count for Zellwood but the highest count is now (2014) that of 232 on September 15, 2006. There were 13 on September 2 with 22 on September 5 and 27 on September 9, then nine seen on September 13. There were 13 on September 16 with 14 on September 19, then eight seen to September 26 with singles to October 7. That closed the early fall passage. There were no further sightings until the following fall. For the early fall passage 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. 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. The count of 119 was another high count now superseded.

Chestnut-sided Warbler (*Dendroica pensylvanica*)

This was a vagrant. For the early fall passage there was one on September 9.

Magnolia Warbler (*Dendroica magnolia*)

This was a vagrant. For the early fall passage there was one on September 26.

Cape May Warbler (*Dendroica tigrina*)

A rare passage migrant; there were more spring than fall records. For the early fall passage there was one on September 26. For the late spring passage there was one on April 21 with two on May 1, then one seen on May 20.

Black-throated Blue Warbler (*Dendroica caerulescens*)

A rare passage migrant; for the early fall passage there were three on September 30 whilst for the late spring passage there was one on April 14.

Yellow-rumped Warbler (*Dendroica coronata*)

A common passage migrant; the greatest numbers were seen during the spring passages. For the late fall passage there was one on October 17 with three on October 24, 53 on October 28 and 75 on November 4, then 49 seen on November 7 with 34 to November 15. There were 89 on November 18 with 42 on November 25 and 38 on November 27. That was the late fall passage. For the winter passage there were 115 on November 29 with 137 on December 2, then 64 seen on December 5. There were 90 on December 9 with 149 on December 13, then 121 seen on December 19 with 63 on December 21. There were 90 on December 27 with 175 on December 30, then 125 seen on January 3 with 115 on January 7. That completed the winter passage. For the spring passage there were 122 on January 10 with 117 on January 16, 59 on January 20 and 57 on January 24. There were 138 on January 27 with 194 on February 6 and 690 on February 17, then 470 seen on February 20. There were 570 on February 24 with 755 on February 27, 810 on March 4 and 1,210 on March 6, then 725 seen on

March 14 with 405 on March 17, 280 on March 19 and 23 on March 22. The count of 1,210 was the highest count for Zellwood but the highest count is now (2014) that of 10,220 on February 23, 2007. There were 25 on March 24 with 26 on March 27, then seven seen on March 31 with three on April 3, two on April 7 and singles on April 10 and April 28. That was the spring passage.

Audubon's Warbler (*Dendroica coronata auduboni*)

This was a vagrant. For the late fall passage there was a female by Canal Road on November 11. There is a description in Appendix B.

Black-throated Green Warbler (*Dendroica virens*)

This was a vagrant. For the late fall passage there was one on October 28.

Blackburnian Warbler (*Dendroica fusca*)

This was a vagrant. For the late spring passage there was one on May 20.

Yellow-throated Warbler (*Dendroica dominica*)

An uncommon passage migrant; there were no winter records. For the early fall passage there was one on August 29 with two later on September 23. For the early spring passage there were singles on January 16 and later February 6, February 10 and February 20. For the early fall passage there were singles on July 17, July 31, August 7, August 11 and August 14.

Pine Warbler (*Dendroica pinus*)

An uncommon spring passage migrant; there were single records for the fall and winter passages. Early fall record: *there was a female on July 22*. For this year there was one on October 3. That was the extent of the early fall passage. For the winter passage there was one on December 30. For the early spring passage there were singles on ten dates from January 7 to February 20. For the main spring passage there were two on March 4, March 10 and March 14. Later there were singles on eight dates from April 14 to May 20.

Prairie Warbler (*Dendroica discolor*)

A passage migrant and winter visitor; numbers were low with the exception of a minor spring passage and a strong passage in the early fall. Early fall records: *there were three on July 11 with five on July 22, then singles seen to July 27. There were five on July 29 and August 2 with nine on August 5, 23 on August 12 and 25 on August 16, then 19 seen on August 19 with 17 on August 22 and six on August 26. There were nine on August 29 with 15 on September 2 and 39 on September 9, then 17 seen on September 13 with 11 to September 19. The count of 39 was the highest count for Zellwood but the highest count is now (2014) that of 83 on September 10, 2003. There were 19 on September 23 with six to September 30. That was the early fall passage. For the late fall passage there were 15 on October 3 with four on October 7 and three on October 10. There were five on October 14 with four on October 17 and three on October 21. There were five on October 24 with three on October 28 and one on November 4. There were three from November 7 to November 29 with one on December 2. That closed the late fall passage. For the winter passage there were three on December 5 and December 9 with four on December 19, then three seen to December 30 with singles to January 7. That completed the winter passage. For the early spring passage there were five on January 10 with three to January 16. There were seven on January 20 with one on January 24. There were two on January 27 with three from February 3 to February 17, then two seen on February 20. That closed the early spring passage. For the main spring passage there were three on February 24 with four on March 4, then three seen on March 6 with two on March 10. There were five on March 14 with four on March 17 and three on March 19. There were six on March 22 with seven on March 27 and ten on April 3, then four seen on April 7 with one on April 10. There were ten on April 14 with one on April 17. Later there were two on May 1. That ended the main spring passage. There were no summer sightings. For the early fall passage 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.*

Palm Warbler (*Dendroica palmarum*)

A common passage migrant and winter visitor; the greatest numbers were seen during the spring passages. For the early fall passage there was one on September 9 with two on September 13, five on September 16, 22 to September 23 and 292 on September 26, then 85 seen on September 30 with 56 on October 3. That was the early fall passage. For the main fall passage there were 128 on October 7 with 57 on October 10. There were 74 on October 14 with 117 on October 17, 145 on October 24, 158 on November 1 and 163 on November 4, then 132 seen on November 7 with 102 on November 11 and 42 on November 15. There were 126 on November 18 with 41 on November 25 and 37 on November 27. That closed the main fall passage. For the winter passage there were 116 on November 29 with 64 on December 2 and

33 on December 5. There were 167 on December 9 with 31 to December 16. There were 80 on December 19 with 96 on December 27, then 69 seen on December 30 with 32 on January 3. That completed the winter passage. For the early spring passage there were 104 on January 7 with 198 on January 13 and 230 on January 16, then 106 seen on January 20. There were 148 on January 24 with 289 on January 27, then 206 seen on February 3 with 204 on February 10 and 189 on February 17. There were 247 on February 20 with 205 on February 24 and 108 on February 27. That concluded the early spring passage. For the late spring passage there were 232 on March 4 with 180 on March 6 and 160 on March 10. There were 230 on March 14 with 115 on March 19 and 89 on March 22. There were 117 on March 24 with 91 on March 27 and 81 on March 31. There were 137 on April 3 with 49 on April 7, 36 on April 10, 25 on April 14, seven to April 24 and five on May 1. That was the late spring passage. Very exceptionally there was one by the Lake Level Canal on June 30. For this year I did not separate out any "Yellow" Palm Warblers.

Blackpoll Warbler (*Dendroica striata*)

This was a quite common spring passage migrant. For the late spring passage there were three on April 21 with four on April 24 and 18 on May 1, then three seen on May 6 with one on May 15. Finally there were two on May 20. The count of 18 was the highest count for Zellwood but the highest count is now (2014) that of 73 on May 5, 2006.

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

This was an uncommon passage migrant; the majority of the sightings were during the early spring passage. For the early fall passage there were singles on September 9 and September 30. There were no records for the late fall passage. The only sighting for the winter passage related to one on December 30. For the early spring passage there were singles on January 7, January 10 and January 13. Later there was one on February 3 with two on February 6, then singles seen on February 17, February 20 and February 24. That completed the early spring passage. For the late spring passage there were singles on April 3 and April 7 with later two on April 24. For the early fall passage there was one on July 17.

American Redstart (*Setophaga ruticilla*)

A quite common passage migrant; the majority were seen in the wooded borders. Early fall records: *there were singles on July 22, July 25 and July 27 with two on August 5 and August 12, then one seen on August 14.* For this year there were singles on August 22 and September 2

with three on September 9, then singles seen to September 19. There were three on September 23 with five on September 26, then two seen on September 30 with one on October 3. That was the early fall passage. For the late fall passage there were three on October 10 and October 17 with one on October 21. That closed the late fall passage. For the late spring passage there were two on April 14 with one on April 21. There were two on April 24 and April 28 with four on May 1 and May 6, then two seen on May 9 with one on May 12. There were 15 on May 15 with six on May 23 and singles on May 30 and June 2. That ended the late spring passage. For the early fall passage there were three on July 25 with two on July 31. There were five on August 4 with two on August 7 and singles to August 14.

Prothonotary Warbler (*Protonotaria citrea*)

This was a vagrant. For the late spring passage there were two on April 14. For the early fall passage there were two on August 7.

Worm-eating Warbler (*Helmitheros vermivora*)

This was a vagrant. For the early fall passage there was one on August 7, 2002.

Swainson's Warbler (*Limnothlypis swainsonii*)

This was also a vagrant. For the early fall passage there was one on September 2, 2001.

Ovenbird (*Seiurus aurocapilla*)

A quite common fall passage migrant to mid-October; after that there was a minimal presence to late April. For the fall passage there were singles on August 16 and August 19 with two on August 26, then singles seen to September 5. There were two on September 9 and September 16 with four on September 19, 11 on September 26 and 13 on October 3, then six seen to October 10 with four on October 14 and singles to November 4. There were two on November 7 and November 11 with singles to November 29. That was the fall passage. For the winter passage there were two on December 2 with singles to January 10. For the early spring passage there were two on January 13 with singles to January 20. There were two on January 27 with singles to February 10. That closed the early spring passage. For the late spring passage there were four on March 4 with singles to March 17. Later there were singles on March 31, April 24 and April 28.

Northern Waterthrush (*Seiurus noveboracensis*)

A quite common passage migrant in the early fall and the late spring there were lesser numbers from mid-October to mid-April. Early fall record: *there was one on August 12*. For this year there were three on August 16 and August 19 with two on August 22 and one on August 26. There were four on August 29 with two on September 2. There were three on September 5 with 17 on September 9 and 24 on September 13, then seven seen on September 16. There were ten on September 19 with 14 on September 23, then eight seen on September 26 with six on September 30. That was the end of the early fall passage. For the late fall passage there were 11 on October 3 with four on October 7 and one on October 10. There were eight on October 14 with three on October 17 and singles to October 28. Passage in November was non-existent; the only record related to two on November 11. That closed the late fall passage. For the winter passage there was one on November 29 with two from December 5 to December 13, then one seen on December 16. There were two on December 19 and December 21 with three on December 27, then two seen on December 30 with singles to January 10. That completed the winter passage. For the early spring passage there was one on January 13 with four on January 16, then one seen on January 20. There were two on January 24 and January 27 with four on February 3 and February 10, then singles seen to February 20. That concluded the early spring passage. For the main spring passage there were two on February 24 with three on March 4, then two seen to March 10 with one to March 17. There were two on March 19 with four on March 27, then three seen to April 10 with two on April 14. There were three on April 17 with 22 on April 24, then three seen to May 1 with one on May 9. Finally for the main spring passage there were two on May 15. There were no early fall sightings.

Louisiana Waterthrush (*Seiurus motacilla*)

An uncommon passage migrant; the greatest numbers were seen during the fall passage. Early fall records: *there were two on July 8, July 22 and July 25 with one on July 27. There were two on July 29 with four on August 5 and August 12*, then 11 seen on August 16 with ten on August 19, five to September 5, four on September 9 and singles to September 19. That was the early fall passage. Exceptionally there was an early spring record as one seen on February 10. For the main spring passage there were two on March 4 with four on March 10 and eight on March 14, then seven seen on March 17 with six on March 19, five on March 22 and four to March 31. There were five on April 3 with one on April 7. There were two on April 14 with one on April 17. That closed the main spring passage. For the early fall passage 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*.

Common Yellowthroat (*Geothlypis trichas*)

A common fall passage migrant with smaller numbers through to the spring; there were summer sightings but no evidence of breeding. Early fall records: *there was one on June 20 with two on June 24, then singles seen to July 22.* For this year there were singles on August 22 and September 5 with 27 on September 9, 34 on September 13, 37 on September 19, 75 on September 23 and 105 on September 26, then 62 seen on September 30 with 59 on October 3, 44 on October 7 and 42 on October 10. There were 108 on October 14 with 49 on October 17. There were 54 on October 21 with 62 on October 24, then 31 seen on October 28. There were 32 on November 1 with 43 on November 4, 53 on November 7 and 62 on November 11, then 23 seen on November 15. There were 36 on November 18 with 66 on November 25, then 34 seen on November 27. That was the fall passage. For the winter passage there were 49 on November 29 with 62 on December 2, then 57 seen on December 9 with 44 on December 13, 42 on December 19 and 32 on December 21. There were 61 on December 27 with 55 on December 30 and 22 on January 3. That completed the winter passage. For the early spring passage there were 46 on January 7 with 69 on January 10, 82 on January 13 and 104 on January 16, then 83 seen on January 20 with 53 on January 24. There were 106 on January 27 with 43 on February 3. There were 45 on February 6 with 94 on February 10, then 32 seen on February 17. There were 46 on February 20 with 57 on February 24, then 27 seen on February 27. That concluded the early spring passage. For the late spring passage there were 63 on March 4 with 51 on March 6. There were 57 on March 10 with 67 on March 14, then 37 seen on March 17 with 33 on March 19 and 26 on March 22. There were 46 on March 24 with 23 on March 27, 15 on April 3 and six on April 7. There were 12 on April 10 with 18 to April 17 and 32 on April 24, then 18 seen on May 1 with 13 on May 6, three on May 9 and one on May 12. There were nine on May 15 with one on May 20. That ended the late spring passage. For the summer passage there were singles on May 23 and May 27 with two to June 2 and three on June 12, then singles seen to June 23. There was no evidence of breeding. That was the end of the summer passage so for the early fall passage there were two on July 3 with singles to July 28. There was also one on August 14.

Hooded Warbler (*Wilsonia citrina*)

This was a rare passage migrant. Early fall record: *there was a male on August 12.* For the late fall passage there was a male on November 1, this was in the wood behind Plant Express. For the late spring passage there was a male on April 14. For the early fall passage there was another male on August 4.

Wilson's Warbler (*Wilsonia pusilla*)

This was a vagrant. For the early spring passage there was a female on January 27.

Yellow-breasted Chat (*Icteria virens*)

A summer resident; during the Breeding Bird Survey a total of 25 pairs located. The last song was heard on July 14. Early fall records: *there were two on June 20, June 24 and July 4 with singles to July 27. There were also two on July 29.* For this year there were singles on August 16, August 29, September 2 and September 9. That was the early fall passage. There were no late fall, winter or early spring sightings. For the main spring passage there were singles on March 27 and April 3 with two on April 7, three to April 14, four on April 17 and six on April 21, then four seen on April 24. That closed the main spring passage. For the summer passage there were five from April 28 to May 9 with three on May 12 and two on May 15. There were three from May 20 to May 27 with six on May 30, nine on June 5 and 21 on June 10, then five seen on June 12 with four on June 16 and three on June 19. The count of 21 was the highest count for Zellwood but the highest count is now (2013) that of 41 on May 23, 2004. 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 July 14. That was the summer passage. For the early fall passage there were singles from July 17 on five dates to August 14.

Summer Tanager (*Piranga rubra*)

This was a vagrant. For the early fall passage there was a female on September 26.

Scarlet Tanager (*Piranga olivacea*)

This was a vagrant. For the late fall passage there was a female on October 7 and October 10.

Eastern Towhee (*Pipilo erythrophthalmus*)

A common resident there was nothing to suggest passage; during the Breeding Bird Survey a total of 91 pairs located. Early fall records: *there were 22 on July 8 with 26 on July 11, then 23 seen on July 15. There were 25 on July 18 with 26 on July 22, 28 on July 27 and 34 on July 29, then 32 seen on August 5 with 24 on August 12 and 19 on August 14.* For this year there were 39 on August 16 with 31 on August 19, 23 on August 22, 19 on August 26 and 16 on

August 29. There were 20 on September 2 with 12 on September 9, seven on September 13 and two on September 16. There were eight on September 19 with 14 on September 23, then ten seen on September 26 with four on September 30. That was the early fall passage. For the late fall passage there were 16 on October 3 with nine on October 7 and seven on October 10. There were eight on October 14 with nine on October 17, 11 on October 21 and 14 on October 24, then five seen on October 28. There were six on November 1 with seven on November 4 and nine on November 7, then seven seen on November 11 with two on November 15. There were eight on November 18 and November 27 with six on November 29. That closed the late fall passage. For the winter passage there were 11 on December 2 with five on December 5. There were eight on December 9 with nine on December 13, then seven seen on December 19 with six on December 21. There were 11 on December 27 with 19 on December 30, then five seen on January 3. That completed the winter passage. For the early spring passage there were eight on January 7 with 23 on January 10, 24 on January 16 and 28 on January 20, then 26 seen on January 27 with 16 on February 3. There were 24 on February 6 with 26 on February 10, then 24 seen on February 20 with 23 on February 24 and nine on February 27. That ended the early spring passage. For the main spring passage there were 15 on March 4 and March 6 with 17 on March 10, 18 on March 17 and 21 on March 19, then 17 seen on March 22 with 15 on March 24. There were 19 on March 27 with 18 on March 31 and 15 on April 3. There were 18 on April 7 with 19 on April 10, 28 on April 14 and 31 on April 21, then 28 seen on April 28 with 27 on May 6, 21 on May 12, 19 on May 15 and 15 on May 20. That concluded the main spring passage. For the summer passage there were 17 on May 23 with 22 on May 27, 30 on May 30 and 49 on June 2, then 29 seen on June 10 with 17 on June 12. There were 23 on June 16 with 32 on June 19 and June 23, then 16 seen on June 26 with 15 on June 30 and 12 on July 3. That was the end of a very short summer passage, the main spring influx continued well into the summer passage. For the early fall passage 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.*

Chipping Sparrow (*Spizella passerina*)

An uncommon passage migrant; there was a single winter record. For the late fall passage there was one on November 4 with three on November 7. For the winter passage there were two on December 2. For the early spring passage there was one on January 13. For the main spring passage there was one on March 4. Later there were four on April 14 with two on April 17. The count of four was the highest count for Zellwood but the highest count is now (2013) that of 19 on December 17, 2008.

Clay-colored Sparrow (*Spizella pallida*)

An uncommon winter and spring passage migrant; there were no fall sightings. For the winter passage there were three on December 2 with four on December 5, then singles seen on December 19 and December 30. There were also two on January 3 with one on January 7. That completed the winter passage. For the early spring passage there were two on January 13 with later one on February 3. For the main spring passage there were singles on March 10, March 14, March 17 and March 19. Later there was one on April 10 with two on April 14.

Field Sparrow (*Spizella pusilla*)

An uncommon winter visitor and spring passage migrant; this is often a rarity so this was a good year. For the winter passage there were two on December 13 and December 21 with singles on December 27 and December 30. There were two on January 3 with singles to January 10. That completed the winter passage. For the early spring passage there were two on January 13 with five on January 20, then two seen to February 20; that closed the early spring passage. For the main spring passage there were four on February 24 with five to March 10 and 12 on March 14, then five seen on March 19 with one on March 22. The count of 12 was the highest count for Zellwood but the highest count is now (2013) that of 32 on January 30, 2009. There were four on March 24 with five on March 27 and March 31; there were no later records.

Vesper Sparrow (*Pooecetes gramineus*)

Another uncommon winter visitor and spring passage migrant. For the winter passage there was one on November 25 with two on November 27, then singles seen on December 5, December 13 and December 19. There were two on December 21 with three on December 30, then singles seen to January 10. That completed the winter passage. For the early spring passage there were two on January 16 and January 24 with three on February 3, then two seen on February 6 with one on February 17. There were six on February 20 with nine on February 24 and February 27, then one seen on March 4. That ended the early spring passage. For the main spring passage there were three on March 6 with eight on March 14 and 11 on March 19, then two seen to March 24.

Savannah Sparrow (*Passerculus sandwichensis*)

A common fall and early spring passage migrant; there were lesser numbers seen during the winter and late spring passages. For the fall passage there were five on September 30 with six on October 14, seven on October 17 and 44 on October 21, then 14 seen on October 24.

There were 32 on October 28 with 107 on November 1, 200 on November 4 and 237 on November 7, then 195 seen on November 11 with 82 on November 15. There were 91 on November 18 with 161 on November 25, then 113 seen on November 27 with 67 on November 29 and 44 on December 2. That closed the fall passage. For the winter passage there were 109 on December 5 with 93 on December 9, 92 on December 16, 72 on December 19 and 65 on December 21. There were 81 on December 27 with 65 on December 30. There were 70 on January 3 with 130 on January 7, then 50 seen on January 10. That completed the winter passage. For the early spring passage there were 88 on January 13 with 118 on January 20, then 75 seen on January 24. There were 77 on January 27 with 126 on February 3 and 158 on February 10, then 154 seen on February 20 with 106 on February 27 and 38 on March 4. That ended the early spring passage. For the late spring passage there were 135 on March 6 with 78 on March 14, 51 on March 19 and 24 on March 22. There were 48 on March 24 with 81 on March 27, then 62 seen on March 31 with 41 on April 3. There were 64 on April 7 with 39 on April 10, 33 on April 14, 21 on April 17, 18 on April 21, 11 on April 24, five to May 1 and one on May 6.

Grasshopper Sparrow (*Ammodramus savannarum*)

An uncommon passage migrant and winter visitor; for this sparrow there were some fall sightings. For the late fall passage there were two on October 24 with one on October 28. There were two on November 4 and November 11 with one on November 15. There were two on November 25 with singles to December 2. That closed the late fall passage. For the winter passage there two on December 5 with one on December 9. There were two on December 13 with singles to January 7. That completed the winter passage. For the early spring passage there were singles on February 3 and February 6 that was it. For the main spring passage there were singles on March 14, March 22 and March 24 with two on March 27, then one seen on March 31. Later there was one on April 14. That ended the main spring passage.

Song Sparrow (*Melospiza melodia*)

An uncommon passage migrant and winter visitor; this is a secretive species so it was probably over-looked. For the late fall passage there were singles on October 17 and October 24 with three on November 1, then two seen to November 11 with one on November 15. There were two on November 18 with three on November 27, then singles seen to December 2. That closed the late fall passage. For the winter passage there was one on December 5 with three on December 9, then singles seen to December 19. There were two on December 21 with three on December 27 and five on December 30, then one seen on January 3. That completed the winter passage. For the early spring passage there were three on January 7 with six on January 10,

then two seen to January 20 with one on January 24. There were five on January 27 with two on February 3 and one on February 6. There were two on February 10 with three on February 20 and February 24, then one seen on March 4. That ended the early spring passage. There were no records for the late spring passage; this species normally is the first to leave in the spring.

Lincoln's Sparrow (*Melospiza lincolnii*)

A very uncommon passage migrant and winter visitor; this is such a secretive species that it is bound to be under-recorded. For the late fall passage there were singles on November 15 and November 25. For the winter passage there were singles on December 5 and December 19 with two on December 21. For the early spring passage there were singles on January 10, January 16, January 27, February 3 and February 6. For the late spring passage there were singles on March 4, April 10 and April 14.

Swamp Sparrow (*Melospiza georgiana*)

A common passage migrant and winter visitor; the greatest numbers were seen during the late winter and early spring passages. For the late fall passage there were two on October 17 with six on October 21, then five seen on October 24 with four on October 28. There were 14 on November 1 with 29 on November 4, 54 on November 7 and 93 on November 11, then 26 seen on November 15. There were 63 on November 18 with 81 on November 25, then 56 seen on November 27 with 44 on November 29. That closed the late fall passage. For the winter passage there were 56 on December 2 with 87 on December 9, then 53 seen on December 13 with 32 on December 16. There were 47 on December 19 with 73 on December 21 and 129 on December 27, then 76 seen on December 30 with six on January 3. That completed the winter passage. For the early spring passage there were 39 on January 7 with 115 on January 10, 123 on January 13 and 180 on January 16, then 99 seen on January 20 with 24 on January 24. There were 109 on January 27 with 37 on February 3 and 26 on February 6. There were 42 on February 10 with 26 to February 24 and seven on February 27. That concluded the early spring passage. For the late spring passage there were 17 on March 4 with 20 on March 10, then 14 seen on March 14 with 11 on March 17. There were 15 on March 19 with 14 on March 24 and 11 to March 31. There were 35 on April 3 with 14 on April 7. There were 27 on April 10 with 35 on April 14, then 12 seen on April 17 with nine on April 24 and two to May 15.

White-throated Sparrow (*Zonotrichia albicollis*)

This was a very secretive and therefore a very uncommon passage migrant and winter visitor. For the late fall passage there was one on November 7 with two on November 11, then one seen on November 15. There were also two on November 27; this could be treated either as a late fall or a winter passage record. In any case for the winter passage there were singles on December 16, December 19, December 21, December 27, December 30 and January 3. For the early spring passage there were also singles on January 10, January 13, January 16 and January 24. Finally for the late spring passage there was one on March 6.

White-crowned Sparrow (*Zonotrichia leucophrys*)

A passage migrant and winter visitor; the greatest numbers were seen during the winter and main spring passages. For the fall passage there were four on November 7 and November 11. For the winter passage there was one on November 27 with four on November 29 and seven on December 5, then singles seen on six dates to January 10. For the early spring passage there were two on January 13 with singles to January 20. There was also one on February 20 with three on February 24, then one seen on February 27. That closed the early spring passage. For the main spring passage there were two on March 4 with singles to March 14. There were later two on March 31 with 13 on April 10 and 14 on April 14, then eight seen on April 17 with two on April 24.

Northern Cardinal (*Cardinalis cardinalis*)

A very common resident even so there was the suggestion of a fall passage; during the Breeding Bird Survey a total of 380 pairs located. Early fall records: *there were 84 on July 22 with 97 on July 27, then 72 seen on July 29 with 58 on August 5, 55 on August 14, 53 on August 16, 49 on August 19 and 39 on August 22.* There were 54 on August 26 with 70 on September 2, then 60 seen on September 9 with 33 on September 13. It is the next influx that suggests a fall passage. There were 39 on September 16 with 68 on September 19, 72 on September 23, 92 on September 26, 101 on October 3 and 112 on October 10, then 69 seen on October 14 with 66 on October 21, 44 on October 28 and 41 on November 1. That influx lasted seven weeks. There were 63 on November 4 with 48 on November 7, 42 on November 11, 40 on November 18 and 38 on November 25. There were 47 on November 27 with 41 on November 29. That was the fall passage. For the winter passage there were 44 on December 2 with 47 on December 5 and 54 on December 9, then 49 seen on December 13 with 48 on December 19 and 40 on December 21. There were 55 on December 27 and December 30 with 37 on January 3. That completed the winter passage. For the early spring passage there were 40 on January 7 with 93 on January 10,

then 81 seen on January 13 with 78 on January 16. There were 124 on January 20 with 137 on January 27, then 98 seen on February 3 with 70 on February 6. There were 137 on February 10 with 80 on February 17. There were 98 on February 20 with 183 on February 24, then 93 seen on February 27. That closed the early spring passage. For the main spring passage there were 127 on March 4 with 132 on March 6, 192 on March 10 and 209 on March 17, then 197 seen on March 19 with 168 to March 27 and 140 on March 31. The count of 209 was the highest count for Zellwood but the highest count is now (2013) that of 344 on April 9, 2008. There were 157 on April 3 with 166 on April 7 and 199 on April 14, then 135 seen on April, 17 with 130 on April 21, 99 on April 28 and 78 on May 1. That ended the main spring passage. For the summer passage there were 101 on May 6 with 102 on May 12, then 96 seen on May 15 with 94 on May 23, 87 on May 30 and 84 on June 2. There were 102 on June 5 with 88 on June 10, 78 on June 16, 72 on June 19, 63 on June 23 and 39 on June 26. That finished the summer passage. For the early fall passage 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.

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

This was a vagrant. For the late fall passage there was one on October 14. For the late spring passage there was one on April 28.

Blue Grosbeak (*Guiraca caerulea*)

A common summer visitor, there was a minimal presence from October to March; that includes the winter a season when this species is not meant to be in the United States. During the Breeding Bird Survey a total of 74 pairs located, the first brood (two) was seen on June 5. Early fall records: *there were 20 on July 8 with 26 on July 11, then 18 seen on July 15. There were 19 on July 18 with 21 on July 22, 23 to July 29, 25 on August 2, 33 on August 5 and 34 on August 12, then 30 seen on August 16 with 17 on August 19. There were 19 on August 22 with 21 on August 26 and 34 on August 29, then 14 seen on September 5 with 11 on September 9 and five to September 16. There were six on September 19 with 11 on September 23, then eight seen on September 26 with three on September 30 and one on October 3. That was the early fall passage. For the late fall passage there was one on October 7 with three on October 10, then two seen to November 1 with one on November 7. Finally for the late fall passage there were two on November 18. For the winter passage there was one on December 2 with three on December 9, then singles seen on December 21, December 30, January 7 and January 10. Not bad for a species that is said not to winter in the United States. For the early spring passage*

there were six on January 16 with four on January 20, three on January 24, two on February 3 and singles to February 24. That closed the early spring passage. For the main spring passage there were two on February 27 with singles to April 3 (the first bird to be heard singing was heard on April 3). There were three on April 7 and April 10 with four on April 14, 12 on April 17 and 13 on April 21, then 21 seen on April 24 and April 28 with 16 on May 1. That ended the main spring passage. For the summer passage there were 22 on May 6 with 26 on May 9 and May 12, then 14 seen on May 15. There were 19 on May 20 with 20 on May 23, 23 on May 27, 25 on May 30, 27 on June 5 and 28 on June 10, then 14 seen on June 12. There were 17 on June 16 with 20 on June 19, then 13 seen on June 23 with 11 on June 26. There were 19 on June 30 with 28 on July 3, then 21 seen on July 8 with 17 on July 10 and ten on July 14. That was the end of the summer passage so for the early fall passage 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.*

Lazuli Bunting (*Passerina amoena*)

This was a vagrant. There was a female on January 7; it was with a Blue Grosbeak at the eastern end of the McDonald Canal. This was either a winter or early spring passage record. There is a description in Appendix B. This is the only (to 2013) Zellwood record.

Indigo Bunting (*Passerina cyanea*)

A summer visitor and fall passage migrant, a number stayed through the winter. During the Breeding Bird Survey a total of 65 pairs located. Early fall records: *there were eight on June 24 with 12 on June 27 and 15 on July 1, then 14 seen on July 8 with ten on July 15, nine on July 22 and five on July 25. There were 11 on July 27 with 15 on July 29, then nine seen to August 5 with six on August 14, four on August 16 and three on August 19. There were eight on August 22 with singles to August 29. There were two on September 2 with three on September 9 and six on September 13, then two seen to September 23. That was the early fall passage. For the main fall passage there were 13 on September 26 with 23 on September 30, then 19 seen on October 3 with 12 on October 7. There were 108 on October 10 with 69 on October 17, 67 on October 21, 65 on October 24, 36 on October 28, 22 on November 1, ten on November 14 and five on November 7. That decline lasted a month i.e. there were probably no new arrivals during this period. The count of 108 was the highest count for Zellwood but the highest count is now (2013) that of 840 on October 26, 2007. There were 14 on November 11 with two to November 18 and one on November 25. That closed the main fall passage. For the winter passage there were three on November 27 with four on December 2, 13 on December 5 and 15 on December 13, then one seen on December 16. There were five on December 19 with 12 on*

December 21, then two seen to January 7. That completed the winter passage. For the early spring passage there were four on January 10 with singles to January 16. There were three on January 20 with two to February 10. There were four on February 20 with two to February 27. That ended the early spring passage. It is interesting just how far the much stronger winter passage stood out. For the main spring passage there were three on March 4 and March 6 with singles to March 14. Later there were singles on March 27 and April 3 with two to April 10, three on April 14, 21 on April 17 (first singing today) and 31 on April 21, then 22 seen on April 24 with 17 on April 28 and 14 on May 1. That was the main spring passage. For the summer passage there were 19 on May 6 with 25 on May 9, then 24 seen on May 12 with 16 on May 15, 13 on May 20, 12 on May 27, 11 on June 2 and ten on June 5. There were 29 on June 10 with 15 on June 16, 11 on June 19 and six on June 23. That was the end of the summer passage. For the early fall passage there were eight on June 26 and June 30 with 11 on July 3 and 18 on July 8, then five seen on July 10. There were 14 on July 14 and 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.

Painted Bunting (*Passerina ciris*)

A non-breeding summer visitor; whilst present for much of the year the only other noticeable event was the winter passage. During the Breeding Bird Survey a total of 20 adult or immature males were located on territory, there were no females identified. Early fall records: *there were three on July 1 with five on July 8, then three seen to July 15 with two to July 22. There were three on July 25 and July 29 with two to August 12 and one on August 14.* For this year there was one on August 16 with two on August 19, then singles seen to August 26. Later there was one on September 16 with two on September 23, then one seen on September 26. That was the early fall passage. For the late fall passage there were two on September 30 with five on October 3, then singles seen on October 7 and October 17. There were also singles on November 18 and November 25. That closed the late fall passage. For the winter passage there was one on December 5 with three on December 9, then singles seen to December 19. There were two on December 21 and December 27 with singles to January 3. That completed the winter passage. For the early spring passage there were two on January 7 with singles to January 16. There were also three on January 20 with one on February 3. Finally for the early spring passage there was one on February 27. For the main spring passage there were singles on March 27, April 3 and April 7 with two to April 14, four to April 21, six to May 1, seven on May 6 and nine on May 9, then six seen on May 12 with four to May 23 and two on May 27. That influx lasted two months; at some point during that event the summer passage started or would have started if this was a breeding species. The count of nine was the highest count for Zellwood but the highest count is now (2013) that of 12 on May 26, 2004. In any case for the summer passage there were three on May 30 with six on June 2 and eight on June 10, then five

seen on June 12 with three to June 23 and singles to July 3. That ended the summer passage. For the early fall passage 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.

Dickcissel (*Spiza americana*)

A rare visitor this year, it is possible that a pair bred. For the early fall passage there were two on September 9. For the late fall passage there was a male on November 11. For the winter passage there was a male on November 27 and December 16. There were no sightings during the early spring passage. For the main spring passage there were two on April 24. Now the situation becomes unclear; there was a male singing by the McDonald Canal on June 30 and July 3. Later there was a male singing south of the Workshops on July 31 and August 4. This species often nests in small colonies out in the middle of a series of fields and they are therefore very hard to locate. These four records either represent a single wandering male or they represent individuals from these colonies that I just happened to locate.

Bobolink (*Dolichonyx oryzivorus*)

A common passage migrant with as usual the heaviest passage in the spring. For the early fall passage there were two on August 19 with one on August 22. There were seven on August 26 with 19 on August 29 and September 2, then 11 seen to September 9. There were 513 on September 13 with 111 on September 16, 110 on September 19, 98 on September 26, five on September 30, four on October 7 and one on October 14. That was the early fall passage. For the spring passage there was one on April 17 with 78 on April 21, 120 on April 24, 130 on April 28 and 7,060 on May 1, then 21 seen on May 6 with 11 on May 9, three on May 12 and singles to May 15. Finally there were three on May 23. The 7,060 flew in from the south-east late in the day and went to roost in the tall grasses by Interceptor Road. That was also the highest count for Zellwood but the highest count is now (2013) that of 16,550 on April 30, 2008.

Red-winged Blackbird (*Agelaius phoeniceus*)

A common resident; there was the suggestion of passage from the late fall to the early spring. There was also a post-breeding gathering. During the Breeding Bird Survey a total of 826 pairs located, the first fledged young was seen on May 30. Early fall records: *for the post-breeding gathering there were 230 on June 17 with 250 on June 20, 395 on June 27, 405 on July 1, 415 on July 4 and 655 on July 8, then 475 seen on July 11 with 405 on July 15 and 205 on July*

18. There were 275 on July 22 with 1,430 on July 25, then 610 seen on July 27 with 370 on July 29. There were 860 on August 2 with 650 on August 12, 480 on August 14 and 360 on August 16. There were 555 on August 19 with 710 on August 22, 990 on August 26 and 1,200 on September 2, then 870 seen on September 5 with 650 on September 9. That was the end of the post-breeding gathering. For the fall passage there were 900 on September 13 with 650 on September 16, 600 on September 19 and 155 on September 23. There were 1,800 on September 26 with 850 to October 3. There were 980 on October 7 with 950 on October 14, 870 on October 21 and 630 on October 24. There were 770 on October 28 with 775 on November 1, then 770 seen on November 4 with 585 on November 7. There were 600 on November 11 with 2,300 on November 15, then 720 seen on November 18 with 445 on November 25. That closed the fall passage. For the winter passage there were 545 on November 27 with 655 on November 29, then 435 seen on December 5 with 365 on December 9 and 175 on December 13. There were 345 on December 16 with 1,475 on December 19, 1,640 on December 27 and 2,040 on January 3, then 1,140 seen on January 7 with 285 on January 10. That completed the winter passage. For the early spring passage there were 530 on January 13 with 950 on January 16, then 785 seen on January 20. There were 805 on January 24 with 1,535 on January 27, then 205 seen on February 3. There were 460 on February 6 with 1,475 on February 10, then 755 seen on February 17 with 545 on February 20 and 305 on February 24. That ended the early spring passage. For the late spring passage there were 850 on February 27 with 1,505 on March 4, then 850 seen on March 6 with 825 on March 10, 505 on March 14 and 480 on March 17. There were 650 on March 19 and March 22 with 805 to March 27 and 950 on April 3, then 875 seen on April 10 with 610 on April 14 and 350 on April 17. That concluded the late spring passage. For the summer passage there were 360 on April 21 with 365 on April 24, then 320 seen on May 1 with 295 on May 6 and 205 to May 12. There were 300 on May 15 with 405 on May 20, then 390 seen on May 23. There were 400 on May 27 with 410 on May 30, 420 on June 2 and 430 on June 5, then 350 seen on June 10 with 310 on June 12 and 210 on June 16. There were 435 on June 19 with 415 on June 23 and 305 on June 26. That was the end of the summer passage. For the post-breeding gathering 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. The count of 4,015 was the highest count for Zellwood but read on. *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.* That was the end of the post-breeding gathering. The counts of 8,120 and then 10,375 were in their turn the highest counts for Zellwood but the highest count is now (2013) that of 303,000 on July 17, 2005. This was the first fall with a significant post-breeding gathering.

Eastern Meadowlark (*Sturnella magna*)

A resident but there were also noticeable fall and spring passages. During the Breeding Bird Survey a total of 15 pairs located. Early fall records: there were eight on July 4 with nine on July 8 and 15 on July 11, then eight seen on July 15 with six on July 18, four on July 22 and two on July 25. There were three on July 27 with four on July 29, then one seen on August 2. There were three on August 5 with four on August 12, then three seen to August 16. There were four on August 19 with 12 on August 22, then eight seen on August 29 with three on September 2. There were 14 on September 5 with three on September 9 and one on September 13. There were four on September 16 with three to September 23. That was the early fall passage. For the main fall passage there were five on September 26 with eight on September 30, then three seen to October 7 with two on October 10. There were ten on October 14 with 15 on October 17, then 13 seen on October 21 with eight on October 24 and five on October 28. There were 16 on November 1 with 13 on November 7 and three on November 11. There were 18 on November 15 with 14 on November 18, seven on November 25, six on November 29 and two on December 2. That closed the main fall passage. For the winter passage there were two on December 5 with four on December 9 and 29 on December 16, then 16 seen on December 19 with 13 on December 21 and seven on December 27. There were 14 on December 30 with five on January 3. That completed the winter passage. For the early spring passage there were six on January 7 with seven on January 10, 11 to January 20 and 62 on January 24, then six seen on January 27. The count of 62 was the highest count for Zellwood but the highest count is now (2013) that of 74 on February 27, 2009. The flock of 62 was on Potter's Farm they were all interacting calling constantly. One was giving the song of the Western Meadowlark (*Sturnella neglecta*) but as I failed to locate the bird I have not included that species. There were seven on February 3 with 16 on February 6, then five seen to February 17. There were ten on February 20 with seven on February 24, six on February 27 and four on March 4. That ended the early spring passage. For the late spring passage there were six on March 6 and March 14 with eight on March 17, then four seen on March 19. There were six on March 22 with 17 on March 27, then 16 seen on April 3 with ten on April 7. There were 11 on April 10 with 12 on April 14, then nine seen on April 21 with seven to May 1, four on May 6 and three on May 9. That closed the late spring passage. For the summer passage there were five on May 12 with eight on May 15 and 11 on May 20, then ten seen to May 27. There were 11 on May 30 with three to June 5 and two on June 10. There were five on June 12 with eight on June 16 and 14 on June 19, then three seen on June 23. 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. That was the end of the summer passage. For the early fall passage 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 one on August 14.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

This was a vagrant. For the late fall passage there was a male on November 15. For the early spring passage there was a male on February 10.

Brewer's Blackbird (*Euphagus cyanocephalus*)

This was a vagrant. For the winter passage there was a male on December 19.

Common Grackle (*Quiscalus quiscula*)

A resident, a passage migrant and a winter visitor during the Breeding Bird Survey a total of 32 pairs located. Early fall records: *for the post-breeding gathering there were eight on June 27 with 92 on July 1, then 63 seen on July 4 with 15 on July 8. There were 35 on July 11 with 60 on July 15, 97 on July 18 and 254 on July 22, then 167 seen on July 25 with 140 on July 27. There were 270 on July 29 with 225 on August 2, 208 on August 12, 101 on August 14, 23 on August 16, 16 on August 22 and eight on August 26. That was the end of a minor post-breeding gathering. For the remnant early fall passage there were 32 on August 29 with 42 on September 2 and 63 on September 9, then 30 seen on September 13. There were 38 on September 16 with 77 on September 19 and 100 on September 23, then 68 seen on September 26 with 50 on September 30 and 33 on October 3. That closed the early fall passage. For the main fall passage there were 63 on October 7 with 135 on October 10 and 148 on October 14, then 113 seen on October 17 with 11 on October 21. There were 56 on October 24 with 69 on October 28, 118 on November 1 and 190 on November 7, then 85 seen on November 11 with 67 on November 15 and 23 on November 18. There were 436 on November 25 with 74 on November 27. That was the main fall passage. For the winter passage there were 76 on November 29 with 159 on December 2, then 156 seen on December 5 with 102 on December 13 and 42 on December 16. Of the 159 seen on December 2 a total of 140 were of the race (*Q.q.versicolor*). These stayed as a very tight flock that dashed around the southern border. There were 225 on December 19 (this included the 140 "*versicolor*") with 11 on December 21. There were 35 on December 27 with 147 on December 30 and 159 on January 7, then 16 seen on January 10. That completed the winter passage. For the early spring passage there were 72 on January 13 with 147 on January 16, then 82 seen on January 24 with ten on January 27. There were 278 on February 3 with 262 on February 10 and 12 on February 17. There were 17 on February 20 with 31 on February 24 and 48 on February 27, then 13 seen on March 4 with four on March 6. That concluded the early spring passage. For the late spring passage there were 11 on March 10 with three on March 14. There were four on March 17 with nine on March 19, then six seen on March 24 with two on March 27. There were six on March 31 with seven on April 3 and ten on*

April 7, then nine seen to April 21 with seven on April 28 and four on May 1. That was the late spring passage. For the summer passage there were eight on May 6 with ten to May 15, 13 on May 20 and 39 on May 23, then 12 seen on May 27. There were 16 on May 30 with 38 on June 2, then 30 seen on June 10 with 11 on June 12. There were 71 on June 16 with 51 on June 19, 16 on June 23 and 13 on June 26. That ended the summer passage. For the post-breeding gathering 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 and 17 to August 14.

Boat-tailed Grackle (*Quiscalus major*)

A common resident; there were indications of an early fall passage and a stronger post-breeding gathering. This was the first year in which such a gathering occurred. During the Breeding Bird Survey a total of 111 pairs located. Early fall records: *for the post-breeding gathering there were 435 on June 3 with 560 on June 7, 620 on June 13 and 1,005 on June 17, then 585 seen on June 24 with 415 on June 27. There were 1,395 on July 1 with 1,475 on July 4, then 865 seen on July 11 with 595 on July 15, 550 on July 18 and 350 on July 22. There were 715 on July 25 with 360 on July 29, 290 on August 2, 255 on August 5, 140 on August 12 and 50 on August 14.* There were 265 on August 16 with 47 on August 19 and ten on August 22. That ended the post-breeding gathering. For the early fall passage there were 90 on August 26 with 196 on September 2, 280 on September 5, 450 on September 13, 1,665 on September 16 and 2,420 on September 19, then 165 seen on September 23. That was the extent of the early fall passage. For the late fall passage there were 595 on September 26 with 670 on September 30, then 340 seen on October 3 with 310 on October 7 and 225 on October 10. There were 405 on October 14 with 430 on October 17 and 470 on October 21, then 415 seen on October 24 with 290 on October 28. There were 510 on November 1 with 610 on November 4 and 675 on November 11, then 450 seen on November 15 with 265 on November 18, 260 on November 27, 175 on November 29, 140 on December 2 and 55 on December 5. That closed the late fall passage. For the winter passage there were 75 on December 9 with 85 on December 13, 105 on December 16 and 290 on December 19, then 260 seen on December 21 with 115 on December 27 and 105 on December 30. There were 530 on January 3 with 470 on January 7 and 310 on January 10. That completed the winter passage. For the early spring passage there were 360 on January 13 with 250 on January 20 and 230 on January 24. There were 360 on January 27 with 290 on February 6 and 155 on February 10. There were 375 on February 17 with 285 on February 24, 280 on February 27 and 45 on March 4. That concluded the early spring passage. There was no late spring passage as this species nested so early so for the summer passage there were 65 on March 6 and March 14 with 105 on March 17, 135 on March 19, 215 on March 22, 260 on March 27 and 275 on March 31, then 215 seen to April 7. There were 225 on April 10 with 220 on April 14, 155 on April 17 and 105 on April 21. There were 135 on April 24 with 195 on April 28, then 105 seen on May 1 with 95 on May 6. That was the summer passage.

For the post-breeding gathering there were 105 on May 9 with 195 on May 12, 205 on May 15, 235 to May 23, 295 on May 27, 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 the highest count is now (2013) that of 167,000 on July 14, 2005. That closed 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.

Shiny Cowbird (*Molothrus bonariensis*)

This was a vagrant. Early fall records: *there was a female on July 8 and July 11; it was joined by a male on July 15. The male was seen on its own on July 18 and July 25. Finally the female was seen on July 25. In reality they were probably both present on all dates.* For this year there was a female on October 10.

Brown-headed Cowbird (*Molothrus ater*)

Present all year, the greatest numbers were seen from October to early March. During the Breeding Bird Survey a total of four pairs located; juveniles seen from June 10. Early fall records: *there were three from June 20 to July 1 with six on July 8 and 24 on July 11, then 21 seen on July 15 with nine on July 18. There were 241 on July 22 with 110 on July 25 and 92 on July 27. There were 145 on July 29 with 195 on August 2, then 102 seen on August 5 with 25 on August 14, 20 on August 16, 12 on August 22 and singles to September 13. Sightings in September were limited. There were ten on September 16 with 50 on September 23, then one seen on September 26. That was the early fall passage. For the main fall passage there were 200 on October 7 with six on October 10. There were nine on October 14 with 23 on October 17 and 230 on October 24, then 60 seen on October 28 with 40 on November 1. There were 210 on November 4 with 88 on November 11, 84 on November 15, 30 on November 25 and 28 on November 27. That closed the main fall passage. For the winter passage there were 171 on November 29 with 223 on December 5, then 118 seen on December 13 with 84 on December 16, 68 on December 19 and one on December 21. There were five on December 27 with 43 on December 30, then 15 seen on January 3 with one on January 7. That completed the winter passage. For the early spring passage there were 20 on January 10 with five on January 13. There were ten on January 16 with 67 on January 20, 104 on January 27, 336 on February 3 and 745 on February 10, then 21 seen on February 20 with 12 on February 24. That concluded the early spring passage. For the late spring passage there were 14 on March 4 with 885 on March 6*

and 975 on March 10, then 20 seen on March 17 with five on March 19 and three on March 22. There were 25 on March 24 with seven on March 27 and one on March 31. There were three from April 3 to April 10 with six on April 14 and nine on April 17, then five seen on April 21 with four on April 24. That ended the late spring passage. On April 28 a pair was seen to copulate on the northern border; I have taken this event to mark the start of the summer passage. There were eight on April 28 with three to May 6. There were ten on May 9 with three on May 12 and two to May 23. There were four on May 27 with two on June 2. There was a juvenile on June 10 with a female on June 12. There were four juveniles on June 16 with one on June 19. There were three juveniles and three adults on June 23 with one adult and one juvenile on June 26. I did not note any juveniles after that date. That was the end of the summer passage. For the early fall passage 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.

Orchard Oriole (*Icterus spurius*)

A summer visitor; exceptionally there were sightings to September this year, there are often no August sightings. During the Breeding Bird Survey a total of 15 pairs located; the first fledged young were seen on June 23. Early fall records: *there were four on July 8 with three on July 11 and singles to July 29. There were two on August 14* with singles on August 16 and August 19. There were also two on September 5 with one on September 9. That was the end of the early fall passage. Exceptionally there were single females on February 24 and March 4. For the main spring passage there were three on April 14 and April 17 with four on April 21 and April 24, then three seen on April 28 with singles to May 6. That was the extent of the main spring passage. For the summer passage there were three on May 9 with four on May 15, then one seen on May 20. There were two on May 23 and May 27 with nine on May 30, then five seen on June 2 with three on June 5, two to June 16 and one on June 19. 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. These last records will have related to juveniles.

Baltimore Oriole (*Icterus galbula*)

This was a vagrant. For the late fall passage there was one on October 7. For the early spring passage there was one on January 16.

American Goldfinch (*Spinus tristis*)

A passage migrant and winter visitor, there were no large flocks this year. For the late fall passage there were two on November 18 with one on November 25. For the winter passage there were three on November 27 with six on November 29, then three seen on December 2 with one on December 5. There were four on December 9 with six on December 13 and seven on December 19, then two seen on December 21. There were three on December 27 with 12 on December 30, then eight seen on January 7 with seven on January 10. That completed the winter passage. For the early spring passage there were nine on January 13 with 11 on January 20, 14 on January 24 and 17 on January 27, then 11 seen on February 3 with three on February 6. There were 20 on February 10 with 28 on February 20, then ten seen on February 24 with eight on March 4 and five on March 6. That closed the early spring passage. For the late spring passage there were 23 on March 10 with six to March 19 and one on March 22. There were five on March 24 with eight on March 27, then seven seen on April 3, with four on April 10 and two on April 21.

House Sparrow (*Passer domesticus*)

There were two pairs on the northern border; that being said there were only a handful of sightings this year. Early fall records: *there were two on June 17 with one on June 20*. For this year there was one on August 26. That was the only record for the early fall passage. For the late spring passage there were singles on March 31 and April 24. For the summer passage there were singles on June 10 and June 19 with two on June 30.

Bronze Mannikin (*Lonchura cucullata*)

This is an exotic, an escaped cage bird. For the late fall passage there was one on the northern border by Canal Road on November 18; it flew off to the east calling.

Table A

The Spreadsheet - August 15, 2001 to August 14, 2002.

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	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	6
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	124	94	112	185	149	128	124	27	18	132	120	131	126	111	101	105
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	7	11	12	12	23	9	8	4	7	12	8	7	5	45	19	11
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	20	21	9	9	47	17	20	28	2	7	14	11	24	11	21	15
2	American Bittern	.	.	1	.	.	.	.	.	.	.	1	.	.	.	1	.
2	Least Bittern	.	.	.	.	.	.	.	1	.	1	.	.	1	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	14	17	14	18	26	22	22	25	7	13	16	17	13	20	29	21
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	10	10	3	6	3	5	5	4	6	5	1	6	8	12	21	63
2	Snowy Egret	26	18	14	11	15	27	25	12	23	8	11	3	4	1	3	101
2	Little Blue Heron	11	19	21	11	23	20	18	23	12	33	8	8	16	12	16	72
2	Tricolored Heron	11	13	4	13	9	9	14	3	5	7	3	3	4	2	6	7
2	Reddish Egret	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
6	Cattle Egret	256	360	700	675	440	475	75	540	450	1620	49	410	230	1020	1000	47
2	Green Heron	3	4	1	3	2	.	2	2	4	4	3	3	4	1	5	.
2	Black-crowned Night-Heron	1	1	1	3	2	.	2	4	1	.	2	.	3	1	.	.
2	Yellow-crowned Night-Heron	.	3	2	1	1	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	1	1	2	3	.	.	2	16	7	13	9	.	5	38	10	70
2	Glossy Ibis	.	.	.	.	2	7	5	3	.	1	.	.	.	1	21	350
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	1	2	.	.	.	2	1	.	.	.	.	.	.	.	.	.
2	Wood Stork	1	7	5	15	12	.	.	1	.	.	.	.	.	1	.	1
7	Black Vulture	10	43	10	20	4	38	12	3	1	9	37	.	.	2	5	.
7	Turkey Vulture	169	187	122	67	62	26	39	196	5	42	55	27	52	32	83	26
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	2	7	.	.	2	.	.	1	52	35	.	.	6	.	.	.
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	.	.	.	.	.	.	.	.	.
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	.	1	1	1	1	1	2	2	1	2	.	.	1	1	3	3
3	Mottled Duck	6	13	7	21	19	16	15	3	17	27	1	1	18	17	8	20
3	Blue-winged Teal	.	.	5	.	35	68	27	3	39	50	.	.	.	4	62	23
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	5	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.	.	20	.	.	.	.	.	.
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	13	10	8	11	9	7	8	12	7	10	4	12	13	12	9
7	Swallow-tailed Kite	4	3	1	3	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	2	2	.	.	2	2	2	2	1	8	7	4	2	3	2	2
7	Northern Harrier	.	.	.	.	.	1	.	1	3	2	2	3	4	3	5	5
8	Sharp-shinned Hawk	.	.	.	.	1	.	.	.	1	.	.	1	.	2	.	2
8	Cooper's Hawk	8	3	9	7	7	12	3	4	3	3	6	6	5	2	4	4
8	Red-shouldered Hawk	9	11	7	9	11	10	7	9	2	10	4	9	9	9	14	7
8	Broad-winged Hawk	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	13	11	12	10	11	18	12	9	6	7	18	12	10	11	11	11
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	1	1	.	1	1	1	1	3	4	6	8	5	19
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.	.	1	2	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	6	3	4	6	3	1	3	1	1	.	3	3	3	.	4	2
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	2	22	20	17
2	Purple Gallinule	8	3	.	2	2	1	5	6	2	6	4	3	4	3	1	2
4	Common Moorhen	133	135	136	123	132	136	146	112	133	140	93	95	118	149	204	213
1	American Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	1	4	.	5	2	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
4	Semipalmated Plover	2	4	14	9	3	5	4	1	3	5	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	9	10	10	5	12	11	6	3	1	4	1	4	5	4	2	3
4	Black-necked Stilt	8	11	8	13	13	16	12	9	6	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	1	2	2	1	.	.	.	1	2	12	7	.	1	24	.	1
4	Lesser Yellowlegs	.	1	2	.	.	.	.	3	6	94	28	.	.	22	.	23
4	Solitary Sandpiper	1	.	.	1	.	1	.	.	.	1	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	1	.	.	.	1	.	2	1	.	.	1	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	2	1	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
4	Sanderling	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	20	1	4	14	12	135	240	12	60	150	17	.	6	1	.	.
4	Western Sandpiper	2	.	.	1	1	19	12	.	12	40	.	.	6	3	.	.
4	Least Sandpiper	4	9	60	9	61	480	330	40	142	270	10	.	85	35	71	42
4	White-rumped Sandpiper	.	.	.	.	.	.	1	.	4	8	.	.	.	.	1	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
4	Pectoral Sandpiper	1	2	.	.	.	22	26	20	17	690	90	.	73	126	24	1
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	6	.	.	.	.	.	.	.	.	8	1	.	.	3	8	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	2	.	.	3	1	1	.
4	Ruff	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
4	Short-billed Dowitcher	1	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	1	1	2	.	.	32	16	14	19
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Wilson's Phalarope	.	.	.	.	1	2	.	.	.	1	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	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	10	10	12	11	17	21	23	12	34	1	.	.	.	1	1	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	4	2	.	.	2	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	2	2	1	1	1	3	3	1	3	18	1	.	.	13	.	.
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	1	.	11	5	.	.	.	.	26	16	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	1	2	.	.	.	2	.	1	.	.	.
8	Eurasian Collared-Dove	3	2	3	5	4	8	18	5	2	2	1	9	6	4	2	20

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove	1		1	3	3	2	1	1			24					
8	Mourning Dove	280	117	85	179	60	506	370	64	59	191	339	75	153	25	309	200
8	Common Ground-Dove	30	25	22	22	27	28	19	22	2	4	16	8	9	6	3	8
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																1
8	Yellow-billed Cuckoo			1				1									
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	1	2	2		1	1	2	1	1	1	1	1	1	1	2	1
8	Eastern Screech-Owl								1				1				
8	Great Horned Owl	1	3	1	4	1	3	1	3	1	4	1	3	2	3	1	2
8	Burrowing Owl																
8	Barred Owl		1		1										1	1	
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk	4		28	18	26	2	12	52	1	3	3					
8	Chuck-will's-widow			1		1	2	1							1	1	
8	Eastern Whip-poor-will						1	1	1	1		1	1	1	1	1	1
7	Chimney Swift	27	10	55	8	10	1	3	49	9	3	67	2	71	106	15	6
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher			2	2		1	4	5	1	4	4	3	4	1	8	3
8	Red-headed Woodpecker					1	1		1						1		
8	Red-bellied Woodpecker	9	12	12	13	13	14	19	18	1	8	13	10	19	9	18	12
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	6	4	3	3	6	4	5	8	1	4	6	6	12	4	16	6
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	1	2	1	2		1	3	1	1	1	2	3	3	2	1
8	Pileated Woodpecker	2	1	2	3	1		1	2			1	2	4	1	2	2

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	.	1	1	.	.	2	.	.	.	.	1
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	1	.	.	.	.	.	.	.	.	.	1	1	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	6
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	4	1	1	2	5	2	2	1	.	.	.	1	.	.	1	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	3	.	7	1	1	12	.	.	2	.	.	1	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	9	7	5	6	6	12	8	10	6	2	7	10	6	4	5	8
8	White-eyed Vireo	.	1	1	1	3	2	1	5	2	1	12	7	13	5	13	7
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	1	1	.	2	2	2	1	3	3	1	3	.	4	.	1	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	9	13	7	16	12	7	21	26	7	11	17	25	31	26	33	28
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	2	.	.	1	.	.	.	2	.	2	1	3	2	1	.	3
7	Fish Crow	32	1	.	2	.	1	.	1	.	.	1	1	7	1	3	11
7	Purple Martin	3	1	.	.	.	.	12	2	2	.	6	.	.	.	.	.
7	Tree Swallow	.	2	1	.	1	1	.	7	2	1	.	.	3	28	62	20
7	Northern Rough-winged Swallow	1	.	.	2	.	2	2	.	.	4	.	.	1	2	.	1
7	Bank Swallow	3	12	2	64	4	145	50	48	43	10	1	2	2	22	1	1

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
7	Cliff Swallow	2	4	2	3	.	1	2	1	.	1	4	10	18	1	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	341	244	298	392	320	1450	465	360	500	350	70	10	48	480	410	376
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	1	.	1	1	1	.	3	1	1	.	1	2	1	1	.
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	34	31	24	24	29	36	31	30	13	15	27	19	29	24	23	21
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	1	1	10	26
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Blue-gray Gnatcatcher	1	6	3	2	10	8	9	12	3	12	30	30	43	37	62	30
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	1	.	.	.	.	.	11	.	.	3
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	1	.	1	36	.	2	2
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	.	.	.	.	1	.	.	9	11	55	81
8	Northern Mockingbird	21	20	23	31	20	27	20	30	13	24	33	29	32	34	25	50
8	Brown Thrasher	7	5	6	2	9	9	11	6	1	7	12	10	10	9	15	23
7	European Starling	10	6	4	7	1	3	5	3	4	19	1	1	11	15	150	260
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	1	.	.	.	.	.	3	1	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	1	.	.	.	2	3	.	1	.	.	.	.	1	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
7	Yellow Warbler	71	43	17	16	12	13	22	27	9	13	14	8	8	1	1	1
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.	.
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	.	.	.	.	1	.	.	.	.	.	.	2	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
7	Prairie Warbler	25	19	17	6	9	15	5	39	17	11	11	19	6	6	15	4
7	Palm Warbler	.	.	.	.	.	.	.	1	2	5	22	22	292	85	56	128
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.	.
8	American Redstart	.	.	1	.	.	1	.	3	.	1	1	3	5	2	1	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	1	.	2	.	1	1	2	.	2	4	3	11	6	13	6
7	Northern Waterthrush	3	3	2	1	4	2	3	17	24	7	10	14	8	6	11	4
7	Louisiana Waterthrush	11	10	5	5	5	4	5	4	1	.	1	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	.	.	1	.	.	.	1	27	34	20	37	75	105	62	59	44
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	.	.	.	1	1	.	1	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7
7	Eastern Towhee	39	31	23	19	16	20	11	12	7	2	8	14	10	4	16	9
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	5	.	.
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	53	49	39	54	50	70	46	60	33	39	68	72	92	70	101	93
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	30	17	19	21	34	13	14	11	5	5	6	11	8	3	1	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	4	3	8	1	1	2	1	3	6	2	2	2	13	23	19	12
8	Painted Bunting	1	2	1	1	.	.	.	.	.	1	.	2	1	2	5	1
7	Dickcissel	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.
7	Bobolink	.	2	1	7	19	19	11	11	513	111	110	3	98	5	2	4
7	Red-winged Blackbird	360	555	710	990	920	1200	870	650	900	650	600	155	1800	850	850	980
6	Eastern Meadowlark	3	4	12	7	8	3	14	3	1	4	3	3	5	8	3	3
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	23	6	16	8	32	42	19	63	30	38	77	100	68	50	33	63
7	Boat-tailed Grackle	265	47	10	90	32	196	280	150	450	1665	2420	165	595	670	340	310

Table A. Part 1

Hab	SPECIES	8/16	8/19	8/22	8/26	8/29	9/2	9/5	9/9	9/13	9/16	9/19	9/23	9/26	9/30	10/3	10/7	
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	20	1	12	.	.	1	.	.	1	10	1	50	1	.	.	200	
8	Orchard Oriole	1	1	.	.	.	.	2	1	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	87	88	82	85	87	87	96	107	87	102	88	71	97	102	95	89	
	TOTAL INDIVIDUALS	2,703	2,404	2,830	3,375	2,911	5,664	3,690	3,047	3,833	6,849	4,767	1,780	4,648	4,546	4,609	4,411	

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
1	Pied-billed Grebe	.	.	.	.	1	10	.	.	3	4	3	2	2	1	4	1
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	121	85	60	171	90	12	125	45	75	32	54	14	240	240	245	165
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	20	6	15	27	30	16	29	39	93	49	130	53	63	98	93	83
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	18	16	15	29	11	6	22	31	16	19	24	15	23	19	21	21
2	American Bittern	1	.	.	1	2	2	.	.	1	.	.	1	.	1	.	2
2	Least Bittern	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	37	21	28	21	23	22	23	22	34	25	24	35	29	31	42
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	73	62	41	14	183	127	46	36	71	49	51	17	21	95	65	85
2	Snowy Egret	53	106	61	80	74	67	57	69	30	20	78	19	23	66	180	205
2	Little Blue Heron	51	31	26	15	163	59	35	22	37	7	12	23	6	10	31	12
2	Tricolored Heron	7	5	5	4	5	6	3	3	3	3	3	3	5	6	13	8
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	520	450	475	115	175	44	67	49	78	170	280	62	15	5	.	.
2	Green Heron	1	2	1	2	1	1	.	1	3	2	3	3	5	3	.	3
2	Black-crowned Night-Heron	.	1	.	.	.	.	.	.	.	.	.	.	2	1	.	2
2	Yellow-crowned Night-Heron	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	90	147	190	75	52	175	160	150	200	175	290	210	95	130	260	108
2	Glossy Ibis	350	250	270	117	180	240	55	90	76	94	46	25	70	57	60	37
2	White-faced Ibis	.	.	.	.	.	.	.	1	.	2	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	1	.	6	1	4	.	.	.	1	.	.	.	1	1	1	1
7	Black Vulture	21	4	.	25	.	1	2	2	6	5	5	.	7	.	3	1
7	Turkey Vulture	32	24	152	39	24	14	11	8	22	15	6	19	21	26	38	15
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	3	3	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	34	205	18	70	95	115	180	180	120	60	3	4
3	Greater White-fronted Goose	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	4	.	.	2	4	.	.	.	2	.	2	.	.	.	.	23
3	Gadwall	.	.	.	.	.	.	1	.	.	2	1	9	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	.
3	Mallard	2	2	.	3	2	6	3	1	.	3	1	1	2	1	6	2
3	Mottled Duck	18	5	2	12	4	6	2	6	3	6	6	8	7	7	18	9
3	Blue-winged Teal	.	240	1	7	4	3500	3500	1500	200	850	350	550	360	320	320	41
3	Cinnamon Teal	.	.	.	.	.	.	1	.	.	1	.	.	.	1	.	.
3	Northern Shoveler	.	3	.	3	.	9	3	8	6	7	7	6	2	5	3	3
3	Northern Pintail	.	.	.	.	.	2	3	6	7	4	3	1	3	3	1	1
3	Green-winged Teal	.	4	.	.	1	.	12	6	9	150	110	380	250	240	200	170
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	44	.	.	.	11	.	1	.	4	1	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	1	.	1	1	1	1	1
1	Lesser Scaup	.	.	.	.	.	.	1	1	2	2	5	.	3	3	3	7
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	16
1	Red-breasted Merganser	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	.	5	55	23	9	30	79	46	106	57
5	Osprey	16	11	13	13	10	15	13	7	12	11	15	15	11	12	15	13
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	4	6	2	5	2	2	3	2	3	4	3	1	3	1	7	2
7	Northern Harrier	9	7	7	9	11	13	13	18	13	15	19	20	14	13	11	6
8	Sharp-shinned Hawk	1	1	2	2	.	5	3	5	3	2	2	2	1	1	2	.
8	Cooper's Hawk	5	3	2	4	4	5	6	6	7	3	5	3	5	5	4	2
8	Red-shouldered Hawk	5	14	7	6	9	6	3	11	13	11	13	15	9	11	9	7
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Red-tailed Hawk	10	13	11	10	16	15	11	12	12	13	9	13	20	20	18	17
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	20	15	15	16	19	11	16	9	7	13	11	13	14	11	12	18
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	3	2	1	1	1	2	1	2	1	.	1	.	1	1	.	1
7	Peregrine Falcon	1	.	1	1	2	.	.	1	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	2	1	2	1	1	.	.	1	.	1	.	.	.	2	1	1
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	1	.	.	.	1	1	.	1	.	.	.	1	.	.	.
2	Sora	11	39	6	4	12	9	12	2	15	21	7	12	9	12	18	20
2	Purple Gallinule	.	1	2	.	.	1	.	.	.	.	1	1	1	1	1	1
4	Common Moorhen	158	223	168	190	159	169	158	203	155	160	158	184	117	127	206	123
1	American Coot	56	1	27	430	555	200	205	350	375	240	515	340	1	7	5	8

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	2	2	.	.	3	.	3	2	1	1	3	3	2	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	4	.	29	1	104	.	65	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	1	.	1	.	.	.	.	.	1	1	1	1	.
4	American Golden-Plover	.	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	1	13	3	35	14	27	52	43	64	61	27	26	44	151	76	161
4	Black-necked Stilt	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	2	3	11	5	7	4	4	3	3	5	3	4	1	1	2	.
4	Lesser Yellowlegs	22	58	55	30	23	13	10	3	8	2	1	1	.	.	.	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	1	.	.	2	.	.	.	.	.	.	.	.	.	.
4	Least Sandpiper	3	40	45	40	.	48	17	38	12	51	25	68	.	31	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	2	8	4	4	.	3	1	.	.	.	.	1	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	2	.	4	2	4	4	3	.	.	.	1	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	1	35	16	14	5	1	1	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	3	1	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	6	120	220	107	16	2	40	1	.	.	16	1	.	.	.
4	Wilson's Snipe	.	24	37	22	42	67	2	4	11	6	29	82	3	27	5	11
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	1	.	1	1	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	.	.	.	.	.	57	5	2	4	.	.	.	1
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	2	1	12	6	12	14	23	19	21	5	35
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	2	2	1	2	1	1
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	2	.	.	.	.	.	3	1	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	26	1	1	1	1	.	.	.	.	2	86	36	52	14	5	16
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Eurasian Collared-Dove	7	13	4	4	2	3	2	3	1	2	9	1	1	1	6	1

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove		2														
8	Mourning Dove	32	32	148	38	73	44	78	227	14	11	36	66	16	4	10	23
8	Common Ground-Dove	7	14	3	7	7	2	5	7	4	5		7	13	3	1	11
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		2	1								1	2	
8	Eastern Screech-Owl																
8	Great Horned Owl	1	1	1	3	2	3	2	2	2		1				1	2
8	Burrowing Owl																
8	Barred Owl																
7	Long-eared Owl																
7	Short-eared Owl											1					
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow	1															
8	Eastern Whip-poor-will	1	1	1	1												
7	Chimney Swift	365	10		2												
8	Ruby-throated Hummingbird					1											
8	Black-chinned Hummingbird																
5	Belted Kingfisher	2	8	2	3	5	4	6	6	5	4	4	4	5	6	6	6
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	13	13	9	6	10	3	1	4	5	5		3	7	2	8	12
8	Yellow-bellied Sapsucker									1							
8	Downy Woodpecker	5	7	3	3	5	5	2	3	5	3	2	4	6	3	4	11
8	Hairy Woodpecker														1		
8	Red-cockaded Woodpecker																
8	Northern Flicker	3	2	8	1	3	1	1	2	1	3	1	5	6	1	5	4
8	Pileated Woodpecker	2	1	1	1	1	1				3	1	1	1		2	2

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
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	3	1	1	2	1	1	1
7	Eastern Phoebe	6	31	74	89	163	112	117	151	171	147	56	152	151	98	156	139
8	Vermilion Flycatcher	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	.	.	.	.	.	.	1	.	1	.	.	2	5	1	2	2
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Western Kingbird	.	.	.	.	.	1	1	.	.	.	.	1	.	1	.	6
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	7	6	7	4	5	9	9	4	6	3	4	4	5	5	6	4
8	White-eyed Vireo	15	8	6	5	6	3	2	4	4	5	.	6	5	3	6	3
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	2	1	1	.	.	1	.	1	.	.	.	.	1	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	23	26	24	17	21	10	16	13	12	11	6	8	10	8	8	12
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	2	1	.	.	.	.	.	.	1	.	.	.	.	.	1
7	Fish Crow	.	1	.	1	10	.	4	8	7	5	1	2	55	28	5	14
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	680	48	42	515	33	43	267	176	12	122	20	41	121	204	79	274
7	Northern Rough-winged	6	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
7	Cliff Swallow	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	410	225	80	120	25	34	26	82	17	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	4	2	1	2	1	1	1	2	2	1	3	2	2	4	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	19	19	17	14	12	13	10	11	15	18	8	13	9	10	16	15
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	24	119	115	208	219	161	207	238	282	239	98	242	200	132	175	133
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	2	2	2	3	7	13	11	8	11	6	7	22	8
7	Marsh Wren	1	6	3	6	3	7	5	6	6	5	3	6	10	15	22	18
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	1	.	1	3	3	1	2	1	5	5	.	9	7	7	8	8
8	Blue-gray Gnatcatcher	54	41	51	38	36	24	38	44	53	41	14	36	34	31	41	45
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	13	5	.	28	1	51	.	52
8	Gray Catbird	84	93	71	92	148	47	25	56	35	93	18	81	47	39	44	36
8	Northern Mockingbird	44	44	31	35	27	12	31	22	18	16	13	18	11	16	10	18
8	Brown Thrasher	12	15	6	7	12	1	5	2	1	.	2	3	1	2	4	2
7	European Starling	122	2	110	3	26	114	51	24	21	13	27	2	2	1	1	12
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	3	12	1	38	102	43	50	11
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	2	2	3	3	7	4	3	6	7
8	Nashville Warbler	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Northern Parula	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	.	.	1	.	3	53	38	75	49	34	34	89	42	38	115	137
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	3	5	4	3	5	3	.	1	3	3	.	3	3	1	3	1
7	Palm Warbler	57	74	117	53	145	129	158	163	132	102	42	126	41	37	116	64
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Redstart	3	2	3	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	6	4	1	1	1	1	.	1	2	2	1	1	.	.	1	2
7	Northern Waterthrush	1	8	3	1	.	1	.	.	.	2	.	.	.	.	1	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	42	108	49	54	62	31	32	43	53	62	23	36	66	34	49	62
8	Hooded Warbler	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
7	Eastern Towhee	7	8	9	11	14	5	6	7	9	7	2	8	7	8	6	11
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	1	3	.	.	.	.	.	.	2
7	Clay-colored Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
7	Field Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	1	2	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	.	6	7	44	14	32	107	200	237	195	82	91	161	113	67	44
7	Grasshopper Sparrow	.	.	.	.	2	1	.	2	1	2	1	.	2	1	1	1
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	1	.	1	.	3	2	2	2	1	2	1	3	1	1
7	Lincoln's Sparrow	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.
7	Swamp Sparrow	.	.	2	6	5	4	14	29	54	93	26	63	81	56	44	56
7	White-throated Sparrow	.	.	.	.	.	.	.	.	1	2	1	.	.	2	.	.
7	White-crowned Sparrow	.	.	.	.	.	.	.	.	4	4	.	.	.	1	4	1
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	112	69	48	66	38	44	41	63	48	42	33	40	38	47	41	44
8	Rose-breasted Grosbeak	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	3	2	2	2	2	.	2	.	1	.	.	2	.	.	.	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	108	21	69	67	65	36	22	10	5	14	2	2	1	3	2	4
8	Painted Bunting	.	.	1	.	.	.	.	.	.	.	.	1	1	.	.	.
7	Dickcissel	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.
7	Bobolink	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	820	950	385	870	630	770	775	770	585	600	2300	720	445	545	655	390
6	Eastern Meadowlark	2	10	15	13	8	5	16	8	13	3	18	14	7	4	6	2
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	135	148	113	11	56	69	118	21	190	85	67	23	436	74	76	159
7	Boat-tailed Grackle	225	405	430	470	415	290	510	610	320	675	450	265	250	260	175	140

Table A. Part 2

Hab	SPECIES	10/10	10/14	10/17	10/21	10/24	10/28	11/1	11/4	11/7	11/11	11/15	11/18	11/25	11/27	11/29	12/2
7	Shiny Cowbird	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	6	9	23	1	230	60	40	210	12	88	84	11	30	28	171	156
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	2	1	3	6	3
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	93	97	95	96	95	97	94	94	103	103	98	106	103	107	100	105
	TOTAL INDIVIDUALS	5,253	4,606	4,032	4,751	4,640	7,424	7,532	6,273	4,368	5,301	6,185	4,849	4,359	3,949	4,429	3,750

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	1	2	2	1	3	6	8	3	3	6	3	5	6	1	3	6
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	95	274	120	180	190	159	86	87	14	53	4	35	3	310	460	210
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	102	97	122	96	123	92	86	150	181	156	184	132	200	169	217	156
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	25	17	19	14	16	20	26	19	14	25	18	26	34	31	17	33
2	American Bittern	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
2	Least Bittern	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	24	34	24	24	29	28	39	32	15	21	26	33	27	20	25	35
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	14	15	1	1	1	1	2	1	.	1	8	12	15	21	1	1
2	Snowy Egret	40	1	5	2	1	110	1	1	2	2	11	15	1	2	2	1
2	Little Blue Heron	18	11	14	26	18	51	11	11	10	19	12	22	7	19	15	17
2	Tricolored Heron	6	2	3	4	2	38	3	4	6	4	5	7	8	2	5	3
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	12	550	40	60	537	275	215	10	2050	630	13	130	165	3	26	37
2	Green Heron	3	2	2	1	2	3	.	1	1	.	4	2	1	3	2	3
2	Black-crowned Night-Heron	.	1	.	.	1	.	2	1	3	3	3	.	1	1	1	3
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	8	36	1	.	.	.	.	.	1	55	84	130	285	.	.	.
2	Glossy Ibis	55	12	.	.	3	9	.	.	1	60	5	370	285	.	.	.
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Wood Stork	.	.	.	.	.	.	.	.	11	.	.	.	.	2	.	.
7	Black Vulture	4	.	.	1	7	17	7	4	1	3	16	7	2	.	1	.
7	Turkey Vulture	11	10	20	5	19	35	19	19	12	12	22	24	7	7	15	9
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	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	.	.	.	.	.	.	1	2	.	2	.	.	.	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	1	.	1	.	.	.	1	1	.	1	1	.	.	1	.	.
3	Mallard	3	4	2	3	3	5	3	5	4	8	2	3	4	2	4	3
3	Mottled Duck	12	19	12	21	24	19	10	18	14	17	10	5	7	8	8	4
3	Blue-winged Teal	8	2	1	1	3	2	1	4	6	8	8	9	8	5	11	9
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	1
3	Northern Pintail	1	3	.	.	.	.	.	.	.	.	1	.	.	.	.	2
3	Green-winged Teal	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	1	18	2	1	.	.	.	.	.
1	Ring-necked Duck	2	1	1	61	2	.	.	.	.	.	.	.	1	.	.	.
1	Greater Scaup	2	2	2	2	2	1	1	1	1	.	2	3	2	.	.	.
1	Lesser Scaup	13	19	28	21	53	61	101	97	119	88	150	85	84	48	88	133
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	1	2	.	7	22	19	25	12	11	10	11	2	4	5	9	5
1	Red-breasted Merganser	.	.	.	.	.	.	1	1	1	.	.	.	.	.	.	.
1	Ruddy Duck	80	97	39	44	1	44	15	12	.	1	4	2	3	2	2	2
5	Osprey	21	8	13	18	13	21	23	16	12	9	11	14	19	13	10	15
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	3	1	2	3	2	3	4	.	7	2	2	6	1	.	2	4
7	Northern Harrier	32	14	7	11	13	11	12	9	13	9	13	12	8	11	9	10
8	Sharp-shinned Hawk	2	2	2	1	1	2	1	2	1	3	2	4	3	2	.	2
8	Cooper's Hawk	2	4	2	1	.	1	1	3	3	3	1	2	1	2	3	2
8	Red-shouldered Hawk	6	5	11	2	8	9	5	9	3	5	9	9	7	11	8	6
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	16	17	14	11	18	19	20	19	12	12	18	14	25	17	13	19
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	12	13	13	13	9	11	12	13	11	9	9	9	9	11	7	10
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	1	.	.	1	.	.	1	.	1	.	1	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	.	1	1	2	1	1	1	1	.	.	1	1	12	3	5
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	.	.	.	.	1	.	1	.	.	.	1	.	.	.	.
2	Sora	6	7	12	3	14	26	13	17	5	22	11	15	18	22	8	8
2	Purple Gallinule	1	.	1	1	1	1	1	.	1	.	1	.	.	.	.	.
4	Common Moorhen	119	113	130	107	120	105	108	100	182	146	171	225	144	146	85	115
1	American Coot	7	8	8	2	24	9	24	26	32	21	17	12	8	17	4	16

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	1	.	.	.	1	1	.	.	1
2	Sandhill Crane	.	.	.	2	.	20	.	.	1	55	.	3	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	1	1	1	1	1	.	.	.	.	.	.	1	1	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	57	40	53	65	77	73	87	93	361	109	75	144	354	52	93	57
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	1	.	.	1	1	.	1	.	.	.	.	1
4	Lesser Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.
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	1	.	.	.	1	3	1	3	20	.	.	.	.	.	.	.
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	3	4	6	2	2	1	1	4	15	2	4	4	13	21	5	96
4	American Woodcock	3	1	.	2	2	1	3	1	1	1	2	7	3	2	1	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	5	2	32	209	404	53	43	17	19	5
5	Ring-billed Gull	3	11	6	18	3	9	96	138	153	628	620	495	114	325	62	8
5	Herring Gull	1	1	.	1	.	1	1	1	2	3	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	1	.	.	.	.	2	.	.	1	1	.	2	2
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	108	21	49	260	36	89	17	20	52	12	7	6	14	9	19	2
5	Least Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	4	.	.	.	.	.	.	.	1	.	.	.
8	Eurasian Collared-Dove	2	4	2	4	2	1	1	1	1	1	2	5	1	3	2	4

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	39	4	25	7	14	10	56	24	72	26	39	114	55	34	35	35
8	Common Ground-Dove	3	3	2	3	1	3	4	3	3	1	10	1	3	2	6	3
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	2	1	1	1	1	1	2	1	1	4	6	1	1
8	Eastern Screech-Owl																
8	Great Horned Owl	1	3	1	1	1	1	1	2	1	2	2	2	1	2	1	1
8	Burrowing Owl																
8	Barred Owl															2	
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow																
8	Eastern Whip-poor-will	1	1	1							1						
7	Chimney Swift																
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	9	8	6	5	11	9	9	6	8	5	11	8	9	9	7	7
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	4	7	10	7	12	12	12	9	2	4	17	13	11	16	15	16
8	Yellow-bellied Sapsucker														2		
8	Downy Woodpecker	2	5	5	4	9	5	2	7	1	5	7	8	7	11	14	9
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	2	3	4	4	5	3	3	2	2	4	4	4	5	3	5	4
8	Pileated Woodpecker	2	1	2	1	1	1	1	3	1	1	2	1		3	2	2

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	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	2	1	.	1	1	.	1	.	.	1	.	1	2	2	5
7	Eastern Phoebe	75	95	78	51	69	60	78	78	32	45	97	94	93	86	67	102
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	2	1	.	2	1	2	1	.	.	1	1	4	6	9	6	6
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	1	1	.	.	.	.	1	.	.	1	.	1	1	1	1
8	Western Kingbird	.	7	6	1	.	20	4	52	.	.	42	13	43	54	46	72
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	1	1	2	2
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	7	3	6	4	5	4	7	6	5	5	6	4	4	7	11	4
8	White-eyed Vireo	1	2	5	2	3	2	3	7	1	4	2	8	4	6	4	3
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	3	.	.	.	.	.	.	.	.	2	1	3	3	1	1
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	5	7	8	5	7	6	8	8	1	1	13	14	16	16	12	22
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	.	.	.	.	.	1	1	.	.	1	2	1	.	.	1
7	Fish Crow	3	15	1	49	37	15	1	10	20	18	19	98	25	183	70	4400
7	Purple Martin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Tree Swallow	82	82	190	35	67	70	10	28	44	46	51	135	54	68	370	113
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Chickadee	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	2	2	2	1	1	1	3	1	2	2	3	2	3	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	5	21	15	10	18	15	6	25	8	14	23	26	21	29	35	29
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	86	147	75	83	106	57	67	66	21	38	86	99	99	105	58	107
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	10	18	16	11	10	9	6	10	3	7	7	10	11	8	6	12
7	Marsh Wren	7	15	7	4	15	19	26	15	3	16	10	26	26	21	7	33
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	4	7	4	3	8	8	9	8	2	6	13	12	14	12	7	8
8	Blue-gray Gnatcatcher	45	40	36	17	52	53	31	40	17	37	66	68	73	72	51	45
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	6	3	86	365	113	92	23	97	2820	3	42	70	19	570	75	520
8	Gray Catbird	29	85	56	25	46	25	42	44	17	15	42	39	29	60	34	53
8	Northern Mockingbird	11	12	13	17	12	9	15	13	8	7	14	19	15	25	31	18
8	Brown Thrasher	2	1	1	2	2	2	.	1	.	1	2	1	2	3	1	2
7	European Starling	18	30	2	38	13	119	7	24	130	66	2	10	28	13	5	32
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	57	52	10	27	5	4	4	2	25	76	31	257	24	25	17	41
8	Cedar Waxwing	.	.	1	.	1	1	1	.	12	.	.	.	.	.	.	1
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	3	5	7	2	6	6	6	7	3	7	10	15	8	13	6	7
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	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	64	90	149	51	121	63	90	175	125	115	122	111	117	59	57	138
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	.	.	.	1	.	1	1	1	1	1	.	.
7	Prairie Warbler	3	3	2	.	4	2	3	3	1	1	5	3	3	7	1	2
7	Palm Warbler	33	167	31	31	80	67	96	69	32	104	100	198	230	106	148	289
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	1	.	1	1	1	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	1	1	.	.	1	1	1	2	1	1	.	2
7	Northern Waterthrush	2	2	2	1	2	2	3	2	.	1	1	1	4	1	2	2
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	34	57	44	30	42	32	61	55	22	46	69	82	104	83	53	106
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
7	Eastern Towhee	5	8	9	6	7	6	11	19	5	8	23	15	24	28	18	26
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
7	Clay-colored Sparrow	4	.	.	.	1	.	.	1	2	1	.	2	.	.	.	.
7	Field Sparrow	.	.	2	.	1	2	1	1	2	1	1	2	1	5	2	.
7	Vesper Sparrow	1	.	1	.	1	2	.	3	.	1	1	.	2	.	2	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	109	93	85	92	72	65	81	65	70	130	50	88	79	118	75	77
7	Grasshopper Sparrow	2	1	2	1	1	1	.	1	1	1	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	1	3	1	1	1	2	3	5	1	3	6	1	2	2	1	5
7	Lincoln's Sparrow	1	.	.	.	1	2	.	.	.	.	1	.	1	.	.	1
7	Swamp Sparrow	43	87	53	32	47	73	129	76	6	39	115	123	180	99	24	109
7	White-throated Sparrow	.	.	.	1	1	1	1	1	1	.	1	1	1	.	1	.
7	White-crowned Sparrow	7	.	.	1	.	1	.	1	1	1	1	2	1	1	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	47	54	49	31	48	40	55	55	37	40	93	81	78	124	78	137
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	.	3	.	.	.	1	.	1	.	1	1	.	6	4	3	1
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Indigo Bunting	13	1	15	1	5	12	.	2	2	2	4	1	1	3	2	.
8	Painted Bunting	1	3	1	.	1	2	2	1	1	2	1	1	1	3	.	.
7	Dickcissel	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	435	365	175	345	1475	1330	1640	1445	2040	1140	285	530	950	785	805	1535
6	Eastern Meadowlark	2	4	3	29	16	13	7	14	5	6	7	6	11	11	62	6
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	156	65	102	42	225	11	35	147	29	159	16	72	147	45	82	10
7	Boat-tailed Grackle	55	75	85	105	290	260	115	105	530	470	310	360	225	250	230	360

Table A. Part 3

Hab	SPECIES	12/5	12/9	12/13	12/16	12/19	12/21	12/27	12/30	1/3	1/7	1/10	1/13	1/16	1/20	1/24	1/27
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	223	116	118	84	68	1	5	43	15	1	20	5	10	67	22	104
8	Orchard Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	1	4	6	2	7	2	3	12	3	8	7	9	5	11	14	17
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	105	100	95	97	103	105	97	109	102	106	110	108	112	102	101	100
	TOTAL INDIVIDUALS	2,717	3,384	2,411	2,783	4,588	4,054	3,889	3,886	9,620	5,202	3,912	4,988	4,857	4,656	3,969	9,710

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	3	4	5	2	3	4	3	4	6	2	2	1	2	.	.	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	320	384	150	145	235	170	500	215	85	574	495	380	435	620	650	640
1	Brown Pelican	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	125	247	237	222	296	263	326	329	313	238	252	161	220	353	262	531
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	29	19	21	14	17	10	10	18	18	16	16	11	8	2	2	5
2	American Bittern	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1
2	Least Bittern	.	1	1	1	1	.	1	1	3	1	1	.	.	.	.	.
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	21	19	31	24	32	33	17	30	22	23	32	36	32	28	27	20
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	1	1	2	6	1	1	3	4	7	2	2	2	3	1	1	2
2	Snowy Egret	1	3	3	2	1	3	2	7	4	3	2	4	4	2	4	13
2	Little Blue Heron	12	14	14	11	16	13	12	13	17	17	18	19	12	19	16	9
2	Tricolored Heron	.	4	5	5	3	3	2	4	4	4	2	3	3	3	4	7
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	84	300	11	295	98	66	11	34	152	278	22	150	58	205	275	162
2	Green Heron	4	3	5	1	2	4	2	3	5	3	8	9	6	7	9	6
2	Black-crowned Night-Heron	1	1	4	.	1	1	1	2	2	.	1	1	.	1	.	.
2	Yellow-crowned Night-Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	White Ibis	1	.	.	30	.	.	.	.	.	1	37	6	5	17	23	193
2	Glossy Ibis	.	.	.	25	.	.	.	.	1	1	.	4	22	8	.	2
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
2	Wood Stork	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Black Vulture	3	1	1	.	2	1	1	1	4	3	21	1	6	2	7	6
7	Turkey Vulture	104	60	27	57	22	43	31	15	19	20	16	18	10	13	36	31
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
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	.	.	.	.	6	6	2	4	6	2	.	5	2	3	.	2
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	16	.	2	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	1	.	2	.	1	1	2	3	1	1	.	.	1	.	4	1
3	Mottled Duck	5	4	6	2	3	5	5	7	6	7	2	5	5	5	7	7
3	Blue-winged Teal	14	14	17	1	4	14	10	51	38	27	20	38	35	84	134	205
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	4	1	1	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	3	1	.	.	.	2	1	2	2	2	2	1	1	1	1
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
1	Ring-necked Duck	.	.	.	.	.	.	.	1	.	16	.	.	.	.	2	1
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
1	Lesser Scaup	42	94	82	60	69	70	61	70	49	69	56	54	37	12	9	1
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	4	7	5	8	3	4	3	5	6	.	.	.	2	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	1	1	.	.	6	.	6	4	.	.	.	160	12	.	18	16
5	Osprey	14	12	24	16	19	17	21	21	20	22	15	18	7	13	7	11
7	Swallow-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	5	9	11	9	10	6	6	9	3	2	5	3	3	6	5	12
7	Northern Harrier	8	7	7	9	7	6	9	6	5	7	6	7	6	5	9	6
8	Sharp-shinned Hawk	3	2	2	2	2	2	1	1	.	.	1	1	2	3	3	2
8	Cooper's Hawk	3	4	3	2	2	2	1	1	.	2	1	2	3	.	1	.
8	Red-shouldered Hawk	6	7	4	8	5	4	1	3	4	3	.	1	7	3	5	5
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	17	13	12	19	15	17	14	14	10	17	17	16	10	11	12	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	6	8	11	10	5	8	9	12	9	9	7	10	6	7	15
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.	1
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Bobwhite	1	1	2	.	1	1	.	.	1	2	2	2	.	.	2	1
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	1	1	.	1	.	.	.	.	.	.	.	.	.	.
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
2	Sora	3	6	13	14	4	10	2	8	7	5	8	7	6	4	6	3
2	Purple Gallinule	.	.	.	.	.	1	1	1	1	.	.	.	.	1	.	2
4	Common Moorhen	91	71	137	109	113	102	97	157	125	95	74	80	93	106	63	79
1	American Coot	12	1	26	10	18	12	18	29	17	6	13	25	22	25	25	28

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	2	.	.	1	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	75	172	104	120	102	416	32	85	96	35	13	12	4	5	2	4
4	Black-necked Stilt	.	.	.	.	.	.	.	.	.	.	.	2	.	24	20	9
4	American Avocet	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Greater Yellowlegs	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	2
4	Lesser Yellowlegs	.	.	.	.	.	1	.	.	.	.	.	.	.	7	4	14
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.
4	Least Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	43	23	25
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27	
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Long-billed Dowitcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	2
4	Wilson's Snipe	6	14	1	3	2	1	19	5	2	.	8	12	3	10	3	1	
4	American Woodcock	.	4	.	1	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	1	.	.	.	.	.	.	.	.	.	.	.	3	.
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	2	5	10	.	4	67	124	31	18	.	.	.	.	.	1	7
5	Ring-billed Gull	17	509	62	891	850	12	550	395	15	24	3	21	14	56	68	4	
5	Herring Gull	.	2	.	.	1	.	1	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Caspian Tern	2	1	2	1	21	3	2	1	.	4	2	3	1	2	4	3	
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	7	8	9	29	14	21	17	13	12	6	2	1	2	1	.	1	
5	Least Tern
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	.	.	4	2	.	.	.	.	.	.	.	1
8	Eurasian Collared-Dove	3	1	7	2	3	1	2	2	5	1	3	5	1	3	3	3	

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
8	Diamond Dove																
8	African Collared-Dove																
8	White-winged Dove																
8	Mourning Dove	40	29	70	75	106	23	11	21	36	23	29	45	120	109	52	64
8	Common Ground-Dove	6	4	13	6	4	9	2	10	8	14	8	16	11	9	9	10
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo																
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	1	2	2	1	2	1				2			1			2
8	Eastern Screech-Owl	1			1							1	1	1			
8	Great Horned Owl	2	3	1	1	2	1	2	1	1	1	1	3	1		1	
8	Burrowing Owl																
8	Barred Owl											2					
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk																
8	Chuck-will's-widow															1	
8	Eastern Whip-poor-will										2	1	1				
7	Chimney Swift														1		
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	6	9	14	9	10	6	5	8	9	6	7	9	5	6	8	6
8	Red-headed Woodpecker																
8	Red-bellied Woodpecker	19	14	15	8	15	14	10	7	10	15	19	16	13	9	11	12
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	9	11	9	6	13	9	2	8	8	7	12	9	4	5	7	7
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	4	4	4	4	3	2	1	3	2	4	3	3	2	3	3	4
8	Pileated Woodpecker	1	3	2	1	1	1	2	3	4	1	3	2	1	3	2	4

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
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	2	1	.	1	1	.	1	1	2	2	.	.	2	.	.
7	Eastern Phoebe	74	64	87	39	43	59	29	44	52	47	34	15	12	1	3	2
8	Vermilion Flycatcher	.	.	1	.	.	.	.	2	1	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	3	.	2	.	1	.	.	1	1	1	2	2	1	.	1	1
8	Great Crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	.	.	.	.	.	.	.	1	1	.	1	1	1	1	1
8	Western Kingbird	58	8	35	3	2	13	.	.	10	24	33	18	28	9	21	19
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Scissor-tailed Flycatcher	2	1	2	.	.	1	.	.	.	3	.	1	2	.	4	2
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	18	5	4	1	3	4	2	3	3	1	3	3	2	2	4	2
8	White-eyed Vireo	5	6	11	4	7	9	4	6	11	11	6	6	6	6	5	3
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	3	2	2	3	.	.	1	1	.	.	.	.	.	.	.	1
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	20	14	11	10	10	21	7	11	19	18	13	16	17	9	12	19
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	1	3	1	1	3	1	1	2	4	1	.	.	2	.	2
7	Fish Crow	3350	263	1028	270	160	2560	4330	1190	73	485	2085	260	300	34	56	30
7	Purple Martin	2	2	2	3	1	2	1	.	3	1	1	.	4	4	5	3
7	Tree Swallow	66	410	28	690	470	165	1035	380	680	170	365	220	320	950	320	1290
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
7	Bank Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	.	.	.	.	.	.	.	.	1	5	18	14	31	32	27	44
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	4	3	2	2	3	1	1	2	1	2	1	2	1	2	1	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	29	24	33	19	32	28	11	26	34	58	51	36	62	30	31	30
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	48	75	74	47	39	66	27	48	57	78	84	88	95	64	68	94
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	10	9	9	6	4	4	3	3	3	1	4	5	4	.	2	6
7	Marsh Wren	14	5	17	14	7	8	4	3	4	5	3	3	4	2	6	5
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	8	8	7	7	2	10	8	7	10	7	11	6	6	4	7	7
8	Blue-gray Gnatcatcher	54	46	58	36	56	46	35	55	37	32	9	3	2	.	1	2
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	137	48	32	51	17	7	22	30	11	36	42	2	3	3	.	.
8	Gray Catbird	28	16	27	20	29	54	7	34	19	62	36	41	16	21	26	49
8	Northern Mockingbird	22	12	16	11	12	15	4	8	17	32	29	39	26	15	28	31
8	Brown Thrasher	3	2	4	.	1	3	.	1	1	4	1	5	1	3	2	3
7	European Starling	49	3	25	19	3	21	6	6	5	7	1	3	8	1	7	6
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	30	170	150	100	125	115	110	25	89	185	25	5	9	2	2	.
8	Cedar Waxwing	.	.	.	.	.	2	2	25	25	5	12	21	32	5	.	5
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	10	9	9	5	4	8	3	9	7	2	6	2	1	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	.	.	1	.	.	.	.	2	3	10	8	3	5	1	3	2

Table A. Part 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Blue Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	128	194	141	690	470	570	755	810	1210	655	725	405	280	23	25	26
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Warbler	.	1	1	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	1	1	1	1	1	.	.	2	1	2	2	.	.	.	.	.
7	Prairie Warbler	3	3	2	3	2	3	.	4	3	2	5	4	3	6	4	7
7	Palm Warbler	206	152	204	189	247	205	108	232	180	160	230	90	115	89	117	91
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	1	2	.	1	1	1	.	.	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	1	1	.	.	1	.	4	1	1	.	1	.	.	.	.
7	Northern Waterthrush	4	2	4	1	1	2	.	3	2	2	1	1	2	1	.	4
7	Louisiana Waterthrush	.	.	1	.	.	.	.	2	1	4	8	7	6	5	.	4
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	43	45	94	32	46	57	27	63	51	57	67	37	33	26	46	23
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 4

Hab	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
7	Eastern Towhee	16	24	26	11	24	23	9	15	15	17	16	18	21	17	15	19
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	1	.	.	.	.	.	.	.	.	1	1	1	1	.	.	.
7	Field Sparrow	2	.	.	2	2	4	.	5	5	5	12	3	5	1	4	5
7	Vesper Sparrow	3	2	.	1	6	9	9	1	3	1	8	3	11	2	2	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	126	125	158	51	154	74	106	38	135	49	78	40	51	24	48	81
7	Grasshopper Sparrow	1	1	.	.	.	.	.	.	.	.	1	.	.	1	1	2
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	2	1	2	1	3	3	.	1	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	1	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.
7	Swamp Sparrow	37	26	42	22	26	26	7	17	14	20	14	11	15	7	14	11
7	White-throated Sparrow	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
7	White-crowned Sparrow	.	.	.	.	1	3	1	2	1	1	1	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	98	70	137	80	98	183	93	127	132	192	191	209	197	140	168	168
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	2	1	.	1	1	1	2	1	.	1	.	.	.	.	.	.
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	2	.	2	.	4	2	2	3	3	1	1	.	.	.	.	1
8	Painted Bunting	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	205	460	1475	755	545	305	850	1505	850	825	505	480	650	650	805	805
6	Eastern Meadowlark	7	16	5	5	10	7	6	4	6	3	6	8	4	6	5	17
7	Yellow-headed Blackbird	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	278	204	262	12	17	31	48	13	4	11	3	4	9	4	6	2
7	Boat-tailed Grackle	125	290	155	375	250	285	280	45	65	25	65	105	135	215	195	260

Table A. Part 4

Ha	SPECIES	2/3	2/6	2/10	2/17	2/20	2/24	2/27	3/4	3/6	3/10	3/14	3/17	3/19	3/22	3/24	3/27
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	336	.	745	12	21	12	.	14	885	975	3	20	5	3	25	7
8	Orchard Oriole	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	11	3	20	6	28	10	5	8	5	23	6	4	6	1	5	8
8	House Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	103	101	103	92	100	103	92	108	101	104	102	100	102	97	101	116
	TOTAL INDIVIDUALS	6,836	4,952	6,367	5,892	5,173	6,536	9,940	6,528	5,955	5,958	6,113	3,673	3,846	4,297	4,000	5,437

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	650	1220	840	1150	630	720	850	640	580	450	160	250	160	245	270	325
1	Brown Pelican	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	247	322	208	147	84	43	87	49	43	35	36	27	27	37	14	24
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	6	5	5	6	5	8	5	4	5	12	5	12	5	8	6	7
2	American Bittern	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
2	Least Bittern	2	1	1	1	1	1	.	1	2	.	3	4	3	4	2	1
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	25	25	27	27	34	23	28	17	36	33	27	36	31	30	17	28
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	4	3	9	8	6	7	2	6	4	7	7	18	8	9	17	16
2	Snowy Egret	15	20	9	8	11	11	5	16	14	14	17	25	13	32	47	50
2	Little Blue Heron	18	16	9	10	9	9	13	5	9	12	14	15	19	9	8	18
2	Tricolored Heron	7	3	6	1	11	4	6	1	3	4	6	7	7	14	4	7
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	34	280	17	216	260	135	12	152	365	24	19	40	175	168	180	308
2	Green Heron	6	10	10	9	9	8	14	11	22	11	20	36	16	22	21	29
2	Black-crowned Night-Heron	7	1	.	.	.	.	4	4	2	.	1	1	1	.	.	.
2	Yellow-crowned Night-Heron	.	.	2	.	1	.	3	1	6	6	.	2	1	.	.	.
2	White Ibis	129	111	47	20	3	29	14	10	22	31	10	3	17	12	22	25
2	Glossy Ibis	1	.	5	.	2	1	1	4	2	.	12	14	8	11	5	12
2	White-faced Ibis	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	2	.	.	.	.	2	.	1	.	.	.	1	.	.	.	.
2	Wood Stork	.	.	.	.	1	.	.	.	.	4	.	.	.	.	.	3
7	Black Vulture	1	9	3	2	7	6	3	.	3	5	4	2	4	2	6	10
7	Turkey Vulture	18	9	13	13	16	15	5	11	5	55	13	44	8	24	63	44
1	Black Swan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	.	2	2	4	2	.	.	.	.	4	2	.	2	.	2	2
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	3	3	2	1	2	2	1	2	1	1	3	3	3	5	3	3
3	Mottled Duck	6	5	5	5	7	2	5	10	22	11	18	17	12	17	12	13
3	Blue-winged Teal	22	22	9	18	12	25	11	7	5	1	.	2	.	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	24	.	15	5	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
1	Greater Scaup	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	1	7	2	2	2	2	2	1	1	2	2	2	2	1	1	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
1	Ruddy Duck	18	.	.	29	16	.	.	11	.	.	.	.	.	.	.	1
5	Osprey	16	18	23	12	14	11	13	19	6	21	21	17	16	22	20	33
7	Swallow-tailed Kite	.	.	.	.	25	.	3	.	.	.	1	2	7	5	2	7

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	7	20	7	4	9	10	4	6	2	2	2	3	2	3	5	4
7	Northern Harrier	5	7	5	5	6	2	5	2	3	3	1	2	.	.	.	.
8	Sharp-shinned Hawk	.	.	1	.	1	1	.	.	.	.	1	.	.	1	.	.
8	Cooper's Hawk	.	.	.	.	3	.	.	1	.	.	1	.	.	.	.	.
8	Red-shouldered Hawk	.	3	2	3	5	2	4	4	3	3	3	3	3	3	3	1
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	8	11	11	7	15	9	12	10	8	9	8	7	10	8	6	6
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	1	6	5	.	2	.	.	.	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	1	.	2	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.	.	.	1	.	.	1	1	1
7	Northern Bobwhite	8	4	10	8	16	16	16	16	17	11	8	23	17	18	13	26
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	5	8	2	4	4	1	2	2	1	.	.	.	.	.	.	.
2	Purple Gallinule	1	1	2	8	3	8	6	15	10	10	7	7	13	5	3	8
4	Common Moorhen	57	78	74	64	58	55	36	69	38	52	50	53	82	72	71	54
1	American Coot	28	32	4	4	15	1	9	11	6	3	3	2	6	.	.	.

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	.	.	.	.	.	5	4	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	.	.	.	5	6	9	35	39	44	27	102	134	28	63
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
6	Killdeer	2	2	5	4	3	3	5	5	3	9	11	10	12	6	6	14
4	Black-necked Stilt	18	25	38	18	23	17	27	22	33	30	35	51	27	53	22	40
4	American Avocet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Greater Yellowlegs	.	.	1	.	.	.	1	6	1	10	10	3	1	2	2	.
4	Lesser Yellowlegs	3	.	5	24	2	14	1	18	8	26	4	8	2	4	4	1
4	Solitary Sandpiper	.	.	.	.	.	.	1	7	.	3	1	.	.	.	.	.
4	Willet	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	.	.	.	.	1	1	2	2	6	1	7	1	13	3	12
6	Upland Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Whimbrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Long-billed Curlew	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Hudsonian Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Marbled Godwit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruddy Turnstone	.	.	.	.	.	.	.	1	1	.	8	.	2	6	5	1
4	Red Knot	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
4	Sanderling	.	.	.	.	.	.	.	.	.	.	4	.	1	.	5	.
4	Semipalmated Sandpiper	.	.	.	.	.	1	.	2	23	80	90	40	595	1150	530	1540
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	2	.	.	8	4	14	2
4	Least Sandpiper	1	13	62	19	30	30	20	138	38	135	115	29	52	135	10	4
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.	.	.	2	7	3	2	3	37
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
4	Stilt Sandpiper	3	.	.	1	.	1	1	.	.	3	15	111	65	54	13	3

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	14	.	.	2	.	.	21	12	3	3	.	.
4	Long-billed Dowitcher	.	.	.	.	.	.	5	.	.	.	.	.	.	.	.	.
4	Wilson's Snipe	10	4	1	1	1	1	1	1	1	1	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	1	59	27	1	10	.	.	.	.	1	4	2	5	9
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	18	12	122	.	1	2	1	1	1	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	1	.	.	1	.	1	1	1	.	.
5	Caspian Tern	2	7	3	5	18	23	25	3	43	44	53	86	85	48	35	49
5	Royal Tern	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	5	.	.	.	.	.	1	1	.	.	3	.	1	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
5	Forster's Tern	1	.	1	10	2	2	3	2	8	8	11	13	12	13	14	16
5	Least Tern	.	.	.	.	.	.	.	2	.	.	9	17	12	7	5	2
5	Black Tern	.	.	.	.	.	.	.	.	.	.	.	1	.	5	1	1
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.	2
8	Rock Pigeon	2	4	.	10	.	16	6	1	6	5	.	3	.	4	3	2
8	Eurasian Collared-Dove	1	1	1	2	3	3	1	3	1	3	1	10	5	2	1	3

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
8	Diamond Dove																
8	African Collared-Dove												1				
8	White-winged Dove					1				1							2
8	Mourning Dove	86	228	64	71	34	54	94	64	90	122	92	68	38	62	139	120
8	Common Ground-Dove	12	9	9	13	9	8	17	21	35	28	25	24	39	22	14	10
8	Cockatiel																
7	Budgerigar																
8	Black-billed Cuckoo																
8	Yellow-billed Cuckoo						1	3	1	4	2	6	5	12	5	2	2
8	Smooth-billed Ani																
8	Groove-billed Ani																
8	Barn Owl	1		1	1	2	4	3	1	3	1	1	2	3	2	1	1
8	Eastern Screech-Owl												1				
8	Great Horned Owl	1	1	1	1	1	1	1	1	1	2	1	1		1	1	2
8	Burrowing Owl																
8	Barred Owl	1			1					2				1			
7	Long-eared Owl																
7	Short-eared Owl																
8	Northern Saw-whet Owl																
8	Lesser Nighthawk																
8	Common Nighthawk					3	1	2	2	1	6	4	2	4	4		1
8	Chuck-will's-widow			6	8	7	7	9	5	4	3	3	2	3	2	3	1
8	Eastern Whip-poor-will			1													
7	Chimney Swift		8	2	8	5	6	4	7	4	3	7	15	11	10	8	10
8	Ruby-throated Hummingbird																
8	Black-chinned Hummingbird																
5	Belted Kingfisher	5	4	5	1	1	1	2									
8	Red-headed Woodpecker																1
8	Red-bellied Woodpecker	12	8	9	10	13	10	14	13	14	15	6	18	14	8	6	7
8	Yellow-bellied Sapsucker																
8	Downy Woodpecker	3	3	1	2	5	5	6	4	3	6	4	6	5	10	7	4
8	Hairy Woodpecker																
8	Red-cockaded Woodpecker																
8	Northern Flicker	1	3	1	1	2	1	1	3	1	2	2	3	1	1	2	1
8	Pileated Woodpecker	1	2	2	1	2	2	3	1	2		1	2	2	1		1

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
8	Olive-sided Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Wood-Pewee	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
8	Yellow-bellied Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Acadian Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Alder Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Willow Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Least Flycatcher	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.
7	Eastern Phoebe	.	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Vermilion Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ash-throated Flycatcher	1	.	2	1	1	1	.	.	.	.	.	.	.	.	.	.
8	Great Crested Flycatcher	4	6	3	1	2	4	12	7	4	14	8	6	7	6	5	8
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	22	16	11	34	22	25	19	9	9	7	2	1	.	.	.	.
8	Eastern Kingbird	1	.	.	.	1	3	.	.	.	1	.	1	.	.	.	.
8	Gray Kingbird	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Scissor-tailed Flycatcher	5	2	1	3	2	2	2	1	1	.	1	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	3	5	5	2	3	4	3	3	4	3	3	1	2	5	5
8	White-eyed Vireo	4	6	4	2	4	3	3	3	4	2	3	4	3	5	3	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	1	2	.	.	.	.	.	.	1	.	.	.	.	.	.
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	15	19	11	14	13	16	14	13	12	14	17	23	25	18	8	7
8	Florida Scrub-Jay	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
7	American Crow	1	1	2	.	.	.	1	2	2	2	1	2	.	.	.	.
7	Fish Crow	30	93	17	13	15	12	5	11	7	6	7	3	6	6	13	100
7	Purple Martin	.	7	.	.	1	.	1	.	1	.	1	1	1	1	1	4
7	Tree Swallow	94	31	8	180	515	5	3	1	1	2	.	1	1	3	1	1
7	Northern Rough-winged Swallow	.	5	1	.	1	.	1	.	.	1	.	1	.	.	.	3
7	Bank Swallow	.	1	.	.	.	.	.	.	.	1	.	1	.	.	13	3

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
7	Cliff Swallow	.	.	.	.	.	.	.	.	1	.	1	.	.	.	3	.
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	38	44	65	40	58	29	29	37	63	45	32	39	56	53	65	35
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	1	1	3	1	2	3	1	2	2	1	1	1	1	1	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	31	23	23	33	34	42	41	32	36	37	27	44	38	32	28	27
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	62	92	81	49	42	9	5	3	1	2	.	1	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	4	5	2	5	6	1	3	2	.	1	.	.	.	.	.	.
7	Marsh Wren	5	6	2	7	11	4	2	5	.	2	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	1	1	.	.	.	2	1	.	2	2	2	1	1
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	36	58	72	84	91	86	96	59	11	22	2	.	.	.	.	.
8	Northern Mockingbird	28	18	22	19	23	19	28	20	23	26	22	30	35	29	37	23
8	Brown Thrasher	4	1	3	3	2	3	3	2	4	3	3	4	3	1	2	3
7	European Starling	7	2	3	2	2	2	4	11	5	3	10	9	8	7	52	94
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	2	21	.	48	10	.	10	1	23	111	134	100	8	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	2	1	1	1	1	1	.	3	1	3	1	2	1	1	.	.

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
7	Yellow Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chestnut-sided Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Magnolia Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cape May Warbler	.	.	.	.	.	1	.	.	.	2	.	.	.	.	1	.
8	Black-throated Blue Warbler	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-rumped Warbler	7	3	2	1	.	.	.	.	1	.	.	.	.	.	.	.
8	"Audubon's Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Gray Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-throated Green Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackburnian Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
8	Yellow-throated Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Warbler	.	.	.	.	1	.	1	.	.	.	1	1	1	1	1	.
7	Prairie Warbler	2	10	4	1	10	1	.	.	.	2	.	.	.	.	.	.
7	Palm Warbler	81	137	49	36	25	7	5	7	3	5	.	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	3	4	2	18	3	.	.	1	2	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	1	1	.	.	.	.	2	.	.	.	.	.	.	.	.
8	American Redstart	.	.	.	.	2	.	1	2	2	4	4	2	1	15	.	6
8	Prothonotary Warbler	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	1	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
7	Northern Waterthrush	3	3	3	3	2	3	2	22	3	3	.	1	.	2	.	.
7	Louisiana Waterthrush	4	5	1	.	2	1	.	.	.	.	.	.	.	.	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	8	15	6	12	18	18	14	32	4	18	13	3	1	9	1	1
8	Hooded Warbler	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	.	1	2	3	3	4	6	4	5	5	2	5	3	2	3	3
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
7	Eastern Towhee	18	15	18	19	28	16	31	22	28	15	27	18	21	19	15	17
7	Bachman's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Chipping Sparrow	.	.	.	.	4	2	.	.	.	.	.	.	.	.	.	.
7	Clay-colored Sparrow	.	.	.	1	2	.	.	.	.	.	.	.	.	.	.	.
7	Field Sparrow	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Vesper Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lark Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Savannah Sparrow	62	41	64	39	33	21	18	11	5	5	1	.	.	.	.	.
7	Grasshopper Sparrow	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
7	Henslow's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Le Conte's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Nelson's Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Fox Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Song Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lincoln's Sparrow	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.
7	Swamp Sparrow	11	35	14	27	35	12	7	9	2	2	1	2	.	2	.	.
7	White-throated Sparrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-crowned Sparrow	2	.	.	13	14	8	1	2	.	.	.	.	.	.	.	.
7	Dark-eyed Junco	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Lapland Longspur	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Cardinal	140	157	166	152	199	135	130	80	99	78	101	95	102	96	74	94
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
8	Blue Grosbeak	.	1	3	3	4	12	13	21	21	16	22	26	26	14	19	20
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	.	1	2	2	3	21	31	22	17	14	19	25	24	16	13	8
8	Painted Bunting	.	1	1	2	2	4	4	6	3	6	7	9	6	4	2	4
7	Dickcissel	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.
7	Bobolink	.	.	.	.	.	1	78	120	130	7060	21	11	3	1	1	3
7	Red-winged Blackbird	655	950	455	875	610	350	360	365	255	320	295	205	205	300	405	390
6	Eastern Meadowlark	11	16	10	11	12	6	9	7	7	7	4	3	5	8	11	10
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	6	7	10	2	9	4	9	6	7	4	8	10	5	10	13	39
7	Boat-tailed Grackle	275	215	215	225	220	155	105	135	195	105	95	105	195	205	235	235

Table A. Part 5

Hab	SPECIES	3/31	4/3	4/7	4/10	4/14	4/17	4/21	4/24	4/28	5/1	5/6	5/9	5/12	5/15	5/20	5/23
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	1	3	3	3	6	9	5	4	8	3	3	10	3	2	2	2
8	Orchard Oriole	.	.	.	.	3	3	4	4	3	1	1	3	2	4	1	2
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	6	7	2	4	.	1	2	.	.	.	.	.	.	.	.	.
8	House Sparrow	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	101	98	103	101	114	109	109	113	109	108	104	109	96	97	95	95
	TOTAL INDIVIDUALS	3,246	4,689	3,101	4,017	3,649	2,518	2,575	2,595	2,647	9,442	1,984	2,087	2,607	3,444	2,757	4,184

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
1	Pacific Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
1	Horned Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	American White Pelican	150	27	205	154	44	180	640	300	770	280	190	125	90	145	23	16
1	Brown Pelican	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	27	18	27	29	31	29	25	20	23	18	18	19	22	19	23	13
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Anhinga	8	7	4	7	2	5	6	8	7	8	10	7	18	15	12	7
2	American Bittern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Least Bittern	3	2	3	2	5	4	4	3	3	1	4	1	1	1	2	6
2	Gray Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Blue Heron	39	40	46	42	34	47	58	49	45	20	50	21	25	21	26	39
2	Great White Heron	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Great Egret	28	31	51	63	119	91	37	51	36	31	33	17	38	55	20	13
2	Snowy Egret	109	72	148	109	315	322	100	174	95	63	51	45	67	122	85	65
2	Little Blue Heron	8	21	29	7	43	41	16	27	30	16	20	26	12	16	13	14
2	Tricolored Heron	15	11	25	34	34	31	45	34	25	28	12	24	14	27	21	22
2	Reddish Egret	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Cattle Egret	591	455	460	340	850	670	390	685	595	1090	525	860	695	1050	695	475
2	Green Heron	47	48	52	30	43	48	27	31	51	22	16	26	17	13	16	17
2	Black-crowned Night-Heron	.	2	1	1	1	12	8	.	1	10	1	6	5	2	.	.
2	Yellow-crowned Night-Heron	1	7	15	10	12	16	12	9	6	3	2	5	.	2	2	1
2	White Ibis	83	54	61	73	117	66	70	82	55	56	77	157	18	21	83	18
2	Glossy Ibis	26	33	52	35	53	51	105	81	17	124	19	44	7	13	17	22
2	White-faced Ibis	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	2	3	3	4	6	9	26	30	18	1	8	2	.	.
2	Wood Stork	10	.	5	5	3	33	5	4	5	3	2	.	.	.	.	1
7	Black Vulture	31	39	42	13	2	3	20	62	47	74	86	22	15	127	65	2
7	Turkey Vulture	59	88	79	30	18	22	63	67	18	35	21	72	47	87	71	63
1	Black Swan	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	.	.	5	1	.	1	2	.	11	17	11	9	4	9	10	33
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Wood Duck	1	4	.	2	2	4	.	2	.	8	.	1	1	1	3	1
3	Gadwall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Mallard	4	3	5	3	7	3	2	1	4	1	1	.	.	.	1	.
3	Mottled Duck	31	17	27	30	44	32	21	14	16	3	3	8	7	7	17	7
3	Blue-winged Teal	.	.	1	2	.	.	.	.	.	.	.	.	.	.	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Shoveler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Lesser Scaup	1	1	1	1	1	.	1	.	1	1	1	1	1	1	.	.
1	Black Scoter	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	Ruddy Duck	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Osprey	22	13	11	15	12	11	14	22	24	31	15	22	19	19	34	25
7	Swallow-tailed Kite	5	4	22	.	4	4	.	1	2	41	2	39	4	35	81	32

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
7	Mississippi Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bald Eagle	5	5	4	2	1	2	4	7	3	1	2	1	2	2	2	2
7	Northern Harrier	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cooper's Hawk	1	.	1	1	.	1	.	2	1	2	2	2	2	3	3	3
8	Red-shouldered Hawk	4	2	2	5	2	3	3	2	2	3	3	6	6	6	8	5
8	Broad-winged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	7	9	12	6	3	9	5	8	4	4	6	4	6	8	5	4
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	1	.	1	1	.	.	.	.	1	.	1	.	.	.
7	Northern Bobwhite	31	21	36	48	25	34	29	19	42	15	12	16	27	22	14	21
2	Yellow Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	King Rail	1	1	1	.	1	1	1	1	1	.	1	2	4	3	2	2
2	Virginia Rail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Purple Gallinule	9	10	47	31	21	38	20	36	35	20	17	12	9	6	5	4
4	Common Moorhen	97	112	127	130	96	125	93	45	125	111	85	87	38	49	101	60
1	American Coot	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
1	Caribbean Coot	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.	1	.	.	.	.	1	2	1
2	Sandhill Crane	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	1	.	.	3	.	2	.	.	.	.	.	.	.	.	.
4	American Golden-Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	1	.	.	4	.	.	.	.	.	.	.	.	.	.	.
4	Wilson's Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	Killdeer	16	20	11	10	16	11	6	9	7	13	40	60	8	15	28	71
4	Black-necked Stilt	52	68	73	86	195	130	43	38	40	28	34	32	.	12	31	18
4	American Avocet	2	1	1	.	1	1	1	1	1	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	.	.	.	.	.	.	.	.	.	.	.	4	5	.
4	Lesser Yellowlegs	.	.	.	.	.	.	.	.	.	.	.	.	.	11	15	.
4	Solitary Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
4	Willet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	3	3	2	.	.	.	.	.	.	.	.	.	.	.	.	.
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	20	19	.	12	22	6	.	.	.	.	.	.	.	.	.	.
4	Western Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
4	Least Sandpiper	.	1	.	.	8	2	.	.	.	.	.	.	.	4	7	2
4	White-rumped Sandpiper	4	5	.	.	8	2	.	.	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17	
6	Buff-breasted Sandpiper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Ruff	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	.	.	9	3	.	.	.	.	.	.	.	.	.	.
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	24	13	8	5	21	17	16	4	2	2	.	1	1	.	.	.	
5	Franklin's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Herring Gull	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	3	1	.	.	.	.	.	1	.	.	.	.	.	.	.
5	Caspian Tern	23	19	2	4	7	2	4	7	12	3	5	.	.	.	1	.	
5	Royal Tern	1	.	.
5	Sandwich Tern	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Forster's Tern	9	8	5	6	12	10	16	16	10	8	2	2	2	.	2	1	
5	Least Tern	1	.	2	.	2	1	.	1	2	5	8	6	8	16	2	.	
5	Black Tern	.	.	.	.	1	.	1	.	1	.	.	.	.	.	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Black Skimmer	9	.	1	.	7	16	12	.	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	2	1	2	1	6	.	4	.	.	2	4	.	5	.	.	
8	Eurasian Collared-Dove	3	6	1	3	2	1	.	3	1	5	2	1	2	9	2	2	

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
8	Diamond Dove																
8	African Collared-Dove	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	White-winged Dove	4	1	.	.	.	2	1	.	.	.	1	2	7	4	8	2
8	Mourning Dove	133	227	620	310	36	275	765	475	824	398	675	347	94	283	121	208
8	Common Ground-Dove	19	34	63	27	10	19	29	30	29	15	28	24	23	25	29	32
8	Cockatiel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	3	7	6	5	4	4	6	5	10	1	4	12	6	4	1	2
8	Smooth-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barn Owl	1	2	1	1	2	1	2	2	3	2	2	2	2	2	3	2
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	1	1	1	1	1	2	.	1	2	1	1	1	2	1	.
8	Burrowing Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	1	.	.	.	.	.	.	.	1	1	.	.	1	1
7	Long-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Common Nighthawk	2	5	6	1	4	2	5	1	2	2	2	2	1	2	1	.
8	Chuck-will's-widow	4	3	1	1	.	.	.	.	1	1	2	1	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Chimney Swift	4	3	10	7	.	7	3	7	8	.	9	1	15	2	2	3
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	Belted Kingfisher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-headed Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-bellied Woodpecker	6	15	19	17	3	11	13	5	9	10	8	17	10	10	11	12
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Downy Woodpecker	9	10	4	8	8	3	3	4	2	4	6	8	5	2	4	4
8	Hairy Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Flicker	1	1	1	.	.	1	1	1	2	1	1	1	1	2	1	1
8	Pileated Woodpecker	1	1	1	1	1	3	4	1	1	3	2	2	1	1	4	3

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
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	3	9	3	5	2	3	2	3	2	3	8	18	6	8	3	3
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	.	.	.	.	.	.	.	.	.	.	2	1	1	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	4	3	4	3	1	3	3	7	6	1	1	2	4	5	6	4
8	White-eyed Vireo	3	2	5	5	2	1	1	2	2	1	3	3	1	2	2	2
8	Bell's Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	.	.	.	.	.	.	.	.	.	.	2	.	.	1	1	3
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Jay	16	17	17	14	5	7	8	7	12	6	10	11	13	18	7	9
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	American Crow	.	1	.	.	.	.	.	2	3	.	.	.	.	.	.	.
7	Fish Crow	13	13	7	14	14	10	50	8	42	77	54	137	19	97	7	11
7	Purple Martin	59	23	11	83	320	41	55	162	44	1	3	.	1	2	1	.
7	Tree Swallow	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.
7	Northern Rough-winged Swallow	1	.	.	.	.	5	.	.	.	.	.	1	.	.	.	.
7	Bank Swallow	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
7	Cliff Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
7	Cave Swallow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Barn Swallow	54	43	75	71	62	90	60	82	76	50	103	66	77	126	219	197
8	Carolina Chickadee	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tufted Titmouse	4	3	4	1	4	3	2	1	2	2	5	1	1	1	1	1
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Carolina Wren	32	44	41	40	27	31	27	25	31	16	24	36	19	40	32	18
8	Bewick's Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	3
8	Eastern Bluebird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Mockingbird	40	37	24	15	19	23	18	16	37	16	13	25	24	26	38	10
8	Brown Thrasher	1	4	4	5	1	3	4	1	1	.	3	3	3	2	2	1
7	European Starling	80	16	92	67	287	126	306	374	565	150	650	342	860	260	240	200
7	Common Myna	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Tennessee Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Northern Parula	1	1	2	1	1	1	1	1	1	1	9	1	1	1	2	1

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	Pine Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Prairie Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
7	Palm Warbler	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
7	"Yellow Palm Warbler"	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bay-breasted Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blackpoll Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Cerulean Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Black-and-white Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
8	American Redstart	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Prothonotary Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Worm-eating Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
8	Kentucky Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Yellowthroat	1	2	2	1	.	3	.	1	1	.	.	2	.	1	1	1
8	Hooded Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	3	6	5	9	21	5	4	3	9	6	4	3	2	1	1	1
8	Summer Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17
7	Eastern Towhee	22	30	49	22	29	17	23	32	32	16	15	12	32	24	28	30
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	81	87	84	102	88	52	78	72	63	39	52	71	76	58	49	43
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Blue Grosbeak	23	25	18	27	28	14	17	20	13	11	19	28	21	17	10	14
8	Lazuli Bunting	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Indigo Bunting	12	9	11	10	29	14	15	11	6	8	8	11	18	5	14	11
8	Painted Bunting	2	3	6	4	8	5	3	2	3	1	1	1	6	2	1	1
7	Dickcissel	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	400	410	420	430	350	310	210	435	415	305	705	450	1395	765	550	420
6	Eastern Meadowlark	10	11	3	3	2	5	8	14	3	5	15	11	9	9	2	11
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Common Grackle	12	16	38	7	30	11	71	51	16	13	32	25	105	37	9	31
7	Boat-tailed Grackle	295	255	400	350	2080	2605	490	1225	2690	1070	1540	1850	3680	1285	3020	1170

Table A. Part 6

Hab	SPECIES	5/27	5/30	6/2	6/5	6/10	6/12	6/16	6/19	6/23	6/26	6/30	7/3	7/8	7/10	7/14	7/17	
7	Shiny Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	4	1	2	.	1	1	4	1	6	2	2	23	1	7	2	6	
8	Orchard Oriole	2	9	5	3	2	2	2	1	3	1	2	2	5	1	1	1	
8	Baltimore Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Bullock's Oriole	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pine Siskin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Purple Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	American Goldfinch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	House Sparrow	.	.	.	.	1	.	.	1	.	.	2	.	.	.	.	.
8	Bronze Mannikin	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Orange Bishop	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Zebra Finch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8	Pin-tailed Whydah	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SPECIES	86	88	87	77	87	89	77	78	86	75	85	84	76	84	83	81	
	TOTAL INDIVIDUALS	2,990	2,720	3,785	3,063	5,755	5,874	4,229	5,030	7,183	4,474	5,441	5,357	7,798	5,130	5,995	3,571	

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
1	Pacific Loon	.	.	.	.	.	.	.	.
1	Common Loon	.	.	.	.	.	.	.	.
1	Pied-billed Grebe	.	.	1	3	.	.	1	.
1	Horned Grebe	.	.	.	.	.	.	.	.
1	Red-necked Grebe	.	.	.	.	.	.	.	.
1	Eared Grebe	.	.	.	.	.	.	.	.
1	Sooty Shearwater	.	.	.	.	.	.	.	.
1	American White Pelican	6	14	19	24	28	41	27	35
1	Brown Pelican	.	.	.	.	.	.	.	.
1	Neotropic Cormorant	.	.	.	.	.	.	.	.
1	Double-crested Cormorant	15	15	20	12	11	11	20	12
1	"California" D-c Cormorant	.	.	.	.	.	.	.	.
1	Anhinga	13	6	12	9	7	14	14	7
2	American Bittern	.	.	.	.	.	.	.	.
2	Least Bittern	4	4	3	2	2	2	1	5
2	Gray Heron	.	.	.	.	.	.	.	.
2	Great Blue Heron	39	21	14	28	21	25	22	18
2	Great White Heron	.	.	.	.	.	.	.	.
2	Great Egret	22	10	13	19	11	21	15	26
2	Snowy Egret	49	17	135	64	217	96	99	121
2	Little Blue Heron	13	13	30	10	11	20	20	38
2	Tricolored Heron	21	29	14	21	16	7	8	20
2	Reddish Egret	.	.	.	.	.	.	.	.
6	Cattle Egret	230	205	165	935	1570	1220	1220	1470
2	Green Heron	20	14	19	13	11	23	6	12
2	Black-crowned Night-Heron	3	1	1	.	.	.	.	1
2	Yellow-crowned Night-Heron	2	2	1	.	1	.	.	.
2	White Ibis	20	16	295	73	65	45	20	24
2	Glossy Ibis	16	13	22	69	215	190	152	42
2	White-faced Ibis	.	.	.	.	.	.	.	.
2	Roseate Spoonbill	.	.	.	.	.	.	.	1
2	Wood Stork	.	.	.	3	.	.	.	.
7	Black Vulture	5	8	12	15	8	15	13	44
7	Turkey Vulture	35	70	64	42	82	66	106	54
1	Black Swan	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
3	White-faced Whistling-Duck	.	.	.	.	.	.	.	.
3	Black-bellied Whistling-Duck	.	.	.	.	.	.	.	.
3	Fulvous Whistling-Duck	19	5	2	46	110	53	18	23
3	Greater White-fronted Goose	.	.	.	.	.	.	.	.
3	Egyptian Goose	.	.	.	.	.	.	.	.
3	Snow Goose	.	.	.	.	.	.	.	.
3	Ross's Goose	.	.	.	.	.	.	.	.
3	Canada Goose	.	.	.	.	.	.	.	.
3	Muscovy Duck	.	.	.	.	.	.	.	.
3	Wood Duck	2	1	2	4	.	1	.	9
3	Gadwall	.	.	.	.	.	.	.	.
3	Eurasian Wigeon	.	.	.	.	.	.	.	.
3	American Wigeon	.	.	.	.	.	.	.	.
3	American Black Duck	.	.	.	.	.	.	.	.
3	Mallard	1	6	6	6	5	4	1	5
3	Mottled Duck	11	23	37	67	33	56	17	56
3	Blue-winged Teal	.	.	.	.	.	3	.	.
3	Cinnamon Teal	.	.	.	.	.	.	.	.
3	Northern Shoveler	1	1	.	.	.	.	.	.
3	Northern Pintail	.	.	.	.	.	.	.	.
3	Green-winged Teal	.	.	.	.	.	.	.	.
3	Eurasian Green-winged Teal	.	.	.	.	.	.	.	.
1	Canvasback	.	.	.	.	.	.	.	.
1	Redhead	.	.	.	.	.	.	.	.
1	Ring-necked Duck	.	.	.	.	.	.	.	.
1	Greater Scaup	.	.	.	.	.	.	.	.
1	Lesser Scaup	.	.	.	.	.	1	.	.
1	Black Scoter	.	.	.	.	.	.	.	.
1	Bufflehead	.	.	.	.	.	.	.	.
1	Common Goldeneye	.	.	.	.	.	.	.	.
1	Hooded Merganser	.	.	.	.	.	.	.	.
1	Red-breasted Merganser	.	.	.	.	.	.	.	.
1	Ruddy Duck	.	.	.	.	.	.	.	.
5	Osprey	15	27	17	22	16	23	30	16
7	Swallow-tailed Kite	13	12	13	14	43	11	11	14

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
7	Mississippi Kite	.	.	.	.	.	.	.	.
7	White-tailed Kite	.	.	.	.	.	.	.	.
7	Snail Kite	.	.	.	.	.	.	.	1
5	Bald Eagle	.	3	2	1	.	1	1	2
7	Northern Harrier	.	.	.	.	1	.	.	.
8	Sharp-shinned Hawk	.	.	.	.	.	.	.	.
8	Cooper's Hawk	2	4	4	14	11	21	8	7
8	Red-shouldered Hawk	7	7	5	9	7	9	9	17
8	Broad-winged Hawk	.	.	.	.	.	.	.	.
8	Short-tailed Hawk	.	.	.	.	.	.	.	.
7	Swainson's Hawk	.	.	.	.	.	.	.	.
8	Red-tailed Hawk	6	6	7	11	7	15	8	10
8	Red-tailed dark-morph	.	.	.	.	.	.	.	.
8	Krider's Red-tailed Hawk	.	.	.	.	.	.	.	.
7	Rough-legged Hawk	.	.	.	.	.	.	.	.
7	Golden Eagle	.	.	.	.	.	.	.	.
6	Crested Caracara	.	.	.	.	.	.	.	.
7	American Kestrel	.	.	.	.	.	.	.	.
7	Eurasian Kestrel	.	.	.	.	.	.	.	.
7	Merlin	.	.	.	.	.	.	.	.
7	Peregrine Falcon	.	.	.	.	.	.	.	.
8	Common Peafowl	.	.	.	.	.	.	.	.
7	Gray Partridge	.	.	.	.	.	.	.	.
8	Wild Turkey	.	.	.	.	.	.	.	.
7	Ring-necked Pheasant	.	.	.	.	.	.	.	.
7	Northern Bobwhite	17	17	12	16	12	9	17	10
2	Yellow Rail	.	.	.	.	.	.	.	.
2	Black Rail	.	.	.	.	.	.	.	.
2	Clapper Rail	.	.	.	.	.	.	.	.
2	King Rail	2	1	.	.	1	1	1	1
2	Virginia Rail	.	.	.	.	.	.	.	.
2	Sora	.	.	.	.	.	.	.	.
2	Purple Gallinule	5	2	6	1	6	6	3	5
4	Common Moorhen	53	48	52	48	57	90	70	61
1	American Coot	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
1	Caribbean Coot	.	.	.	.	.	.	.	.
2	Limpkin	.	.	.	.	.	.	.	.
2	Sandhill Crane	.	.	.	.	.	.	.	.
2	Whooping Crane	.	.	.	.	.	.	.	.
4	Black-bellied Plover	.	.	.	.	.	1	3	.
4	American Golden-Plover	.	.	.	.	.	.	.	.
4	Semipalmated Plover	.	.	2	.	7	4	10	.
4	Wilson's Plover	.	.	.	.	.	.	.	.
4	Piping Plover	.	.	.	.	.	.	.	.
6	Killdeer	56	32	29	27	39	59	11	41
4	Black-necked Stilt	28	22	32	22	53	12	13	10
4	American Avocet	1	.	.	.	.	.	.	.
4	Greater Yellowlegs	.	1	10	2	5	1	2	4
4	Lesser Yellowlegs	14	23	16	12	53	7	12	24
4	Solitary Sandpiper	.	4	1	1	2	1	1	1
4	Willet	.	.	.	.	.	.	.	.
4	Spotted Sandpiper	.	1	1	1	2	2	2	.
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	8	3	5	4	8	12	22	4
4	Western Sandpiper	1	2	2	1	1	1	8	.
4	Least Sandpiper	6	48	30	23	34	18	96	27
4	White-rumped Sandpiper	.	.	.	.	.	.	.	.
4	Baird's Sandpiper	.	.	.	.	.	.	.	.
4	Pectoral Sandpiper	1	6	21	4	7	5	8	12
4	Sharp-tailed Sandpiper	.	.	.	.	.	.	.	.
4	Dunlin	.	.	.	.	.	.	.	.
4	Curlew Sandpiper	.	.	.	.	.	.	.	.
4	Stilt Sandpiper	.	14	6	5	17	2	3	1

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
6	Buff-breasted Sandpiper	.	.	.	.	1	.	.	.
4	Ruff	.	.	.	.	.	.	.	.
4	Short-billed Dowitcher	.	.	1	.	1	.	3	.
4	Long-billed Dowitcher	.	.	1	.	.	.	.	.
4	Wilson's Snipe	.	.	.	.	.	.	.	.
4	American Woodcock	.	.	.	.	.	.	.	.
4	Wilson's Phalarope	.	.	.	.	.	.	.	.
4	Red-necked Phalarope	.	.	.	.	.	.	.	.
4	Red Phalarope	.	.	.	.	.	.	.	.
5	Pomarine Jaeger	.	.	.	.	.	.	.	.
5	Parasitic Jaeger	.	.	.	.	.	.	.	.
5	Laughing Gull	.	.	.	1	1	.	.	.
5	Franklin's Gull	.	.	.	.	.	.	.	.
5	Little Gull	.	.	.	.	.	.	.	.
5	Bonaparte's Gull	.	.	.	.	.	.	.	.
5	Ring-billed Gull	.	.	.	.	.	.	.	.
5	Herring Gull	.	.	.	.	.	.	.	.
5	Thayer's Gull	.	.	.	.	.	.	.	.
5	Great Black-backed Gull	.	.	.	.	.	.	.	.
5	Lesser Black-backed Gull	.	.	.	.	.	.	.	.
5	Gull-billed Tern	.	.	.	.	.	.	.	.
5	Caspian Tern	.	.	.	.	.	.	.	.
5	Royal Tern	.	.	.	.	.	.	.	.
5	Sandwich Tern	.	.	.	.	.	.	.	.
5	Roseate Tern	.	.	.	.	.	.	.	.
5	Common Tern	.	.	.	.	.	.	.	.
5	Arctic Tern	.	.	.	.	.	.	.	.
5	Forster's Tern	.	.	.	1	.	.	2	.
5	Least Tern	6	3	3	1	.	.	.	.
5	Black Tern	.	.	.	6	.	9	.	.
5	Bridled Tern	.	.	.	.	.	.	.	.
5	Sooty Tern	.	.	.	.	.	.	.	.
5	Black Skimmer	.	.	.	.	.	.	.	.
8	Rock Pigeon	.	.	.	.	1	.	.	.
8	Eurasian Collared-Dove	7	1	2	1	2	1	2	1

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
8	Diamond Dove								
8	African Collared-Dove	1	.	.	.	.	.	.	.
8	White-winged Dove	1	.	.	3	1	1	2	.
8	Mourning Dove	82	81	84	96	114	440	214	114
8	Common Ground-Dove	34	30	51	17	15	16	20	29
8	Cockatiel	.	.	.	.	.	.	.	.
7	Budgerigar	.	.	.	.	.	.	.	.
8	Black-billed Cuckoo	.	.	.	.	.	.	.	.
8	Yellow-billed Cuckoo	3	1	2	2	2	1	.	1
8	Smooth-billed Ani	.	.	.	.	.	.	.	.
8	Groove-billed Ani	.	.	.	.	.	.	.	.
8	Barn Owl	1	2	2	1	4	1	1	3
8	Eastern Screech-Owl	.	.	.	.	.	.	.	.
8	Great Horned Owl	1	.	.	1	.	.	2	1
8	Burrowing Owl	.	.	.	.	.	.	.	.
8	Barred Owl	.	.	.	.	1	1	.	2
7	Long-eared Owl	.	.	.	.	.	.	.	.
7	Short-eared Owl	.	.	.	.	.	.	.	.
8	Northern Saw-whet Owl	.	.	.	.	.	.	.	.
8	Lesser Nighthawk	.	.	.	.	.	.	.	.
8	Common Nighthawk	2	2	2	1	1	.	.	.
8	Chuck-will's-widow	1	.	.	.	.	.	.	.
8	Eastern Whip-poor-will	.	.	.	.	.	.	.	.
7	Chimney Swift	.	1	.	.	.	14	20	.
8	Ruby-throated Hummingbird	.	.	.	.	.	.	.	.
8	Black-chinned Hummingbird	.	.	.	.	.	.	.	.
5	Belted Kingfisher	1	.	.	1	1	2	.	1
8	Red-headed Woodpecker	.	.	.	1	.	.	.	.
8	Red-bellied Woodpecker	23	12	13	17	19	15	12	12
8	Yellow-bellied Sapsucker	.	.	.	.	.	.	.	.
8	Downy Woodpecker	11	4	6	3	4	10	3	7
8	Hairy Woodpecker	.	.	.	.	.	.	.	.
8	Red-cockaded Woodpecker	.	.	.	.	.	.	.	.
8	Northern Flicker	1	1	1	1	1	2	2	1
8	Pileated Woodpecker	4	1	3	2	2	4	1	2

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
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	10	5	5	4	3	11	1	2
8	Brown-crested Flycatcher	.	.	.	.	.	.	.	.
8	Tropical Kingbird	.	.	.	.	.	.	.	.
8	Cassin's Kingbird	.	.	.	.	.	.	.	.
8	Western Kingbird	.	.	.	.	.	.	.	.
8	Eastern Kingbird	.	1	.	.	1	.	.	.
8	Gray Kingbird	.	.	.	.	.	.	.	.
8	Scissor-tailed Flycatcher	.	.	.	.	.	.	.	.
8	Fork-tailed Flycatcher	.	.	.	.	.	.	.	.
8	Loggerhead Shrike	2	5	1	4	4	2	4	3
8	White-eyed Vireo	3	1	1	5	5	1	7	1
8	Bell's Vireo	.	.	.	.	.	.	.	.
8	Yellow-throated Vireo	.	.	.	1	.	.	.	.
8	Blue-headed Vireo	.	.	.	.	.	.	.	.
8	Philadelphia Vireo	.	.	.	.	.	.	.	.
8	Red-eyed Vireo	1	2	1	1	2	1	2	3
8	Black-whiskered Vireo	.	.	.	.	.	.	.	.
8	Blue Jay	16	8	10	24	24	16	18	7
8	Florida Scrub-Jay	.	.	.	.	.	.	.	.
7	American Crow	1	.	.	.	.	.	.	.
7	Fish Crow	31	76	4	10	4	6	110	6
7	Purple Martin	.	.	.	.	.	1	.	.
7	Tree Swallow	.	.	.	.	.	.	.	.
7	Northern Rough-winged Swallow	.	.	.	.	.	.	.	.
7	Bank Swallow	.	1	1	.	.	.	1	1

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
7	Cliff Swallow	2	.	.	.	.	.	.	.
7	Cave Swallow	.	.	.	.	.	.	.	.
7	Barn Swallow	83	70	57	47	47	33	66	21
8	Carolina Chickadee	.	.	.	.	.	.	1	.
8	Tufted Titmouse	1	2	1	2	2	1	2	2
8	Brown-headed Nuthatch	.	.	.	.	.	.	.	.
8	Carolina Wren	53	28	28	35	28	40	31	33
8	Bewick's Wren	.	.	.	.	.	.	.	.
8	House Wren	.	.	.	.	.	.	.	.
8	Winter Wren	.	.	.	.	.	.	.	.
7	Sedge Wren	.	.	.	.	.	.	.	.
7	Marsh Wren	.	.	.	.	.	.	.	.
8	Golden-crowned Kinglet	.	.	.	.	.	.	.	.
8	Ruby-crowned Kinglet	.	.	.	.	.	.	.	.
8	Blue-gray Gnatcatcher	.	2	.	4	2	1	3	3
8	Eastern Bluebird	.	.	.	.	.	.	.	.
8	Veery	.	.	.	.	.	.	.	.
8	Gray-cheeked Thrush	.	.	.	.	.	.	.	.
8	Bicknell's Thrush	.	.	.	.	.	.	.	.
8	Swainson's Thrush	.	.	.	.	.	.	.	.
8	Hermit Thrush	.	.	.	.	.	.	.	.
8	Wood Thrush	.	.	.	.	.	.	.	.
8	American Robin	.	.	.	.	.	.	.	.
8	Gray Catbird	.	.	.	.	1	.	.	1
8	Northern Mockingbird	13	18	14	14	13	12	14	15
8	Brown Thrasher	9	4	1	6	5	3	12	4
7	European Starling	16	8	1	1	4	5	1	1
7	Common Myna	.	.	.	.	.	.	.	.
6	American Pipit	.	.	.	.	.	.	.	.
8	Cedar Waxwing	.	.	.	.	.	.	.	.
8	Blue-winged Warbler	.	.	.	.	.	.	.	1
8	Tennessee Warbler	.	.	.	.	.	.	.	.
8	Orange-crowned Warbler	.	.	.	.	.	.	.	.
8	Nashville Warbler	.	.	.	.	.	.	.	.
8	Northern Parula	.	1	.	1	.	1	2	3

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
7	Yellow Warbler	1	8	3	6	25	17	27	64
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	.	.	.	1	.	1	1	1
8	Pine Warbler	.	.	.	.	.	.	.	.
7	Prairie Warbler	1	2	1	5	4	3	2	1
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	.	3	.	2	5	2	1	1
8	Prothonotary Warbler	.	.	.	.	.	2	.	.
8	Worm-eating Warbler	.	.	.	.	.	1	.	.
8	Swainson's Warbler	.	.	.	.	.	.	.	.
8	Ovenbird	.	.	.	.	.	.	.	.
7	Northern Waterthrush	.	.	.	.	.	.	.	.
7	Louisiana Waterthrush	.	1	.	1	.	2	3	5
8	Kentucky Warbler	.	.	.	.	.	.	.	.
7	Common Yellowthroat	1	1	1	.	.	.	.	1
8	Hooded Warbler	.	.	.	.	1	.	.	.
8	Wilson's Warbler	.	.	.	.	.	.	.	.
8	Canada Warbler	.	.	.	.	.	.	.	.
7	Yellow-breasted Chat	1	1	.	.	.	.	1	1
8	Summer Tanager	.	.	.	.	.	.	.	.
8	Scarlet Tanager	.	.	.	.	.	.	.	.
8	Western Tanager	.	.	.	.	.	.	.	.

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
7	Eastern Towhee	38	25	26	29	32	41	36	52
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	106	47	39	48	37	60	57	47
8	Rose-breasted Grosbeak	.	.	.	.	.	.	.	.
8	Blue Grosbeak	16	17	18	15	10	20	17	15
8	Lazuli Bunting	.	.	.	.	.	.	.	.
8	Indigo Bunting	14	10	6	6	7	14	11	3
8	Painted Bunting	3	2	2	4	1	3	2	1
7	Dickcissel	.	.	.	1	1	.	.	.
7	Bobolink	.	.	.	.	.	.	.	.
7	Red-winged Blackbird	355	875	750	1370	720	1650	4015	2495
6	Eastern Meadowlark	8	5	7	5	1	1	2	1
7	Yellow-headed Blackbird	.	.	.	.	.	.	.	.
7	Rusty Blackbird	.	.	.	.	.	.	.	.
7	Brewer's Blackbird	.	.	.	.	.	.	.	.
7	Common Grackle	24	69	15	46	5	17	4	17
7	Boat-tailed Grackle	4050	485	70	610	580	190	840	120

Table A. Part 7

Hab	SPECIES	7/21	7/25	7/28	7/31	8/4	8/7	8/11	8/14
7	Shiny Cowbird	.	.	.	.	.	.	.	.
7	Bronzed Cowbird	.	.	.	.	.	.	.	.
7	Brown-headed Cowbird	.	20	8	4	3	2	1	.
8	Orchard Oriole	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	83	88	82	90	88	90	87	86
	TOTAL INDIVIDUALS	5,821	2,720	2,402	4,171	4,561	4,902	7,708	5,397

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 provides this habitat but as the farmer was gradually removing all the turf this habitat was being lost. 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
16-Aug-01	151	87	8	180	35	268	1428	546
19-Aug-01	126	98	21	168	28	374	1233	356
22-Aug-01	133	68	13	226	25	722	1313	330
26-Aug-01	206	86	22	171	33	687	1718	452
29-Aug-01	219	97	57	225	36	460	1456	361
2-Sep-01	154	93	85	816	36	489	3183	808
5-Sep-01	152	102	45	773	40	96	1821	661
9-Sep-01	60	105	9	202	28	546	1679	418
13-Sep-01	27	67	114	387	52	452	2559	175
16-Sep-01	151	96	134	1427	68	1630	2976	367
19-Sep-01	142	60	1	248	40	53	3562	661
23-Sep-01	149	43	1	95	11	417	691	373
26-Sep-01	155	64	25	322	18	243	3221	600
30-Sep-01	167	115	22	379	33	1033	2448	349
3-Oct-01	141	133	73	322	23	1006	2132	779
7-Oct-01	138	705	46	299	14	53	2483	673
10-Oct-01	215	659	24	188	51	523	2977	616
14-Oct-01	108	682	254	370	26	473	2101	592
17-Oct-01	117	632	3	476	18	493	1632	661
21-Oct-01	657	343	27	536	22	163	2354	649
24-Oct-01	687	698	49	355	18	197	1899	737
28-Oct-01	288	711	3734	332	23	76	1748	512
1-Nov-01	386	394	3547	199	26	135	2279	566
4-Nov-01	471	397	1597	295	28	100	2553	832
7-Nov-01	622	467	322	190	83	158	1899	627
11-Nov-01	370	409	1139	224	38	246	2276	599
15-Nov-01	751	546	660	217	127	326	3239	319
18-Nov-01	458	340	1135	358	85	140	1614	720
25-Nov-01	412	381	744	124	91	168	1928	511
27-Nov-01	419	415	637	188	56	203	1572	459
29-Nov-01	479	727	552	214	39	132	1719	567
2-Dec-01	359	527	253	134	74	174	1597	632
5-Dec-01	328	176	25	126	146	128	1369	419
9-Dec-01	519	121	30	119	50	646	1334	565
13-Dec-01	341	63	16	137	76	106	1047	625
16-Dec-01	428	64	25	112	307	181	993	673
19-Dec-01	436	72	30	127	65	635	2581	642
21-Dec-01	411	288	27	111	132	365	2227	493
27-Dec-01	373	72	15	113	155	313	2365	483
30-Dec-01	409	70	29	109	184	119	2254	712
3-Jan-02	394	57	25	219	268	2441	3028	3188
7-Jan-02	362	243	36	149	868	821	2339	384
10-Jan-02	394	172	22	178	1055	126	1252	713
13-Jan-02	302	612	19	239	583	537	1914	782
16-Jan-02	345	651	19	161	201	554	2229	697

Habitat	1	2	3	4	5	6	7	8
20-Jan-02	583	93	16	170	373	91	2018	1312
24-Jan-02	801	60	25	91	121	198	2026	647
27-Jan-02	561	72	20	212	43	141	7353	1308
3-Feb-02	536	44	20	97	53	196	5076	814
6-Feb-02	757	53	21	89	555	658	2168	651
10-Feb-02	526	80	26	138	133	270	4415	779
17-Feb-02	461	120	3	113	955	520	2586	1134
20-Feb-02	647	61	14	115	929	335	2076	996
24-Feb-02	533	72	26	105	132	604	3920	1144
27-Feb-02	927	43	21	116	726	159	6903	1045
4-Mar-02	675	73	66	163	478	148	3620	1305
6-Mar-02	494	73	53	127	77	343	3079	1709
10-Mar-02	922	60	39	95	64	501	2921	1356
14-Mar-02	834	113	24	83	34	66	3584	1375
17-Mar-02	792	92	48	94	55	175	1381	1036
19-Mar-02	738	93	65	97	32	75	1777	969
22-Mar-02	1012	91	94	193	84	218	2105	500
24-Mar-02	970	90	149	117	96	284	1769	525
27-Mar-02	1226	259	216	134	44	183	2771	604
31-Mar-02	950	223	31	92	49	47	1346	508
3-Apr-02	1587	199	32	120	61	298	1677	715
7-Apr-02	1060	129	18	181	166	32	983	532
10-Apr-02	1338	97	52	127	33	231	1544	595
14-Apr-02	752	95	23	114	104	275	1705	581
17-Apr-02	774	104	44	139	76	144	710	527
21-Apr-02	953	98	22	95	50	26	726	605
24-Apr-02	716	94	20	284	33	164	846	438
28-Apr-02	636	133	28	182	71	375	757	465
1-May-02	503	132	18	387	80	40	7687	595
6-May-02	207	124	23	406	96	34	553	541
9-May-02	293	170	23	352	140	53	515	541
12-May-02	200	137	17	944	136	192	555	426
15-May-02	291	148	22	1633	101	182	682	385
20-May-02	291	147	17	711	86	197	916	392
23-May-02	357	197	18	1758	118	332	1028	376
27-May-02	187	379	36	178	94	617	1076	423
30-May-02	54	332	24	212	61	486	971	580
2-Jun-02	237	538	38	203	34	474	1291	970
5-Jun-02	191	445	38	228	32	353	1152	624
10-Jun-02	79	804	53	346	66	868	3244	295
12-Jun-02	214	806	40	269	60	686	3295	504
16-Jun-02	672	514	25	139	67	404	1388	1020
19-Jun-02	328	591	17	84	57	708	2532	713
23-Jun-02	801	432	31	166	57	605	4016	1075
26-Jun-02	307	427	29	139	50	1108	1855	559

Habitat	1	2	3	4	5	6	7	8
30-Jun-02	219	325	15	119	32	580	3241	910
3-Jul-02	154	387	18	119	32	931	3064	652
8-Jul-02	132	225	12	38	32	712	6281	366
10-Jul-02	180	305	17	80	38	1074	2880	556
14-Jul-02	58	294	31	162	41	725	4311	373
17-Jul-02	36	225	41	84	28	557	2192	408
21-Jul-02	34	216	34	112	22	294	4674	435
25-Jul-02	35	143	36	172	33	242	1750	309
28-Jul-02	52	553	47	180	22	201	1038	309
31-Jul-02	48	303	123	123	33	967	2217	357
4-Aug-02	46	577	148	247	18	1611	1571	343
7-Aug-02	67	436	117	156	35	1280	2082	729
11-Aug-02	62	347	36	253	33	1233	5274	470
14-Aug-02	54	314	93	144	19	1512	2908	353

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
8.16.01	13.25	87	2,703
8.19.01	13.25	88	2,404
8.22.01	13.75	82	2,830
8.26.01	13.75	85	3,375
8.29.01	13.75	87	2,911
9.2.01	13.50	87	5,664
9.5.01	13.50	96	3,690
9.9.01	13.75	107	3,047
9.13.01	12.75	87	3,833
9.16.01	13.50	102	6,849
9.19.01	13.25	88	4,767
9.23.01	13.50	71	1,780
9.26.01	13.50	97	4,648
9.30.01	13.25	102	4,546
10.3.01	13.25	95	4,609
10.7.01	13.00	89	4,411
10.10.01	13.00	93	5,253
10.14.01	12.50	97	4,606
10.17.01	13.00	95	4,032
10.21.01	12.75	96	4,751

Date	Field work hours	Total species	Number of birds
10.24.01	13.00	95	4,640
10.28.01	12.00	97	7,424
11.1.01	12.00	94	7,532
11.4.01	11.25	94	6,273
11.7.01	12.00	103	4,368
11.11.01	12.00	103	5,301
11.15.01	12.00	98	6,185
11.18.01	11.75	107	4,850
11.25.01	11.50	103	4,359
11.27.01	11.75	107	3,949
11.29.01	11.75	100	4,429
12.2.01	11.75	105	3,750
12.5.01	12.00	105	2,717
12.9.01	11.75	100	3,384
12.13.01	11.75	95	2,411
12.16.01	11.75	97	2,783
12.19.01	11.75	103	4,588
12.21.01	12.00	105	4,054
12.27.01	11.75	97	3,889
12.30.01	11.75	109	3,886
1.3.02	11.50	102	9,620
1.7.02	12.00	106	5,202
1.10.02	12.00	110	3,912
1.13.02	12.00	108	4,988
1.16.02	12.25	112	4,857
1.20.02	12.25	102	4,656
1.24.02	12.50	101	3,969
1.27.02	12.00	100	9,710
2.3.02	12.25	103	6,836
2.6.02	12.50	101	4,952
2.10.02	12.25	103	6,367
2.17.02	12.25	92	5,892
2.20.02	12.50	100	5,173
2.24.02	12.50	103	6,536
2.27.02	12.50	92	9,940
3.4.02	12.25	108	6,528
3.6.02	12.50	101	5,955
3.10.02	12.50	104	5,958

Date	Field work hours	Total species	Number of birds
3.14.02	13.00	102	6,113
3.17.02	13.00	100	3,673
3.19.02	12.75	102	3,846
3.22.02	12.75	97	4,297
3.24.02	13.00	101	4,000
3.27.02	13.00	116	5,437
3.31.02	13.00	101	3,246
4.3.02	12.75	98	4,689
4.7.02	13.25	103	3,101
4.10.02	13.75	101	4,017
4.14.02	14.00	114	3,649
4.17.02	14.00	109	2,518
4.21.02	14.00	109	2,575
4.24.02	14.00	113	2,595
4.28.02	14.25	109	2,647
5.1.02	14.25	108	9,442
5.6.02	14.50	104	1,984
5.9.02	13.25	109	2,087
5.12.02	14.25	96	2,607
5.15.02	14.00	97	3,444
5.20.02	14.00	95	2,757
5.23.02	14.25	95	4,184
5.27.02	14.00	86	2,990
5.30.02	14.00	88	2,720
6.2.02	14.00	87	3,785
6.5.02	14.50	77	3,063
6.10.02	14.50	87	5,755
6.12.02	14.00	89	5,874
6.16.02	14.25	77	4,229
6.19.02	13.50	78	5,030
6.23.02	12.00	86	7,183
6.26.02	12.50	75	4,474
6.30.02	13.75	85	5,441
7.3.02	13.25	84	5,357
7.8.02	13.75	76	7,798
7.10.02	13.25	84	5,130
7.14.02	13.50	83	5,995
7.17.02	12.50	81	3,571

Date	Field work hours	Total species	Number of birds
7.21.02	14.00	83	5,821
7.25.02	13.00	88	2,720
7.28.02	12.00	82	2,402
7.31.02	13.00	90	4,171
8.4.02	13.75	88	4,561
8.7.02	13.75	90	4,902
8.11.02	12.75	87	7,708
8.14.02	13.50	86	5,397

Total days = 104 Total hours = 1,345.50

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 was visited and the number of hours spent on fieldwork for each of the 14 years.

Survey Year	No. visits	Total visits	No. hours	Total hours
8.15.98-8.14.99	88	88	1,000	1,000
8.15.99-8.14.00	104	192	1,207	2,207
8.15.00-8.14.01	104	296	1,328	3,535
8.15.01-8.14.02	104	400	1,345	4,880
8.15.02-8.14.03	105	505	1,367	6,247
8.15.03-8.14.04	104	609	1,380	7,627
8.15.04-8.14.05	94	703	1,261	8,888
8.15.05-8.14.06	131	834	1,629	10,517
8.15.06-8.14.07	147	981	1,803	12,320
8.15.07-8.14.08	152	1,133	1,801	14,121
8.15.08-8.14.09	157	1,290	1,829	15,950
8.15.09-8.14.10	155	1,445	1,806	17,756
8.15.10-8.14.11	155	1,600	1,822	19,578
8.15.11-8.14.12	153	1,753	1,558	21,136

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

This list covers all the species seen during the 14 years of the survey. As well as listing the species details are given of the highest daily count for each species together with the date on which the high count occurred to August 14, 2003 and to August 14, 2012. When the same high count occurred on more than one date only the first is given. I will be including this double table in Reports 1 to 3.

Species	Highest count to 8.14.03	Date of high count to 8.14.03	Highest Count to 8.14.12	Date of highest 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	7800	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
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
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
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	2.02
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
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
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
Acadian Flycatcher	2	9.11.02	4	9.10.03
Alder Flycatcher			1	9.14.03
Willow Flycatcher	1	7.27.99	1	7.27.99
Least Flycatcher	8	12.2.02	23	12.19.07
Eastern Phoebe	257	11.5.00	416	10.26.03
Vermillion Flycatcher	2	3.4.02	2	3.4.02
Ash-throated Flycatcher	19	1.20.02	16	12.14.07
Great Crested Flycatcher	18	7.3.02	45	5.16.07
Brown-crested Flycatcher	1	1.14.01	2	3.1.06
Tropical Kingbird	1	12.9.01	1	12.9.01
Cassin's Kingbird	1	12.4.99	2	2.29.04
Western Kingbird	72	1.27.02	72	1.27.02
Eastern Kingbird	347	8.31.99	347	8.31.99
Gray Kingbird	2	10.21.98	2	10.21.98
Scissor-tailed Flycatcher	5	3.31.02	8	12.11.05
Fork-tailed Flycatcher	1	7.23.00	1	7.23.00
Loggerhead Shrike	18	2.3.02	18	2.3.02
White-eyed Vireo	27	10.5.00	74	10.5.08
Bell's Vireo	1	2.6.00	1	2.6.00
Yellow-throated Vireo	2	4.3.02	2	4.3.02
Blue-headed Vireo	4	12.2.02	19	11.23.08

Philadelphia Vireo	1	10.14.99	1	10.14.99
Red-eyed Vireo	17	9.21.00	17	9.21.00
Black-whiskered Vireo			1	9.10.06
Blue Jay	46	10.5.00	180	10.17.07
Florida Scrub-Jay	2	4.17.02	2	4.17.02
American Crow	6	7.4.03	38	11.9.08
Fish Crow	4,400	1.27.02	4,400	1.27.02
Purple Martin	1,935	6.19.99	2850	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
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
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
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 was 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

Piping Plover (*Charadrius melodus*)

On May 20 I was scanning the shorebird flocks that were feeding on the extensive mud flats to the north of the Lust Road pump house when I spotted this bird. I had been looking at Semipalmated Plovers but this bird was different. This bird was paler but not perhaps as pale as I had expected. The bill was black, short and stubby. The forehead was white with the white extending back as a broad supercilium. The crown, ear coverts, mantle and wings were an even pale brown. This color was lighter than the Semipalmated's but I think a bit darker than the ones I might see at Ponce Inlet. There was a smudgy breast band, the same color as the mantle otherwise the underparts were white. Legs were a bright orange.

Red Phalarope (*Phalaropus fulicarius*)

I cannot now remember whether it was a tropical storm or a hurricane but on September 16 many of the fields were flooded with numerous shorebirds. I was working my way south down the Lake Level Canal scanning the fields when as I approached the McDonald Canal I spotted a phalarope spinning. I promptly got the telescope onto the bird and realized that it was a Red Phalarope and not the expected Wilsons or the very rare Red-necked. This bird was in full winter plumage i.e. the upperparts were all a pale even gray. The hind neck and rear crown were darker. The forehead and face were white with the exception of the ear coverts which were black. The bill was quite short and thick at the base; in length it was the same as the distance back to the nape. The bill was dark.

Audubon's Warbler (*Dendroica coronata auduboni*)

On November 11 I was by Canal Road checking the flocks of Yellow-rumped Warblers that were working their way through the cover where the storm water ponds are now. One bird caught my attention as it had a totally plain face, there was no supercilium. The throat patch had a tinge of buffish-

yellow; the patch itself was much smaller as it did not curl around onto the side of the neck. Apart from these two features it was a regular looking Yellow-rumped Warbler.

Lazuli Bunting (*Passerina amoena*)

On January 7 I was at the eastern end of the McDonald Canal when I found a Blue Grosbeak, a species that is not meant to winter here. Whilst watching this bird in the skeleton of a plant I saw that there was another smaller bunting with it; a species with which I was not familiar. It appeared to be a female with pale brown upperparts. There were two strong white wing bars not the thin lines one can see on an Indigo Bunting. The breast was also distinctive as it was a clear orange, no trace of any streaking, I looked for it. The rest of the underparts were a dingy white.

Appendix C

Banded or tagged American White Pelicans

In the summer of 2001 American White Pelicans summered at Lake Apopka for the first time. The high count was that of 2,400 on June 27, 2001. On June 24 whilst counting the flock of pelicans loafing on the mud at the end of Lust Road I noticed that some of them bore pink, numbered tags on their wings. I later found out that they had been banded by Eric Nelson in Minnesota. On June 27 I saw birds with green numbered leg bands and these had been banded by Tommy King at Chase Lake in North Dakota.

Eric Nelson has kindly provided the following information. All banding took place at Marsh Lake, Lac Qui Parle County in Minnesota. Tags 1 to 200 were used on June 19, 1999. Tags 201 to 450 were used on June 17, 2000. There were thousands of young pelicans on the island of varying ages but they only banded those that were seven or more weeks old. Apparently the young of about the same age moved around the island in a group or pod. A group of ten banders would surround a pod and slowly move in to tighten the pod. When the birds were calm they would grab the birds which would set off a commotion. However within 15 minutes between 100 and 200 young were banded.

Tommy King has also kindly provided information. Birds with D and E bands were banded in July, 2000. Birds with C, G or H bands were banded on July 12, 2001. All his banding took place at Chase Lake in North Dakota.

Table A Tommy King Banded American White Pelicans

6.27.01	E ?33	E 566	E 914							
7.4.01				E 587	E 604					
7.11.01				E 587		E 897	D 174			
10.10.01								E 271		
4.14.02			E 914						H 313	
4.17.02									H 313	G 417

Table B Eric Nelson Tagged American White Pelicans

6.24.01	160	206	230	248	316	318	351	356	427	446				
6.27.01			230	248		318					225			
7.1.01	160	206		248		318		356			225	408		
7.4.01				248		318								
7.8.01	160	206	230	248			351	356	427	446	225			
7.11.01	160	206	230	248	316	318	351	356	427				383	431
7.18.01									427					
7.22.01		206	230					356						
7.23.01													383	
7.27.01		206												
5.9.02		206												
6.19.02		206												

Single individuals from each location were seen again in the second year (E 914 and 206). The April 2002 sightings of E 914 might just relate to it passing through on passage but it would be too late for it to be travelling that far north. Young birds tend not to go as far north as the breeding areas. The October record adds another dimension.

The table detailing the wing tagged birds is much more extensive than the table of banded birds. The tags were large, quite visible and easy to read. The birds did manage to hide a few tags in their feathers. The bands were smaller with black on green numbers. These were harder to read and as the pelicans were often standing in shallow water they were often out of sight. All in all the wing tags were far superior to the bands.

This species needs areas of mud for loafing. In recent years Lake Apopka has been too high so no tagged or banded pelicans have been seen.

Appendix D

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 each 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; there were five pairs in 1999 with two pairs in 2004.

Limpkin

Breeding has yet to be proved but it has probably bred somewhere along the shore of Lake Apopka.

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

Barred Owl

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

Common Nighthawk

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

Chuck-will's-widow

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

Red-bellied Woodpecker

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

Downy Woodpecker

This is yet another pattern species but one with a variation. Step 1 involved 12 pairs in 1999 and 14 pairs in 2000, 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 indicates a move to step 3. I have seen nest holes for both this and the following species in utility poles out in the fields.

Pileated Woodpecker

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

Great Crested Flycatcher

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

Eastern Kingbird

Breeding has yet to be proved although birds may be present during the summer.

Loggerhead Shrike

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

White-eyed Vireo

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

Blue Jay

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

Fish Crow

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

Barn Swallow

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

Tufted Titmouse

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

Carolina Wren

This is yet another pattern species, a real one. Step 1 involved 79 pairs in 1999 with 69 pairs in 2000. Step 2 involved 153 pairs in 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 located 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

Breeding has not been proved although birds are often present during the summer.

Yellow-breasted Chat

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

Eastern Towhee

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

Northern Cardinal

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

Blue Grosbeak

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

Indigo Bunting

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

Painted Bunting

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

Dickcissel

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

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

Red-winged Blackbird

The number of pairs appears to be totally dependent on the height and type of vegetation. If it grass there are no pairs in contrast if the fields are full of woody plants with taller plants interspersed then there will be many pairs of Red-winged Blackbirds. The worst year was 1999 with 545 pairs and the best year was 2003 with 2582 pairs. Some, if not many, of the nests may be destroyed by mowing. It is likely that in 2003 some 1200 of the 2582 nests were destroyed. The adults then congregate at the Sand Farm Cattail Marsh for a few days before leaving to nest again at a new location.

Eastern Meadowlark

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

Common Grackle

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

Boat-tailed Grackle

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

Brown-headed Cowbird

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

Orchard Oriole

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

House Sparrow

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

CAUTION

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

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

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

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

SPECIES	1999	2000	2001	2002	2003	2004
Pied-billed Grebe	5				1	7
Anhinga		5				
American Bittern						1
Least Bittern	3	4	8	6	15	7
Great Blue Heron						5
Little Blue Heron		2				
Cattle Egret	413	103				
Green Heron	9	20	25	54	43	38
Fulvous Whistling-Duck	25	1				1
Wood Duck	1		1	2	1	1
Mallard	3	1				
Mottled Duck	12	13	7	12	4	
Bald Eagle	1	1	1	1	1	1
Cooper's Hawk		4	1	3	2	3
Red-shouldered Hawk	4	6	9	6	4	5
Red-tailed Hawk	6	11	6	6	8	6
Northern Bobwhite	40	38	65	89	125	87
King Rail				2	14	18
Purple Gallinule	21	23	17	40	51	54
Common Moorhen	104	129	126	146	214	305
American Coot	5					2
Killdeer	6	1	6	11		
Black-necked Stilt	6	7	18	30	1	1
Eurasian Collared-Dove			1	1	1	3

SPECIES	1999	2000	2001	2002	2003	2004
White-winged Dove					3	
Mourning Dove	32	14	29	23	22	26
Common Ground-Dove	40	59	116	98	236	191
Yellow-billed Cuckoo	7	10	16	26	48	49
Barn Owl	1	4		4	4	6
Great Horned Owl	2	5	7	9	8	13
Barred Owl	3	2	4	2	4	3
Common Nighthawk	5	4	13	8	12	16
Chuck-will's-widow	5	2	1	5	20	20
Red-bellied Woodpecker	27	39	58	56	76	94
Downy Woodpecker	12	14	31	37	39	38
Northern Flicker	5	5	10	12	10	18
Pileated Woodpecker	3	3	8	10	8	13
Great Crested Flycatcher	17	10	13	25	30	33
Loggerhead Shrike	6	5	5	6	6	5
White-eyed Vireo		5	3	13	14	16
Blue Jay	26	25	42	49	62	70
Fish Crow	6	11	6	4	6	10
Barn Swallow	25	48	52	44	34	36
Tufted Titmouse	3	3	7	9	16	16
Carolina Wren	79	69	153	162	185	171
Northern Mockingbird	55	51	59	62	61	60
Brown Thrasher	7	12	20	20	22	38
European Starling	16	11	8	11	9	7
Northern Parula	2	2	10	6	10	7
Yellow-breasted Chat		19	7	25	56	103
Eastern Towhee	10	48	72	91	206	207
Northern Cardinal	179	176	320	380	575	593
Blue Grosbeak	41	59	76	74	87	81
Indigo Bunting	11	32	54	65	96	157
[Painted Bunting]	8	9	19	20	19	22
Dickcissel	13	8			4	4
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	

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

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

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

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

Appendix E

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

Species	1999	2000	2001	2002	2003
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
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

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

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

Appendix F

Dragonflies and Damselflies

I have not kept a daily log of these insects. All I have recorded is the first date on which each species was seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed all the species that have been seen during the survey from August 15, 1998 to December 31, 2003. Here I detail the first dates for the years 1999 to 2003.

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

Species	1999	2000	2001	2002	2003
Twilight Darner	4.1.99	1.21.00	6.10.01	1.20.02	5.4.03
Cyrano Darner	4.23.99	8.6.00	7.29.01		3.29.03
Phantom Darner		1.1.00	8.29.01	8.11.02	
Two-striped Forceptail	5.1.99	5.16.00	4.16.01	5.15.02	5.15.03
Gray-green Clubtail	3.23.99	5.2.00	3.22.01		5.12.03
Cypress Clubtail	4.1.99			3.10.02	
Dragonhunter			7.27.01		
Prince Baskettail	3,23.99	3.18.00	3.22.01	3.19.02	3.24.03
Sepia Baskettail	5.14.99	3.18.00	7.29.01		5.4.03
Florida Baskettail	2.10.99	1.18.00		1.27.02	1.11.03
Four-spotted Pennant	4.20.99	3.18.00	4.16.01	3.31.02	4.13.03
Amanda's Pennant		7.4.00			
Halloween Pennant	4.20.99	3.21.00	5.6.01	7.3.02	3.24.03
Banded Pennant		6.3.00	5.8.01		6.26.03
Faded Pennant		3.10.00		7.3.02	6.1.03
Scarlet Skimmer	1.1.99	1.1.00	7.18.01	3.24.02	4.24.03
Pin-tailed Pondhawk		3.25.00	4.19.01	5.6.02	3.12.03
Eastern Pondhawk	1.29.99	2.29.00	1.17.01	1.24.02	3.2.03
Little Blue Dragonlet	6.22.99	3.18.00	5.4.01	4.28.02	4.6.03
Blue Corporal		3.3.00			
Golden-winged Skimmer	4.20.99	4.6.00	4.8.01	4.10.02	4.27.03
Bar-winged Skimmer					4.24.03
Slaty Skimmer	3.25.99	4.19.00	4.6.01	4.14.02	4.24.03
Needham's Skimmer			5.20.01	4.17.02	
Great Blue Skimmer		8.27.00	6.7.01	6.10.02	6.11.03
Marl Pennant			5.20.01		
Hyacinth Glider	2.17.99	3.14.00	3.11.01	3.22.02	3.12.03
Roseate Skimmer	1.1.99	1.1.00	1.28.01	1.24.02	3.24.03
Blue Dasher	2.10.99	2.29.00	2.25.01	2.3.02	3.5.03
Wandering Glider	5.1.99	1.1.00	4.2.01	3.22.02	3.9.03
Spot-winged Glider	4.9.99	8.27.00	5.24.01	9.29.02	5.26.03
Eastern Amberwing	2.10.99	1.18.00	2.21.01	3.19.02	3.12.03
Carolina Saddlebags	1.29.99	2.23.00	2.11.01	2.10.02	1.2.03
Black Saddlebags	1.11.99	3.27.00	4.2.01	3.6.02	2.26.03
Red Saddlebags	4.9.99		5.20.01	7.17.02	4.16.03

So far during the survey a total 53 species have been identified, of these 13 were damselflies.

Appendix G

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 H

Mammals

I have not kept a daily log of these mammals. All I have recorded is the first date on which they were seen in each calendar year. Thus the cycle is different from the bird report which runs from August 15 to August 14. Below I have listed all the species that have been seen from August 15, 1998 to December 31, 2003. I have only detailed those seen in the years 1999 to 2003.

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

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

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