

# THE BIRDS OF TOM RENICK COUNTY PARK 

AN OVERVIEW

JANUARY 1, 2016 to DECEMBER 31, 2022

By

Harry Robinson

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## A SEVEN-YEAR REVIEW

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## CONTENTS

Introduction ..... 1
Acknowledgements .....  2
Systematic List ..... 3
Table A Survey Statistics. ..... 120
Table B Highest daily bird counts ..... 121
Table C Historical bird counts at the park ..... 129
Addendum Bird abundance at Tom Renick County Park by Sam Krah ..... 132

## INTRODUCTION

This is basically a summary of what I and others saw over the first seven years of this project from January, 2016 to December, 2022. Initially I was still working at Lake Apopka so the coverage was more limited but from my retirement (August 31, 2017) I have not missed a day, Details of the days covered and the hours spent will be tabled at the back of this paper (Table A). During each survey I spent time looking to the east and to the west. To the east I looked out over the sea searching the areas up to a mile from the shore. To the west I looked towards the Halifax River (which I could not see) checking the utility wires and the skies above the river. During 2020 I walked a one-mile circuit to the west twice in the dark and often once during the morning. I also checked a clump of sea grapes in the migration season for warblers there is another small interesting area on the south side of the park by A1A. A series of seven annual reports covers the fine detail so this is more of an overview.

For each species I will cover first and last dates if applicable, highest numbers and main periods of passage. Each year has had very different features which make it all the more interesting.

For each year I have written an annual report. This is different as I will not have it printed rather after the book is completed each year, I will then add the data for that year to this paper making this an ongoing summary even if there is a time lag.

Table B follows and this shows the highest daily count during these seven years each year this will brought up to date.

Table C details the historical records these are not mentioned in the main systematic list or included in the highest counts.

The addendum by Sam Krah gives you a quick look at when each species was seen and just how common it is at this site.

## ACKNOWLEDGEMENTS

Whilst I have done the bulk of the birding a number of people have put in significant hours helping me. In particular I would like to thank Sam Krah and Kim Ramos. Others such as Sherri Brown, Scott Coupland, Paul Hueber, Luddy Lambertson, Lorri Lilja, Judy Morrison, Eli Schaperow and Tatyana St Laurent have all contributed thank you.

The text of this paper has been held by Sam Krah and Kim Ramos thank you I would hate to have to write it all again.

Sam Krah has prepared a table which shows the abundance of each species month on month, that was a much-appreciated major task, thanks Sam.

For this year I have decided to include two photographs from each book for the use of these photographs I thank Michael Brothers, Dave Flumm, Sam Krah, Lorri Lilja, Kim Ramos, Eli Schaperow and Tatyana St Laurent.

Once again Kim Ramos has come to my aid by creating the PDF version of this document and she added the photographs a new feature this year, thanks Kim.

Harry Robinson

Front cover picture: Parasitic Jaeger photographed by Michael Brothers

## SYSTEMATIC LIST

## Red-throated Loon (Gavia stellata)

Overall, they were seen from November 13 (2017) to April 13 (2020) with a late individual on May 8, 2016. Compared to the Common Loon this is a rarity the number of sightings has varied from seven to 20 a year. Normally only singles noted with two on January 17, 2019, two on January 29, 2016, two on February 25, 2019, two on November 19, 2021, two on November 23, 2021, two on December 7, 2016 and three on January 30, 2021. The high count is that of five on December 13, 2017.

## Pacific Loon (Gavia pacifica)

This is a vagrant for the early spring passage there were singles on January 29, 2021 (wind N 8) and February 14, 2022 (wind NW 4). For the winter passage there was one on December 25, 2022 (wind NW 3).

## Common Loon (Gavia immer)

Overall, they were seen from October 22 (2020) to May 9 (2022). Whilst they were often to be seen flying by offshore there were many sightings of individuals drifting to the south or to the north irrespective of the season. The early spring passage ran from January 1 (2020) to March 1 (2019) with high counts of five on January 3, 2016, five on January 5, 2019, five on January 25, 2018, seven on January 2, 2018, seven on January 10, 2016 and seven on January 18, 2019. The late spring passage ran from February $28(2018,2021)$ to May $9(2022)$ with high counts of three on April 17, 2018, three on April 8, 2020 and four on March 17, 2019. The late fall passage ran from October $22(2020)$ to December $1(2018,2021)$ with high counts of ten on November 22, 2019, 11 on November 23. 2021, 13 on November 22, 2018, 17 on November 26, 2016, 19 on November 12, 2016, 20 on November 19, 2021 and 31 on November 16, 2022 the latter is the highest count for the park. The winter passage ran from November 25 (2018) to January 1 (2016) with high counts of 12 on December 19, 2018, 27 on December 14, 2017 and 29 on December 21, 2018.

## Pied-billed Grebe (Podilymbus podiceps)

Over the seven years there are 12 records for the late fall passage. Singles were seen on the sea from September 25 (2019) to November 27 (2022) with exceptionally a high count of two on September 25, 2019. Apart for this September sighting the records started on October 14 (2018).

## Horned Grebe (Podiceps auritus)

An uncommon migrant and winter visitor they could be seen flying by or sitting on the sea. The late fall passage was the heaviest event. The early spring passage ran from January 5 (2017) to February26 (2022) with a high count of five on January 20, 2018. The late spring passage ran from March 3 (2018) to March 19 (2018) there were singles on four dates. The late fall passage ran from November 4 (2018) to November 28 (2022) with high counts of six on November 13, 2017 and 12 on November 13, 2016 the count of 12 is the highest count for the park. The winter passage ran from November $28(2017,2019)$ to December $24(2017)$ with high counts of six on November 28, 2017, eight on December 17, 2016 and nine on December 4, 2016.

## Red-necked Grebe (Podiceps grisegena)

This is a vagrant for the early spring passage there was one on February 26, 2021 (wind calm) with for the winter passage there was one on December 5, 2021 (wind calm).

## Eared Grebe (Podiceps nigricollis)

This is a vagrant for the early spring passage one in winter plumage flew to the south on February 14, 2017. For the late fall passage there was one on November 26, 2022. For the winter passage a party of four flew to the south on December 4, 2020 this is the highest count for the park.

## Yellow-nosed Albatross (Thalassarche chlororhynchos)

This is a vagrant for the summer passage one flew to the south on May 31, 2021 (wind ENE 17).

## Northern Fulmar (Fulmarus glacialis)

This is another vagrant that normally does not reach Florida. In 2017 for the late fall passage there was one on October 3 (wind ENE 18) with two on October 4 (wind ENE 25) and four on October 5 (wind NE 30) later there was one on November 11 (wind NE 15). The count of four is the highest count for the park.

## Cory's Shearwater (Calonectris diomedea)

There are two races of this species that can be separated with a good view of the underwing pattern. It is quite possible that these are two separate species. Unless I obtained a good view, I treat all as Cory's Shearwaters if I can sort out the other race then they are dealt with separately under the name of Scopoli's Shearwater.

With the exception of 2017 and 2022 this was a rare visitor. For the late spring passage there were two on April 29, 2022. For the summer passage there were 31 records from June 9 (2017) to August 2 (2020) with a high count of 15 on June 26, 2020 then there was 2022 In that year there were three on June 17 with 21 on June 20 (wind NE 8), then three seen on June 21. There were 64 on June 25 with 147 on June 26 (wind E 10), then 18 seen on June 27 with seven on June 28, three on June 29, three on June 30 and singles on July 1, July 6 and July 9. The count of 147 is by far the highest count for the park. For all years for the early fall passage there were singles on September 3, 2018, September 15, 2019 and September 21, 2019 with two on September 16, 2020. The other main event was the late fall passage in 2017 there were 23 on October 2 (wind ENE 18) with 24 on October 4 (wind ENE 25), then 14 seen on October 5 (wind NE 20) with ten on October 6 (wind SE 3). There were 15 on October 7 (wind SE 5) with three to October 16 (wind E 6). There were six on October 17 (wind N 18) with singles to October 19. There were two on October 20 (wind NE 13) with singles to October 22. There were three on October 23 (wind S 12) with two on October 29 (wind NW 12) and singles to November 11. There were four on November 12 (wind NE 15) and November 14 (wind N 20) with one on November 20. In 2020 there were singles on seven dates to November 25 with two on October 26, three on November 5 and five on October 22. Exceptionally there was a winter record as one seen on December 13, 2019.

## Scopoli's Shearwater (Calonectris diomedea diomedea)

Almost certainly this is the rarer of the two races. For the early spring passage there was one on January 28, 2022. There are eight records for the summer passage from June 10 (2017)
to July 18 (2018) with high counts of two on June 17, 2022, July 5, 2018 and July 18, 2018. For the early fall passage there were singles on August 30, 2019 and September 20, 2019. The main fall passage ran from October 1 (2018) to November 13 (2017) with high counts of three on October 7, 2017 (wind SE 5) and five on October 2, 2017 (wind ENE 18). The count of five is the highest count for the park. Again, there were winter sightings as singles seen on December 4, 2018 and December 16, 2021.

## Great Shearwater (Puffinus gravis)

I had expected the Cory's Shearwaters to be the less common species but the opposite appears to be the case. For the early spring passage there were two on February 22, 2022. For the late spring passage there were singles on March 22, 2021 and April 28, 2022. For the summer passage there were 38 records from May 1 (2018) to August 3 (2020) with high counts of seven on June 25, 2020, seven on June 26, 2020 and eight on June 21, 2020. The early fall passage ran from August 26 (2017) to September 16 (2020) with high counts of two on September 1, 2019 and three on August 27, 2017. The main event was the late fall passage the majority as with the Cory's Shearwater were seen in 2017. This event ran from September 16 (2020) to October 19 (2020 with high counts of 12 on October 3, 2017 (wind ENE 20) and 15 on October 2, 2017 (wind ENE 18). The count of 15 is the highest count for the park. Apart from 2017 no more than two a day were seen. There was a later fall record as one seen on November 14, 2018. Finally for the winter passage there were singles on December 23, 2022, December 27, 2019 and December 28, 2022.

## Sooty Shearwater (Puffinus griseus)

There are only sightings in 2017, 2019, 2020, 2021 and 2022; 12 in all. For the summer passage there were singles on May 15, 2021, May 21, 2021, June 5, 2022 and June 21, 2020 with three on May 22, 2021. For the early fall passage there was one on September 14, 2019 with two on September 21, 2020. For the late fall passage there were one on October 6, 2017, one on October 8, 2019, two on October 9, 2019 and 16 on October 2, 2017 (wind ENE 18). Later there was one on November 11, 2017. The count of 16 is the highest count for the park.

## Manx Shearwater (Puffinus puffinus)

There are sightings in 2017, 2018, 2019, 2020, 2021 and 2022; 18 in all. For the late spring passage there was one on March 7, 2021. For the fall passage there were singles on September

20, 2020 and September 24, 2017 with two on October 4, 2017 (wind ENE 25). Only singles then noted on October 5, 2017, October 6, 2017, October 10, 2019, October 19, 2017, October 21,2020, October 23, 2018, November 5, 2020, November 6, 2021, November 8, 2022, November 21, 2019 and November 27, 2022. For the winter passage there were singles on December 3, 2022 and December 16, 2021 with three on December 2, 2022 (wind NE 7). The latter is the highest count for the park.

## Audubon's Shearwater (Puffinus Iherminieri)

There are sightings in 2017, 2018, 2019, 2020, 2021 and 2022: 14 in all. This is a tiny shearwater so may well be under-recorded. For the late spring passage there were singles on April 15, 2017, April 23, 2022, April 25, 2022 and May 1, 2022. For the summer passage there was one on May 15, 2018. For the early fall passage there were singles on July 5, 2018, July 6, 2022, July 18, 2020 and July 26, 2020 with five on August 2, 2020, then singles seen on August 3, 2020, August 4, 2020 and August 13, 2021. There was a late individual on September 20, 2019. The count of five is the highest count for the park.

## Wilson's Storm-Petrel (Oceanites oceanicus)

There are sightings in 2017, 2018, 2020, 2021 and 2022; 15 in all. For the summer passage there were singles on April 16, 2017, May 12, 2020, May 12, 2022 and June 26, 2022 with two on April 29, 2022. In 2021 there was a major event with one on May 17, 22 on May 20 and 28 on May 21 (wind E 11), then six seen on May 22 with nine on May 23 and one on May 31. For the early fall passage there were singles on June 17, 2020 and July 5, 2018 with two on June 27, 2020 and two on September 10, 2017. The count of 28 is the highest count for the park.

## Leach's Storm-Petrel (Oceanodroma leucorhoa)

The only records come from 2017, 2020, 2021 and 2022. There were six sightings in 2021 for the summer passage. There were 17 on May 20 with $\mathbf{3 0 7}$ on May 21 (wind E11), then 58 seen on May 22 with 13 on May 23, six on June 1 and one on June 2 . For the other years for the late spring passage there was one on April 23, 2022 with 32 on April 29, 2022. For the summer passage there was one on May 13, 2022. There were five sightings for the late fall passage, there were singles on October 1, 2017, October 4, 2017 and October 21, 2020 with later two on November 11, 2017 (wind NE 15) and one on November 12, 2017. The count of 307 is the highest count for the park.

## Band-rumped Storm-Petrel (Oceanodroma castro)

The only records come from 2017, 2020, 2021 and 2022 there were ten sightings. For the summer passage there were three on April 16, 2017 with one on June 26, 2022 then there was 2021. In that year there were singles on May 18 and May 19 with six on May 20 (wind E 20), then five seen on May 21 with two on May 22 and two again on May 23 . For the late fall passage there was one on October 2, 2017 with another on November 9, 2020. The count of six is the highest count for the park.

## Madeiran Storm-Petrel (Oceanodroma castro)

All the Band-rumped Storm Petrels seen in 2021 were believed to belong to this species so there were singles on May 18 and May 19 with six on May 20, then five seen on May 21 with two on May 22 and two again on May 23. The count of six is the highest count for the park.

Grant's Storm-Petrel (Oceanodroma (undescribed)
One believed to be of this species was seen on June 26, 2022.

## White-tailed Tropicbird (Phaethon lepturus)

This is a vagrant for the summer passage there was an adult on April 18, 2019 (wind S 12); this individual flew inshore and then turned to the north. In 2022 on June 29 an immature flew to the north (wind calm).

## Masked Booby (Sula dactylatra)

This is a vagrant for the early spring passage there was one in first-winter plumage on January 3, 2021 (wind W 4). For the summer passage there were singles in first-winter plumage on June 15, 2021 (wind SW 8) and June 27, 2020 (wind calm) and an adult flew to the north on May 27, 2022 (wind SW 6). For the early fall passage there was one in first-winter plumage on August 27, 2020 (wind SE 5). For the winter passage one in first-winter plumage flew to the south on December 24, 2017 (wind SW 7) this was the day with the huge passage of Northern Gannets $(2,375)$.

## Brown Booby (Sula leucogaster)

In all over the seven years they were recorded on 69 dates there were no sightings in January. For the early spring passage there was one on February 14, 2021. The late spring passage ran from March 2 (2018) to April 17 (2019) singles were seen on ten dates with two on March 20, 2021. The summer passage ran from April $28(2020,2022)$ to July $2(2020)$ singles noted on 25 dates with two on April 28, 2020 and two on June 26, 2016. The individual seen on June 28, 2017 fell asleep in the surf. The early fall passage was a weak event it ran from July 25 (2019) to September 23 (2020) singles were seen on 11 dates. The late fall passage was like the summer passage a main event, the passage ran from September 29 (2017) to November 24 (2021). Apart from a passage in 2017 singles were noted on ten dates. In 2017 there was one on the November 1 with four on the November 2 (wind NE 2), then three seen on the November 3 (wind N8) with one on the November 5. The count of four is the highest count for the park. For the winter passage singles were seen on December 3, 2017, December 10, 2020, December 11, 2017 and December 17, 2019.

## Northern Gannet (Morus bassanus)

A common fall to spring visitor they were seen daily either on passage or feeding offshore. The last dates in the spring ranged from May 17 (2020) to June 9 (2022). There were four summer sightings as singles were seen on June 15, 2019, June 15, 2021, June 25, 2020 and July 1, 2018. The first fall sightings ranged from October 15 (2017) to October 31 (2021). There was no particular peak to the spring passage the higher counts were 963 on February 15, 2017 (wind SW 18), 1,520 on January 24, 2019 (wind NW 8), 1,575 on January 9, 2022 (wind SE 6) and 2,028 on January 4, 2019 (wind SW 8). Generally, the spring numbers were lower than those in the winter. The peak counts in the winter fit into two periods firstly from November 27 (2016) to December 17 (2016) and later from December 24 (2017) to December 27 (2017, 2018). The highest counts were: 3,118 on December 9, 2018 (wind SW 12), 3,683 on December 27, 2018 (wind E 12), 4,880 on December 17, 2016 (wind S 6) and 4,897 on December 14, 2018 (wind SE 7) the latter is the highest count for the park. Winds from the SE to SW tended to produce higher counts.

## American White Pelican (Pelecanus erythrorhynchos)

All sightings were over the Halifax River. Most were seen between mid-November and mid-February. The early spring passage ran from January 1 (2021) to March 5 (2021) this was the strongest event of the year with higher counts of 30 on February 18, 2017, 31 on February 16, 2018, 45 on January 21, 2020, 53 on January 28, 2018, 99 on January 24, 2020 and 120 on January

24, 2018. The latter is the highest count for the park. There were very few records for the late spring passage there were eight sightings from March 7 (2020) to April 15 (2018) with high counts of 15 on March 10, 2017 and 15 on March 20, 2018. There were no May records. For the summer passage there were three on June 4, 2018, two on June 13, 2017 and three on June 13, 2018. That was it until October. In the fall they were seen from October $3(2020,2022)$ to November $29(2018,2021)$ the higher counts were 33 on November 16, 2017, 52 on October 9, 2020, 56 on November 25, 2017 and 78 on November 28, 2021. The winter passage was similar the passage ran from November 30 (2021) to December 30 (2020) with higher counts of 35 on December 21, 2016, 38 on December 16, 2022, 44 on December 12, 2018 and 62 on December 19, 2020.

## Brown Pelican (Pelecanus occidentalis)

Seen every day flying either to the north or to the south or both; I could not identify how many birds were seen each day I just counted them all. A few were seen flying over the Halifax River. Counts in the 100's could occur at any time but the main spring passage ran from March 3 (2017) to June 6 (2016) the highest counts fitted into three periods. The first ran from March 19 (2016) to April 2 (2020) with high counts of 656 on March 28, 2019, 893 on April 2, 2020, 1,058 on March 19, 2016 and 2,536 on March 26, 2018; the latter is the highest count for the park. The second ran from April 8 (2017) to April 17 (2016) with high counts of 652 on April 8, 2017, 755 on April 17, 2016 and 839 on April 10, 2018. The third ran from May 16 (2018) to May 24 (2017) with a high count of 719 on May 24, 2017. The lowest counts of the year were normally from July to mid-September. The main fall/winter passage ran from September 27 (2020) to December 31 (2016) again there were three sets of higher counts. The first ran from November 20 (2017) to November 27 (2019) with higher counts of 730 on November 20, 2017, 835 on November 22, 2018, 1,045 on November 27, 2019 and 2,486 on November 24, 2016. The second ran from December 7 (2020) to December 17 (2017) with higher counts of 544 on December 10, 2021, 548 on December 16, 2018, 628 on December 14, 2020, 1,165 on December 17, 2017, 1,295 on December 13, 2019 and 1,910 on December 7, 2020. The third ran from December 22 (2016, 2018) to December 26 (2017) with higher counts of 884 on December 25, 2019 and 973 on December 26, 2017. On April 12, 2018 a loaded barge was being towed to the south a mile out to sea; a party of at least 60 pelicans was standing on top of the cargo hitching a ride to the south!

## Double-crested Cormorant (Phalacrocorax auritus)

Passage could be seen over the river or out at sea; individuals could often be seen feeding in the surf. They were seen in the spring through to July $5(2017,2019)$ but the passage only ran from March 1 (2018) to May 8 (2018). Again, the main spring passage appeared to have three
peaks to the passage. The first ran from March 28 (2016) to March 30 (2019) with a high count of 980 on March 28, 2018. The second ran from April 2 (2016) to April 8 (2018) with high counts of 456 on April 8, 2018, 555 on April 6, 2020, 1,310 on April 2, 2016 and 2,650 on April 3, 2019. The latter is the highest count for the park. The third ran from April 13 (2016) to April 15 (2017) with a high count of 365 on April 15, 2017. Unlike the Brown Pelican there was no noticeable fall/winter passage they were seen from July 4 (2020). The highest counts were of 320 on October 4, 2020, 377 on November 1, 2020, 416 on December 6, 2021 and 977 on October 29, 2022.

## Great Cormorant (Phalacrocorax carbo)

None were seen in 2016 and 2021. A total of seven were seen from 2017 five for the early spring passage and two for the winter passage. For the early spring passage one in first-winter plumage flew to the south on January 8, 2019. One in first-winter plumage was seen on January 12, 2020. One in second-winter plumage flew to the north on January 16, 2018. One in secondwinter plumage flew to the north on February 10, 2019. Finally, a sub-adult was seen on February 28, 2020. For the winter passage one in first-winter plumage flew to the south on December 3, 2017 with one in first-winter plumage on December 17, 2022.

## Anhinga (Anhinga anhinga)

They could be seen over the river all year long but on many days, they were probably lost in the heat haze; there were no sightings offshore. There was a significant spring passage with flocks circling high over the river this event ran from February 22 (2022) to May 5 (2019) with high counts of 75 on April 9, 2016, 88 on March 29, 2021, 123 on March 22, 2019, 143 on March 25, 2018, 170 on February 22, 2022, 200 on March 11, 2022 and 272 on April 9, 2018. For the summer passage there were 83 on June 17, 2021. There was no regular reciprocal passage in the fall but in 2017 there were 46 on July 29 and 133 on August 29. Then in 2020 there were 417 on September 1 this is the highest count for the park. There were also 92 on August 23, 2021 with 75 on July 20, 2022.

## Magnificent Frigatebird (Fregata magnificens)

Most sightings are from mid-May to the end of the year they were most often seen out over the sea but they could be found gliding along above the Halifax River. For the early spring passage there were singles on January 10, 2018 and January 28, 2017. There were no records for February or March. For the late spring passage there was one on April 14, 2019 with two on April

30, 2020. In all there were 16 records for the summer passage this ran from May 10 (2020) to June 22 (2021) with high counts of two on May 16, 2019 and two on May 30, 2021. For the early fall passage there were 14 records from July 7 (2021) to September 11 (2019) with high counts of two on July 25,2018 and five on September 11, 2019. The late fall passage was the strongest event with 15 sightings the event ran from September $28(2018,2019)$ to November 26 (2016) with high counts of two on October 29, 2019 and five on October 26, 2019. The counts of five are the highest counts for the park. For the winter passage there were nine records from November 28 (2019) to December 31 (2020) with a high count of two on December 24, 2017. On October 29, 2019 the two birds landed on the rigging of a shrimp boat and stayed there for some time I have not seen this behavior before.

## American Bittern (Botaurus lentiginosus)

This is a vagrant for the late spring passage one flew to the south on March 11, 2022. For the early fall passage, one flew to the south out at sea on September 3, 2021. For the late fall passage, one flew to the north by the Halifax River on October 6, 2017.

## Least Bittern (lxobrychus exilis)

This is a vagrant for the summer passage one flew to the north over the island on June 15, 2020. For the early fall passage, one flew to the south with a flock of Snowy Egrets on September 17, 2022.

## Great Blue Heron (Ardea herodias)

A spring and fall passage migrant that could be seen over the river or out at sea; it appears that in the spring flocks travelling north cut across the "bay" from the cape reaching the shore near the park. Records for January and early February were very limited. Through the rest of the year, they could frequently be seen on the beach fishing or begging from the fishermen. The main spring passage ran from March 3 (2021) to April 29 (2020) with high counts of 56 on March 20, 2018, 73 on March 19, 2016, 86 on March 3, 2021 and 103 on March 22, 2017. The main fall passage ran from August 31 (2020) to November 5 (2018) with high counts of 165 on October 1, 2016 and 206 on September 18, 2020 the latter is the highest count for the park.

## Great White Heron (Ardea occidentalis)

For the winter passage one flew to the south over the Halifax River on December 5, 2022.

## Great Egret (Ardea alba)

As a migrant they could be seen over the sea or over the river however very few were seen on the actual beach. They were seen throughout the year but there was no evidence of passage in December and early January. The spring passage ran from January 19 (2019) to May 26 (2018) with high counts of 135 on April 8, 2018, 179 on April 2, 2019 and 204 on March 23, 2019. The latter is the highest count for the park. By comparison the numbers for the rest of the year were very low. The summer passage ran from June 1 (2016) to June 30 (2022) with a high count of 41 on June 20, 2021. The early fall passage ran from July 1 (2022) to October 3 (2022) with high counts of 18 on September 14, 2018 and 31 on September 30, 2022. The late fall passage ran from September 30 (2017) to November 30 (2022) with high counts of 41 on October 1, 2020, 43 on October 17, 2017 and 51 on November 5, 2018. There was no winter passage.

## Snowy Egret (Egretta thula)

Present all year on the beach regardless of the number of people there; it was also a passage migrant over the river or the sea. There appeared to be a breeding colony along the river somewhere to the south. As with the Great Egret there was no real winter and early January passage. The spring passage ran from January 18 (2017) to May 23 (2018) with high counts of 55 on March 22, 2017, 59 on March 23, 2019, 63 on April 4, 2019, 100 on March 12, 2018, 125 on April 1, 2022 and 170 on April 8, 2018. The summer passage ran from May 28 (2017) to July 3 (2016) with high counts of 21 on June 8, 2016, 21 on June 16, 2022 and 31 on June 8, 2022. The early fall passage ran from July 1 (2022) to October 2 (2022) with high counts of 66 on September 2, 2021, 75 on September 26, 2018 and 103 on September 7, 2022. The late fall passage ran from October 3 (2022) to November 29 (2022) with high counts of 41 on October 5, 2019, 48 on October 6, 2022, 115 on October 14, 2018, 120 on October 14, 2020, 138 on October 7, 2021 and 212 on October 17, 2017 the latter is the highest count for the park. For the winter passage there were 16 on December 24, 2017 this was the only record of note for that passage.

## Western Reef Heron (Egretta gularis)

This species is nearly unknown in North America so having a sighting in Florida is outstanding; this is of course a first record for the State. On November 5, 2020 a dark morph adult flew to the north along the shore (wind E 17).

## Little Blue Heron (Egretta caerulea)

During migration they could be seen flying over the sea or over the river I did not see them on the beach. There were just 18 sightings for the early spring passage which ran from January 4 (2018) to February 22 (2021); the highest counts were of two on February 8, 2022, two on February 14, 2021 and two on February 18, 2017. The late spring passage was the strongest event of the year it ran from February 23 (2019) to May 2 (2018) with high counts of 41 on April $8,2016,62$ on April $8,2018,74$ on March 22, 2017 and 84 on March 26, 2019. During the summer no more than seven a day were seen. The early fall passage ran from July 1 (2022) to September 25 (2022) there was only a noticeable passage in 2016, 2017 and 2021. The higher counts were 36 on August 26, 2017, 73 on September 3, 2016 and $\mathbf{1 2 0}$ on September 1, 2021 this is the highest count for the park. The late fall passage was much lighter it ran from October 5 (2016) to November 23 (2019) with a high count of 89 on October 14, 2020. Only singles seen on eight dates for the winter passage they were seen from December 3 (2017) to December 26 (2018).

## Tricolored Heron (Egretta tricolor)

Sightings from December to February are very limited; at other times they could be seen migrating over the sea or the river. I do not remember seeing any on the shore. There were 18 records for the early spring passage from January 11 (2021) to February 26 (2021) with a high count of five on February 18, 2017. The late spring passage ran from February 28 (2019) to May 5 (2017) with high counts of 20 on March 22, 2017, 27 on April 8, 2016, 34 on April 8, 2018, 37 on April 16, 2021, 54 on April 2, 2019, 58 on March 29, 2021 and 70 on March 26, 2019. Numbers were much lower for the summer passage this ran from April 30 (2021) to June 29 (2018) with high counts of 15 on June 3, 2018, 18 on July 2, 2021, 20 on June 21, 2021 and 24 on June 21, 2020. The early fall passage ran from June 30 (2019) to September 25 (2022) with high counts of 23 on September 14, 2016 and 60 on September 4, 2017. The late fall passage ran from September 28 (2018) to December 1 (2018) with high counts of 28 on September 28, 2018, 39 on October 14, 2020 and 107 on October 17, 2017. The latter is the highest count for the park. For the winter passage there were singles on December 5, 2020, December 7, 2022, December

15, 2021, December 18, 2019, December 24, 2020 and December 27, 2020. Whilst the highest count was in the fall the late spring passage was the main event.

## Reddish Egret (Egretta rufescens)

There are records for every month, 87 in all. With five exceptions they were all seen over the river; the exceptions were: on October 14. 2017 one flew to the south over the sea, on July 5, 2019 one flew along the beach, on October 1, 2019 one flew south at sea with a flock of four Tricolored Herons, on September 2, 2020 one flew to the south in a flock of 5 Snowy Egrets and there was one on the beach on November 2, 2020. Most sightings were noted from June to November. For the early spring passage there were singles on 11 dates from January 1 (2019) to February 26 (2018, 2022). Whilst singles seen on March 1, 2022, March 5, 2018, March 12, 2020 and March 14, 2021 the late spring passage really ran from March 21 (2020) to April 26 (2017, 2020) (there were singles on ten dates). The summer passage ran from May 1 (2020) to June 19 (2021) there were singles on 14 dates. The early fall passage ran from June 30 (2019) to September $18(2019,2020)$ singles were seen on 28 dates with two on August 11, 2022 and two on August 12, 2019. The late fall passage ran from October 1 (2019) to November 26 (2017) there were singles on 14 dates with two on November 26, 2017. The counts of two are the highest counts for the park. For the winter passage there were singles on November 30, 2018, December 5, 2019, December 7, 2018, December 8, 2021, December 21, 2020 and December 24, 2020.

## Cattle Egret (Bubulcus ibis)

Whilst there was a noticeable late spring passage this was really a fall passage migrant; they could be seen migrating over the river or the sea. At times small flocks were seen feeding in the area. The early spring passage ran from January $1(2019,2022)$ to March $1(2021)$ with a high count of 20 on February 12, 2021. The main spring passage ran from February 28 (2019) to May 3 (2019) with high counts of 37 on April 25, 2017, 40 on March 20, 2016, 42 on April 10, 2021, 43 on April 19, 2020, 46 on March 21, 2022 and 46 on March 22, 2019. The summer passage ran from May $3(2017,2021)$ to July $1(2017,2022)$ with a high count of 21 on May 26,2017 . The early fall passage ran from July 1 (2021) to September 28 (2017) with high counts of 40 on September 4, 2016, 46 on August 20, 2016, 104 on September 4, 2017 and 210 on September 18, 2021. The latter is the highest count for the park. The late fall passage ran from September $20(2018)$ to November $30(2017,2021)$ with high counts of 43 on September 23, 2016, 48 on October 7, 2018, 57 on September 25, 2016, 89 on September 20, 2018, 103 on October 4, 2016, 127 on October 1, 2016, 154 on October 14, 2020 and 173 on October 1, 2020. The higher counts
all fell between September 20 and October 7 a very limited period. The winter passage ran from December 1 (2018) to December 31 (2018) with a high count of eight on December 23, 2019.

## Green Heron (Butorides virescens)

Some species always surprise me and this is one of them on occasions individuals or small parties were seen migrating out at sea. In all for the seven years there were 95 records but there was only one December record. There were seven records for the early spring passage as singles seen on January 8, 2021, January 16, 2019, January 30, 2021, February 1, 2017, February 13, 2021, February 16, 2020 and February 19, 2019. The late spring passage only ran from March 4 (2021) to May 4 (2019) singles were seen on 20 dates. The summer passage ran from May 2 (2020) to June 30 (2022) again only singles noted on 16 dates. The early fall passage was the main event the passage ran from July 2 (2019) to September 26 (2018). Singles were seen on 20 dates with counts of two on July 10, 2018, July 16, 2019, August 16, 2018, September 2, 2021, September 4, 2016, September 8, 2022, September 10, 2021, September 11, 2021, September 16, 2022 and September 21, 2022 with four on August 31, 2020. The late fall passage ran from September 26 (2017) to November 25 (2019) singles were seen on 14 dates with three on October 11, 2021 and four on October 17, 2017 the counts of four are the highest counts for the park. For the winter passage there was one on December 2, 2021.

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

This is only a very irregular visitor 27 of the 62 were seen from April 13 (2018) to August 19 (2019) with three winter records in 2019 . For the early spring passage there were singles on January 3, 2020, January 15, 2022, January 16, 2021, February 9, 2020 and February 23, 2020. For the late spring passage there were singles on March 4, 2021, March 4, 2022, March 5, 2020, March 24, 2020 with two on March 26, 2020 then singles seen on April 2, 2022, April 13, 2018 and April 22, 2020. There were also five on April 18, 2021 this is the highest count for the park. For the summer passage there were singles on May 5, 2019, May 6, 2021, May 7, 2018, May 7, 2019, May 7, 2022, June 3, 2016, June 9, 2020, June 92021 and June 12, 2022. The individual seen on May 7, 2018 was an immature it was flying north offshore with two Tricolored Herons all the other sightings were over the river. For the early fall passage there were singles on 18 dates from July 2 (2021) to August 6 (2021) with two on August 19, 2019, then singles seen on September 4, 2021, September 8, 2020 and September 25, 2020. There were also two on September 16, 2022. For the late fall passage there were singles on October 2, 2022, October 6, 2022, October 8, 2020, October 9, 2021, October 12, 2020, October 14, 2021, October 15, 2022, October 17, 2022, November 5, 2021, November 5, 2022, November 6, 2021, November 8, 2020
and November 21, 2022. For the winter passage there were singles on November 28, 2019, December 3, 2022, December 6, 2020, December 26, 2021 and December 27, 2019.

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

A summer visitor to the upper beach where they fed on the Ghost Crabs, in late June and early July the young of the year joined the adults on the hunt. The more crabs they ate the better as these crabs like to feast on the baby sea-turtles. It may not be significant but the first date is earlier each year: May 15, 2016, April 20, 2017, April 12, 2018, March 30, 2019, March 15, 2020, March 14, 2021 and March 13, 2022. Normally only one to three a day seen the high counts were: five on June 21, 2017, five on August 28, 2022, six on June 6, 2021, six on June 16, 2018, six on June 30, 2019, seven on May 22, 2021 and 12 on July 2, 2016. The count of 12 is the highest count for the park. The last seen dates were: September 30, 2016, September 21, 2017, September 21, 2018, August 17, 2019, September 17, 2020, October 5, 2021 and October 27, 2022. Again, there was an unusual sighting on October 14, 2018 a juvenile flew to the south in a flock of Great Blue Herons.

## White Ibis (Eudocimus albus)

Present all year there are no sightings out over the sea. The winter and the early spring were the lowest passages exceptionally the higher counts could be at any time from March to November. The early spring passage ran from January 1 (2017, 2019 and 2022) to March 1 (2021) with a high count of 70 on January 4, 2017. The late spring passage ran from February 24 (2022) to May 6 (2020) with high counts of 115 on March 12, 2017, 125 on March 9, 2022, 130 on March 13, 2021, 140 on March 15, 2019, 180 on March 7, 2017 and 220 on March 21, 2017. The summer passage ran from May $3(2019,2021)$ to July $4(2016)$ with high counts of 105 on June 5,2018 , 108 on June 11, 2022, 244 on June 16, 2021, 288 on June 16, 2018 and 363 on June 11, 2018. The early fall passage ran from July $1(2020,2022)$ to October $4(2022)$ with high counts of 86 on September 20, 2018, 87 on September 26, 2017, 94 on September 25, 2022, 97 on September 23, 2021, 105 on July 21, 2018 and 124 on August 2, 2021. The late fall passage ran from September 29 (2017, 2021) to December 3 (2022) with high counts of 80 on October 21, 2018, 97 on November 4, 2017, 102 on October 9, 2021, 108 on October 22, 2016, 186 on October 25, 2017, 354 on October 1, 2016 and 508 on October 19, 2022 the latter is the highest count for the park. Finally, the winter passage ran from November 29 (2019) to December 31 (2016, 2018, 2019 and 2022) with high counts of 80 on December 21, 2016 and 132 on December 12, 2020.

## Glossy Ibis (Plegadis falcinellus)

Unlike the last species this one migrates out at sea as well as along the Halifax River. This is never a common migrant but it is seen throughout the year. The early spring passage ran from January $4(2020)$ to February $28(2017,2019)$ with a high count of 35 on January 21, 2017. The late spring passage ran from February 28 (2021) to May 5 (2020) with high counts of 30 on April 21, 2020, 55 on April 19, 2021 and 55 on March 19, 2022. The summer passage ran from May 1 (2021, 2022) to July 4 (2021) with high counts of 52 on May 19, 2018 and 60 on June 7, 2021. The early fall passage ran from July 1 (2020) to September 30 (2016) with high counts of 40 on July 22, 2021 and 55 on September 3, 2017. The late fall passage ran from September 24 (2021) to December 1 (2021) with a high count of 63 on October 18, 2020, this is the highest count for the park. The winter passage was the weakest event with passage from November 30 (2020) to December 29 (2021) the high count was that of seven on December 19, 2021.

## Roseate Spoonbill (Platalea ajaja)

With two exceptions they were all seen flying over the Halifax River. The early spring passage was a minor event it ran from January 3 (2020) to February 25 (2019) with high counts of 14 on February 17, 2017 and 24 on January 9, 2021. On February 16, 2019 three flew to the north over the sea. The late spring passage ran from March $2(2016,2020)$ to May $5(2020)$ with a high count of 30 on March 8, 2017. The strongest events by far were the summer and the late fall passages. The summer passage ran from April 28 (2022) to July 7 (2022) with high counts of 36 on June 7, 2017, 38 on June 10, 2017, 41 on June 8, 2016 and 65 on June 10, 2022. On June 20, 2019 two flew to the north over the sea. In 2021 there was a northerly post-breeding dispersal from June 15 to August 2 with high counts of 30 on June 23 and 41 on July 3 otherwise the early fall passage ran from July 3 (2016) to October 4 (2022) with high counts of 61 on September 19. 2020 and 73 on September 30, 2022 the latter is the highest count for the park. The late fall passage ran from October $1(2016,2021)$ to November $30(2021)$ with high counts of 23 on November 5, 2016, 25 on November 5, 2018, 25 on November 4, 2021, 28 on October 20, 2018, 30 on October 3, 2020, 43 on October 17, 2021, 44 on October 30, 2017, 48 on October 4, 2021 and 58 on October 13, 2022. The winter passage ran from November 27 (2020) to December 31 (2019) with high counts of seven on December 31, 2019, nine on December 2, 2022 and ten on December 22, 2021.

## Wood Stork (Mycteria americana)

All sightings were over the river the heaviest passage was from late January to early March. For the rest of the year normally up to six a day were seen occasionally. The early spring passage ran from January 1 (five years) to March $1(2021,2022)$ with high counts of 46 on January 29, 2016, 59 on February 14, 2017, 76 on February 7, 2019, 102 on January 16, 2020, 119 on January 1, 2021 and $\mathbf{1 2 7}$ on January 6, 2021 the latter is the highest count for the park. The late spring passage ran from March $1(2017,2018)$ to April $29(2019)$ with high counts of 18 on March 25, 2018, 28 on March 4, 2017 and 37 on March 24, 2021. The summer passage ran from May 6 (2022) to July 1 (2018) with high counts of 21 on June 2, 2018 and 31 on June 28, 2018. The early fall passage ran from June 26 (2021) to September 28 (2016) with a high count of 28 on September 10, 2016. The late fall passage ran from September 30 (2020) to November 30 (2022) with high counts of 16 on November 26, 2019, 18 on November 27, 2021, 24 on October 30, 2021 and 44 on November 13, 2020. Finally, the winter passage ran from November 29 (2021) to December 31 (six years) with high counts of 22 on December 31, 2019, 23 on December 22, 2020, 24 on December 22, 2021, 27 on November 30, 2021, 30 on December 25, 2021, 30 on December 28, 2021 and 54 on December 10, 2020.

## Black Vulture (Coragyps atratus)

Present all year the majority stay close to the Halifax River the highest numbers were seen during the two fall passages. The early spring passage ran from January 1 (five years) to March 3 (2022) with high counts of 94 on January 21, 2021, 97 on February 16, 2016, 107 on February 26, 2018, 135 on January 3, 2022 and 144 on January 4, 2021. The late spring passage ran from February 27 (2016) to May 2 (2021) with high counts of 81 on March 25, 2018 and 146 on March 11, 2021. The summer passage was the weakest event the passage ran from May 1 (2016, 2020 and 2022) to July 3 (2020) with high counts of 72 on May 15, 2021, 75 on June 27, 2020 and 98 on May 7, 2022. Now to the main events the fall passages; the early fall passage ran from June 29 (2016) to October 4 (2020) with high counts of 131 on July 1, 2016, 137 on September 14, 2018, 138 on September 2, 2021, 140 on September 8, 2018, 160 on September 28, 2020, 172 on September 4, 2016, 175 on September 13, 2021 and 177 on September 22, 2018. The late fall passage ran from September 28 (2021) to December 3 (2021) with high counts of 136 on October 4, 2018, 143 on October 28, 2017, 151 on November 28, 2021, 165 on November 16, 2021, 175 on November 7, 2017, 203 on November 4, 2020, 217 on October 11, 2021, 264 on November 18, 2017, 284 on November 24, 2020, 357 on October 22, 2016 and 425 on October 16, 2020 the latter is the highest count for the park. The winter passage ran from November 29 (2016, 2017 and 2020) to December 31 (all years) with high counts of 91 on December 5, 2019, 92 on December 6, 2017, 100 on December 23, 2021, 103 on December 8, 2021, 106 on December 23,

2022, 128 on December 5, 2020, 157 on December 28, 2022, 171 on December 28, 2020, 196 on December 11, 2020, 203 on December 1, 2017 and 265 on December 2, 2020.

## Turkey Vulture (Cathartes aura)

This species is not so restricted it regularly patrolled the barrier island including the shore. On December 6, 2017 a party of six was seen circling over the sea! They could be seen in numbers from late October to late March with very low numbers for the summer and early fall passages. The early spring passage ran from January 1 (six years) to March 1 (2020) with high counts of 158 on February 12, 2017, 164 on February 1, 2021, 165 on January 9, 2019, 174 on February 6, 2021, 210 on January 1, 2020, 295 on February 11, 2021, 435 on January 17, 2018, 559 on January 16, 2017 and 905 on January 23, 2018. The late spring passage ran from February $24(2017)$ to May $2(2020,2021)$ with high counts of 144 on March 8, 2017, 166 on March 20, 2018, 171 on March 21, 2017, 173 on March 1, 2021, 178 on March 4, 2022, 265 on March 18, 2016 and 383 on March 25, 2018. The summer passage ran from April 30 (2019) to June 30 (2017) with high counts of 24 on June 14, 2017, 27 on May 24, 2021, 28 on June 23, 2022, 30 on June 16, 2021, 31 on May 6, 2021 and 37 on June 10, 2021. The early fall passage ran from June 28 (2022) to October 4 (2017) with high counts of 64 on September 19, 2018, 67 on September 7, 2022, 70 on August 21, 2021, 71 on September 7, 2021, 77 on September 26, 2021, 83 on September 15, 2022, 117 on August 29, 2022, 133 on September 9, 2020 and 136 on September 19, 2021. Now we go back to the heavy movements the late fall passage ran from September 30 ( $2016,2019,2020$ and 2022) to December 2 (2018) with high counts of 230 on November 12, 2016, 248 on October 16, 2020, 295 on October 30, 2020, 330 on October 31, 2021, 340 on October 27, 2021, 470 on November 28, 2022, 491 on October 20, 2019, 540 on October 29, 2017, 766 on November 16, 2017, 1,125 on November 19, 2017 and 1,906 on November 13, 2020 the latter is the highest count for the park. The winter passage ran from November $30(2017,2019)$ to December 31 (all years) with high counts of 128 on December 31, 2019, 166 on December 26, 2021, 173 on December 28, 2022, 209 on December 24, 2020, 299 on December 20, 2017, 321 on December 2, 2020, 370 on December 6, 2022, 375 on December 10, 2017, 500 on December 6, 2021 and 741 on December 13, 2016.

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

This is a vagrant there are eight records; for the summer passage there were five on June 8, 2016 with 14 on June 12, 2021, then five seen on June 14, 2021 with six on June 23, 2019. There were also nine on June 7, 2022 with four on June 8, 2022. The count of 14 is the highest count for the park. For the early fall passage there were two on July 10, 2021 with one on July 13, 2018.

## Fulvous Whistling-Duck (Dendrocygna bicolor)

This is a vagrant for the early fall passage there was one on July 9, 2021 with two on August 23, 2019. The count of two is the highest count for thew park.

## Greater White-fronted Goose (Anser albifrons)

This is a vagrant for the late fall passage there was one on October 16, 2022 with four on October 28, 2018, then two seen on November 2, 2021. The count of four is the highest count for the park.

## Snow Goose (Chen caerulescens)

This is a vagrant for the early spring passage an adult light morph was seen on February 27, 2016. For the late fall passage there was one on October 16, 2022 with two on October 27, 2021, then singles seen on November 3, 2021 and November 9, 2022. On November 23, 2020, one was heard calling in the dark. For the winter passage there was a party of four blue morphs on December 2, 2020 this is the highest count for the park

## Canada Goose (Branta canadensis)

This is a rare passage migrant for the late spring passage there were four on March 21, 2021 with one on April 25, 2021. For the early fall passage there was one on August 18, 2022. For the late fall passage there were singles on November 1, 2021, November 9, 2018 and November 12, 2020 with two on November 23, 2018. For the winter passage there was one on December 22,2020 . The count of four is the highest count for the park.

## Brant (Branta bernicla)

This is a vagrant for the late fall passage one flew to the south on November 6, 2016 with one flying to the north on October 28, 2018.

## Egyptian Goose (Alopochen aegyptiaca)

This is an exotic for the late spring passage in 2017 two flew to the north on April 9 and four flew to the south on April 25. The latter is the highest count for the park. In 2022 there were two on May 29.

## Tundra Swan (Cygnus columbianus)

This is yet another vagrant for the early spring passage an adult flew to the south over the Halifax River on January 13, 2018.

## Muscovy Duck (Cairina moschata)

An exotic that was seen in 2018, 2019 and 2021 for the early spring passage one flew to the north over the Halifax River on January 6, 2019. For the summer passage two flew to the north out at sea on June 12, 2018 with four likewise on June 18, 2021. The latter is the highest count for the park. For the early fall passage, one flew to the south out at sea on August 12, 2018. All the later sightings were over the Halifax River. Over the river there were two on September 11, 2020. For the late fall passage singles flew to the north on October 22, 2019 and October 30, 2019. Finally for the winter passage there were singles on December 23, 2021 and December 27, 2019.

## Wood Duck (Aix sponsa)

There are just nine records for the seven years two for March, one for June, four for November and two for December. For the late spring passage there was one on March 23, 2018 with two on March 12, 2019 the latter is the highest count for the park. For the summer passage there was one on June 10, 2022. For the late fall passage there were singles on November 8, 2016, November 12, 2017, November 20, 2022 and November 23, 2018. For the winter passage there were singles on December 3, 2020 and December 5, 2021.

## Gadwall (Anas strepera)

A very uncommon passage migrant there are records for March, April, late October, November and December. The late spring passage ran from March 13 (2017) to April 3 (2022)
with high counts of three on March 21, 2018 and five on March 13, 2017. The late fall passage ran from October 25 (2018) to November 29 (2021) with high counts of eight on November 5, 2017, nine on November 3, 2021, 11 on November 14, 2019, 13 on October 30, 2017, 13 on November 11, 2021, 20 on November 5, 2022, 23 on November 18, 2021 and 30 on November 8, 2022. The count of 30 is the highest count for the park. The winter passage ran from December $4(2016,2021)$ to December $27(2018)$ with high counts of eight on December 27, 2018, eight on December 14, 2020, ten on December 4, 2021, 14 on December 16, 2016 and 15 on December 6, 2019.

## American Wigeon (Anas americana)

Nearly all the sightings are of birds migrating offshore numbers were always low. For the early spring passage there were four on January 23, 2019 with two on February 15, 2017 the only records. The late spring passage ran from March 10 (2022) to March 31 (2018) with high counts of ten on March 20, 2019 and 14 on March 31, 2018. There were also very late records of two on April 14, 2021, four on April 20, 2018 and two on April 22, 2020. Exceptionally for the summer passage there were two on May 16, 2021. The late fall passage ran from October 1 (2018) to November 29 (2017) with high counts of 15 on November 18, 2016, 18 on November 9, 2019, 20 on November 1, 2022, 23 on November 20, 2017, 25 on November 18, 2020, 41 on November 11, 2017 and 42 on November 11, 2018 the latter is the highest count for the park. Note that the two highest counts were on the same date. The winter passage ran from December 3 (2016) to December 27 (2018) with high counts of nine on December 4, 2017, ten on December 16, 2016 and 13 on December 4, 2016.

## American Black Duck (Anus rubripes)

This is a vagrant for the late fall passage there were singles on November 2, 2021 and November 12, 2022.

## Mallard (Anas platyrhynchos)

A very rare visitor; it is likely that most were wild birds from the north. For the late spring passage there was one on March 20, 2021. For the early fall passage there was one on September 3, 2016. For the late fall passage there was one on September 21, 2021, one on October 30, 2017, two on November 4, 2019, one on November 11, 2018 and three on November 12, 2016. Finally
for the winter passage there were two on December 11, 2018 with three on January 10, 2020 the counts of three are the highest counts for the park.

## Mottled Duck (Anas fulvigula)

There are only nine sightings of this mainly fresh water species. For the early spring passage there was one on January 19, 2018. For the late spring passage there was one on April 28, 2021 with two on March 10, 2022. For the early fall passage there were two on August 18, 2021 with singles on August 23, 2018, September 6, 2020 and September 29, 2017. For the late fall passage there were singles on November 10, 2019, November 10, 2022 and November 14, 2021. For the winter passage there were three on December 2, 2020 this is the highest count for the park

## Blue-winged Teal (Anas discors)

Passage was offshore with the heaviest movements in September and early October; there were no winter records. For the early spring passage there was a minor event from January 16 (2016) to February $19(2018,2020)$ with high counts of four on February 19, 2018 and eight on January 28, 2021. The late spring passage ran from March 5 (2019) to May 9 (2022) with high counts of 161 on April 1, 2019, 307 on April 11, 2018 and 495 on April 8, 2018. The strongest event by far was the early fall passage this ran from July 7 (2022) to October 1 (2017, 2018, 2019 and 2020) with high counts of 835 on September 28, 2019, 850 on September 1, 2021, 905 on September 6, 2017, 1,060 on September 28, 2016, 1,105 on September 27, 2020, 1,130 on September 22, 2019, 1,530 on September 28, 2018, 1,790 on September 10, 2016 and 2,015 on September 29, 2020 the latter is the highest count for the park. The late fall passage ran from October 2 (2019) to December 4 (2016) with high counts of 485 on October 13, 2019, 580 on October 10, 2017 and 980 on October 7, 2017. There was no winter passage.

## Northern Shoveler (Anas cyanoptera)

A late spring and fall passage migrant in low numbers all were seen over the sea. The late spring passage ran from March 7 (2018) to May 1 (2021) with high counts of nine on April 9, 2016, 11 on April 8, 2018 and 16 on March 7, 2018. The early fall passage ran from August 21 (2019) to September 30 (2018) with high counts of five on September 10, 2016 and ten on September 29, 2018. The late fall passage ran from September 28 (2019) to December 7 (2016) with high counts of eight on November 2, 2019, nine on November 2, 2020, 14 on November 16, 2016, 16 on

October 18, 2019, 30 on November 5, 2016, 32 on October 31, 2022 and 35 on November 21, 2022 the latter is the highest counts for the park. For the winter passage there were three on December 8, 2021 with one on December 11, 2021.

## Northern Pintail (Anas acuta)

Apart from the late fall passage of 2016 this species was only seen in low numbers; there was a limited winter passage. For the early spring passage there was one on January 5, 2022 with four on January 29, 2022. The late spring passage ran from March 24 (2021) to April 11 (2018) with a high count of 14 on April 9,2016 . There was no early fall passage which is probably why there was a winter passage it was a late fall migrant. The late fall passage ran from September 26 (2021) to November 29 (2019, 2021) with high counts of 22 on November 11, 2018, 25 on November 5, 2022, 30 on November 19, 2021, 30 on November 24, 2021, 35 on November 28, 2017, 42 on October 26, 2020 and 55 on November 22, 2020. In 2016 there were 52 on November 5,65 on November 6 and 225 on November 12, then ten seen on November 13 with four on November 22. The count of 225 is the highest count for the park. The winter passage ran from December 5 (2021) to January 3 (2017) with high counts of ten on December 9, 2021 and 14 on December 16, 2016.

## Green-winged Teal (Anas crecca)

A late fall and early winter passage migrant there are only limited sightings in the spring and the early fall; this is another coastal species. For the early spring passage there was one on January 13, 2018 with eight on January 20, 2018 and singles on February 12, 2022 and February 15, 2017. The late spring passage ran from March 11 (2022) to April 22 (2021) with high counts of 15 on March 25, 2016, 16 on March 20, 2022, 20 on March 22, 2021 and 65 on April 3, 2020. There was a very late record a flock of three on May 6, 2016. The early fall passage ran from August 31 (2016) to September 30 (2016) with high counts of 20 on September 27, 2019, 23 on September 6, 2022, 27 on September 20, 2022, 40 on September 26, 2022 and 95 on September 27, 2021. The late fall passage ran from September 26 (2018) to December 3 (2016) with high counts of 60 on October 13, 2019, 70 on November 3, 2021, 127 on November 23, 2021, 150 on November 27, 2016, 157 on October 16, 2020, 220 on November 18, 2020, 250 on November 11, 2018, 260 on October 31, 2020, 420 on November 12, 2016, 565 on October 11, 2017 and 850 on November 11, 2017 the latter is the highest count for the park. On November 25, 2019 an albino flew to the south with eight birds in ordinary plumage. The winter passage ran from November 30 (2021) to January 1 (2017) with high counts of 25 on December 11, 2017, 30 on December 19, 2022 and 420 on December 16, 2016.

## Canvasback (Aythya valisineria)

A rare migrant for the early spring passage there were three on January 4, 2021, four on February 6, 2020, five on February 19, 2021 and nine on January 2, 2022. They were seen in the late fall from November 11 (2020) to November $29(2019,2022)$ with high counts of 17 on November 22, 2021, 18 on November 26, 2020 and 25 on November 15, 2022. The winter passage ran from December $2(2020)$ to December 31 (2020) with high counts of 14 on December 4, 2018, 14 on December 10, 2019, 16 on December 11, 2021, 19 on December 1, 2022, 27 on December 16, 2016, 36 on December 13, 2017 and 65 on December 8, 2020 the latter is the highest count for the park.

## Redhead (Aythya americana)

An uncommon late fall and winter passage migrant although some of the counts were quite high; there were a few spring sightings. The early spring passage ran from January 1 (2019) to February 22 (2017) with high counts of 14 on January 1. 2019, 70 on January 2, 2021 and 80 on January 7, 2019. For the late spring passage there were four on March 18, 2019. The late fall passage ran from October 31 (2020) to November $30(2020,2022)$ with high counts of 41 on November 11, 2018, 47 on November 20, 2017, 75 on November 22, 2022, 105 on November 11, 2022, 110 on November 2, 2020, 205 on November 23, 2021 and 490 on November 23, 2018. The winter passage ran from December $2(2020,2022)$ to December $31(2017)$ with high counts of 150 on December 6, 2018, 225 on December 9, 2018, 425 on December 13, 2017, 550 on December 3, 2020 and $\mathbf{7 3 5}$ on December 23, 2017 the latter is the highest count for the park.

## Ring-necked Duck (Aythya collaris)

Another uncommon late fall and winter passage migrant. The early spring passage ran from January 3 (2018) to February 28 (2019) with a high count of 12 on January 12, 2022. For the late spring passage there were singles on March 1, 2022 and March 12, 2020 with eight on March 12, 2019, six on March 18, 2019, two on March 19, 2021, 11 on March 20, 2022, one on April 3, 2022 with 20 on April 6, 2020. In contrast the late fall passage ran from October $19(2018,2019)$ to November 29 (2017) with high counts of 27 on November 11, 2017, 30 on November 12, 2018, 35 on November 5, 2021, 40 on November 21, 2022, 55 on November 24, 2021, 61 on November 4, 2019, 80 on November 4, 2020, 88 on November 14, 2021, 130 on November 18, 2021, 177 on November 18, 2020, 180 on November 13, 2019, 305 on November 6, 2019 and 345 on November 8, 2022 the latter is the highest count for the park. The winter passage was a minor event the passage ran from November 29 (2019) to December 27 (2022) with high counts of 20
on December 13, 2017, 20 on December 19, 2019, 30 on December 26, 2017 and 50 on December 14, 2020.

## Greater Scaup (Aythya marila)

Seen in the spring through to late March numbers were low. In the fall seen from late October but the heaviest movements were in December. The early spring passage ran from January 1 (2019, 2021 and 2022) to February 26 (2016) the highest counts were in 2019 there were 125 on January 1, 180 on February 10 and 227 on January 22. For the other years no more than 80 a day were seen with 130 on January 4, 2022. The late spring passage ran from March 2 (2018) to March 31 (2018) with a high count of 25 on March 6, 2019. Exceptionally for the summer there was one on May 17, 2018. The late fall passage ran from October 25 (2018) to November 29 (2019) with high counts of 110 on November 23, 2018, 160 on November 26, 2017, 210 on November 30, 2022, 695 on November 20, 2017, 825 on November 20, 2021 and 865 on November 24, 2021. The winter passage ran from November 24 (2020) to December 31 (2017, 2021) with high counts of 200 on December 20, 2018, 270 on December 13, 2017, 270 on December 19, 2021, 290 on December 5, 2021, 385 on December 10, 2016, 870 on December 11, 2021, 1,060 on December 16, 2016, 1,550 on December 23, 2017, 2,170 on December 3, 2020, 3,030 on December 26, 2022 and 15,800 on December 23, 2021 the latter is the highest count for the park.

## Lesser Scaup (Aythya affinis)

This is one of the commonest ducks the highest counts were seen during the late fall and winter passages. On occasions quite large flocks could be seen over the river. The early spring passage ran from January 1 (all years) to February 28 (2019) with high counts of 1,266 on January 13, 2016, 1,300 on January 31, 2016, 1,520 on February 15, 2016 and 1,800 on February 10, 2019. The late spring passage ran from February 27 (2016) to April 23 (2017) with high counts of 450 on March 3, 2019 and 1,100 on March 11, 2016. The late fall passage ran from October 17 (2018) to December 5 (2017) with high counts of 2,940 on November 23, 2018, 4,015 on November 28, 2017, 7,980 on November 11, 2017 and 10,770 on November 22, 2016 the latter is the highest count for the park. The winter passage ran from December 1 (2018) to December $31(2016,2017$ and 2022) with high counts of 1,225 on December 13, 2017, 2,400 on December 10, 2016, 3,150 on December 4, 2016 and 3,150 on December 17, 2016.

## Common Eider (Somateria mollissima)

A total of 16 were seen over the seven years (there were none in 2016). For the early spring passage there were two on January 22, 2019 with one on February 2, 2021. For the late fall passage there were singles on November 11, 2018, November 16, 2021, November 21, 2017, November 22, 2022 and November 26, 2021 with two on November 12, 2018. For the winter passage there were singles on November 30, 2018, December 7, 2020, December 10, 2019, December 13, 2019, December 23, 2022, December 24, 2017 and December 26, 2017 with two on December 4, 2022. The counts of two are the highest counts for the park. All were females or immature females except for the immature males on December 24 and December 26, 2017. No adult males seen to date.

## Harlequin Duck (Histrionicus histrionicus)

This is a vagrant there are four records: three for the late fall passage and one for the winter passage. For the late fall passage there was one on November 2, 2020 and an adult male flew to the south on November 6, 2018 (a female may have been with it). Singles flew to the south on November 17, 2020 and on November 24, 2019. For the winter passage there was one on December 7, 2020.

## Surf Scoter (Melanitta perspicillata)

An uncommon sea duck that will have been overlooked in the much larger flocks of Black Scoter; the highest numbers were seen during the late fall and winter passages. The early spring passage ran from January 1 (2017) to March 6 (2021) with high counts of five on January 4, 2020, eight on February 19, 2017 and eight on February 1, 2021. The late spring passage ran from March 1 (2019) to May 5 (2018) with high counts of eight on March 1, 2019 and 12 on April 4, 2019. For the summer passage there was one on May 23, 2021. The late fall passage ran from October 30 $(2016,2018)$ to December 3 (2016) with high counts of nine on November 30, 2016, nine on November 20, 2020, ten on November 14, 2019, 13 on November 13, 2016 and 36 on November 4, 2022 the latter is the highest count for the park. The winter passage ran from December 1 (2018) to December 31 (2020) with high counts of five on December 13, 2017, five on December 12, 2018, five on December 12, 2019, 11 on December 3, 2020 and 24 on December 4, 2018.

## White-winged Scoter (Melanitta fusca)

In all there are 60 records for the seven years the early spring and the fall passages being the heaviest events. The early spring passage ran from January 3 (2021) to February 28 (2016) with high counts of four on February 9, 2020 and six on January 16, 2020. The late spring passage ran from March 2 (2016) to April 28 (2018) with high counts of two on March 7, 2021, two on March 19, 2018 and two on April 6, 2019. For the summer passage there were three on June 9, 2022 with one on June 13, 2022. The late fall passage ran from October 26 (2017) to November $30(2018,2022)$ with high counts of two on October 26, 2017, two on November 21, 2021, two on November 28, 2021, two on November 30, 2022, four on November 11, 2018, four on November 9, 2020 and five on November 18, 2020. The winter passage ran from December 2 (2018) to December 28 (2018) with high counts of two on December 18, 2016, two on December 25, 2018, two on December 6, 2019, six on December 5, 2020 and nine on December 3, 2020 the latter is the highest count for the park.

## Black Scoter (Melanitta nigra)

Numbers vary dramatically from year to year the worst years were 2017, 2019, 2020, 2021 and 2022. In the better years the heaviest numbers were seen from November to early February with a southerly passage into January. The early spring passage ran from January 1 (2016, 2017 and 2019) to March 8 (2020) with high counts of 1,180 on January 7, 2019, 1,190 on January 16, 2016, 1,245 on January 1, 2016, 1,370 on February 10, 2019, 1,410 on January 11, 2019, 1,500 on January 15, 2016, 1,760 on January 9, 2016 and 2,540 on January 28, 2019. The late spring passage ran from March $1(2017,2019)$ to May $2(2019)$ with a high count of 227 on March 16, 2019. Exceptionally there were nine summer sightings there were singles on May 10, 2020, May 13, 2017, May 21, 2019, June 2, 2019, June 25, 2017, July 16, 2019, July 18, 2018, July 27, 2020 and August 7, 2020. There was no early fall passage. The late fall passage ran from October 19 (2017) to December $2(2018,2021)$ with high counts of 1,365 on November 22, 2016, 2,035 on November 21, 2018, 2,280 on November 8, 2016, 2,940 on November 13, 2016, 3,060 on November 27, 2018 and 4,200 on November 12, 2018. The winter passage ran from November 29 (2019) to December 31 (2016, 2018, 2019 and 2020) with high counts of 1,230 on December 22, 2017, 1,760 on December 8, 2018, 2,840 on December 7, 2016 and 8,490 on December 4, 2018 the latter is the highest count for the park.

## Long-tailed Duck (Clangula hyemalis)

This is a vagrant there are only nine records. For the early spring passage there were singles on January 8, 2018, February 7, 2020 and February 17, 2021 with two on January 23, 2019. For the late fall passage there was one on November 9, 2016. For the winter passage there were singles on December 15, 2021 and December 22, 2021 with two on December 15, 2022 and two on December 31, 2017. The counts of two are the highest counts for the park.

## Bufflehead (Bucephala albeola)

There was a significant passage in November and December 2016, 2017, 2020 and 2021 but only low numbers seen for the other years. The early spring passage ran from January 2 (2016, 2022) to February 21 (2021) with high counts of four on January 13, 2016, four on January 5, 2018, four on February 7, 2020, five on January 4, 2020, six on January 4, 2022, seven on January 3,2021 and seven on January 12, 2021. For the late spring passage there was a female that flew to the north on March 7, 2018. The late fall passage ran from November 4 (2020) to November 30 (2021, 2022) with high counts of five on November 29, 2019, seven on November 18, 2020, seven on November 27, 2022, ten on November 17, 2022, ten on November 19, 2022, 11 on November 19, 2021, 14 on November 28, 2021 and 18 on November 11, 2017 (there were five high counts of three). The winter passage ran from November 29 (2020) to December 26 (2017, 2022) with high counts of eight on December $7,2016,11$ on December 13, 2017, 12 on December 16, 2016, 13 on December 17, 2020, 18 on December 17, 2016, 22 on December 9, 2017 and 24 on December 3, 2020 the latter is the highest count for the park.

## Common Goldeneye (Bucephala clangula)

Just 15 birds seen over the seven years most were seen from late November to early January. For the early spring passage there were singles on January 8, 2017, January 24, 2016 and February 22, 2020. For the late fall passage there were singles on November 13, 2017, November 20,2017 and November 25, 2016 with two on November 5, 2022 and two on November 27, 2018 the counts of two are the highest counts for the park. For the winter passage there were singles on December 5, 2021, December 7, 2016, December 17, 2020, December 19, 2019 and December 20, 2017.

## Hooded Merganser (Lophodytes cucullatus)

In all there are 45 records for this inland species most were seen from mid-November to late December. They could be seen over the river or offshore. For the early spring passage there were singles on January 8, 2018, January 11, 2021, January 13, 2022, January 14, 2020, February 17, 2018, February 20, 2022, February 26, 2022 and February 28, 2021. The late spring passage ran from March 7 (2020) to April 16 (2018) with high counts of two on March 7, 2020, two on April 11, 2018 and two on April 12, 2018 with three on March 8, 2018. The late fall passage ran from November $7(2017)$ to November $28(2017,2021)$ with high counts of four on November 11, 2018, four on November 15, 2022, four on November 28, 2021, five on November 19, 2022, eight on November 23, 2021, ten on November 18, 2021, 14 on November 22, 2016 and 14 on November 24, 2016. The winter passage ran from November 29 (2017, 2019 and 2020) to December 23 (2020) with high counts of four on December 2, 2018, four on December 2, 2019, six on December 2, 2022, six on December 13, 2017 and 36 on November 29, 2019 the latter is the highest count by far for the park.

## Common Merganser (Mergus merganser)

This is a vagrant for the late fall passage a female flew to the south on November 20, 2017. For the winter passage an adult male flew to the north on December 14, 2019, a female flew to the south on December 12, 2020 and a male flew to the south on December 22, 2022.

## Red-breasted Merganser (Mergus serrator)

At times a common late fall and winter passage migrant numbers in the spring were much lower. The early spring passage ran from January 1 (five years) to February 28 (2017) with high counts of 23 on January 7, 2019, 27 on January 4, 2022, 28 on January 1, 2017 and 30 on January 10, 2016. The late spring passage ran from February 28 (2021) to May 30 (2016) with high counts of 29 on April 15, 2016, 30 on April 11, 2018, 33 on April 1, 2019 and 44 on March 31, 2018. The late fall passage ran from October $19(2021)$ to December $2(2016,2020)$ with high counts of 98 on November 13, 2016, 122 on November 23, 2018, 152 on November 22, 2016, 159 on November 24, 2017 and 449 on November 20, 2017 the latter is the highest count for the park. The winter passage ran from November $29(2019)$ to December $31(2016,2018)$ with high counts of 83 on December 4, 2020, 84 on December 7, 2019, 87 on December 21, 2016, 102 on December 13, 2017, 159 on December 16, 2016 and 220 on December 7, 2016.

## Ruddy Duck (Oxyura jamaicensis)

A very rare late fall and winter passage migrant there are only ten records, none seen in 2016. For the late fall passage there were singles on November 2, 2020, November 9, 2017, November 10, 2018, November 13, 2022, November 18, 2018 and November 18, 2020. There were two on November 8, 2021 and November 16, 2021. There were nine on November 16, 2020, ten on November 21, 2019 and 15 on November 23, 2021 this is the highest count for the park. Finally for this passage there were two on November 26, 2017 with one on November 29, 2021. For the winter passage there was one on December 19, 2019.

## Osprey (Pandion haliaetus)

A resident that could be seen over the Halifax River and over the sea; at times they hunted nearly a mile out to sea. Any migration tended to be over the river. For the early spring passage, the highest count was that of six on February 17, 2019. The late spring passage ran from March 3 (2022) to May 2 (2020). In 2018 there was a marked passage with 11 on April 10, 24 on April 9 and 37 on March 20. In 2022 there was another significant passage with 42 on March 11 and 58 on March 12, then 21 seen on March 24 with 19 on March 25. the count of 58 is the highest count for the park. For the other year's counts of four noted with five on March 22, 2019, five on April 19, 2020, six on April 12, 2021 and six on April 18, 2016. For the summer passage they were seen from April $30(2022)$ to July $1(2020,2019)$ with a high count of six on June 2,2021 . The early fall passage ran from June 30 (2021) to October 2 (2020) with high counts of six on September 30, 2016, six on September 7, 2017, nine on September 3, 2019, nine on September 18, 2020, ten on September 2, 2020, ten on September 21, 2021 and 24 on September 16, 2022 the counts of ten and 24 may indicate passage. The late fall passage ran from September 30 (2021) to December 1 (2020) with high counts of six on October 26, 2016, seven on October 25,2021 , eight on October 29, 2016, nine on October 18, 2017, nine on October 10, 2021, nine on October 4, 2022 and 13 on October 3, 2021 again these counts may indicate a passage. There was no passage during the winter as the high count was only that of five on December 2, 2020.

## Swallow-tailed Kite (Elanoides forficatus)

I had been told that these kites did not occur on the barrier island that is so very wrong. It is not easy to identify exactly what periods the events covered. Initially there is the spring arrival in March and I am treating that as going to mid-April. Those birds that arrived too late to breed and those whose nest's failed then start returning to the south I am treating this as covering the
period from mid-April to early June. All later sightings I treat as part of the fall passage. It is possible that I have got the timing of these three events wrong.

The spring passage ran from February 25 (2022) to May 1 (2022) with high counts of nine on April 11, 2022, April 12, 2021 and April 16, 2021. The failed nesters event ran from April 20 (2017) to June 16 (2021) with high counts of six on June 9, 2021, seven on June 13, 2022 and seven on June 15, 2022. The fall passage ran from June 3 (2017) to September 3 (2021) with high counts of nine on June 28, 2021, nine on June 29, 2016, nine on July 21, 2018, ten on July 11, 2017, 11 on June 17, 2021, 11 on June 24, 2021, 11 on July 19, 2022, 12 on July 11, 2021, 13 on July 2, 2019, 13 on July 5, 2021, 14 on June 28, 2022, 15 on July 21, 2017, 19 on July 4, 2016, 20 on July 10, 2016, 21 on July 22, 2017, 21 on June 17, 2020 and 27 on July 5, 2020 the latter is the highest count for the park.

## Snail Kite (Rostrhamus sociabilis)

This is a vagrant for the early fall passage there was an adult male on August 1, 2021.

## Mississippi Kite (Ictinia mississippiensis)

This is a rare visitor to the park there are just 27 sightings for the seven years (none in 2017). For the late spring passage there were singles on April 8, 2022, April 10, 2022, April 21, 2021 and April 27, 2020 with two on April 27. 2021. For the summer passage there was one on May 5, 2019 with two on May 6, 2021, then singles seen on May 11, 2020 and May 12, 2021. There were two on May 14, 2022 and two on May 20, 2020 with singles on June 4, 2018, June 8, 2021, June 9, 2018, June 10, 2021, June 11, 2022, June 15, 2020, June 23, 2022, June 28, 2018 and June 29, 2016. For the early fall passage there were two on July 2, 2019 and July 2, 2021 with singles on July 3, 2020, July 10, 2018, August 4, 2019 and August 26, 2022. There was a late individual on September 21, 2021. The counts of two are the highest counts for the park.

## Bald Eagle (Haliaeetus leucocephalus)

Most were seen over the river but on occasions individuals could be seen at least half a mile out to sea. Sightings were very limited from mid-May to mid-August. The early spring passage ran from January 1 (2019, 2020, 2021 and 2022) to March 2 (2022) with high counts of four on January 6, 2018, four on January 21, 2020, four on February 12, 2017, four on February 18, 2021, five on January 6, 2021 and six on February 1, 2021. The late spring passage ran from

March 1 (2017, 2018 and 2021) to May 21 (2022) with high counts of four-on-seven dates (March 1, 2021, March 11, 2021, March 18, 2017, March 24, 2021, March 25, 2018, April 7, 2018 and April 7, 2019 with five on April 10, 2019. There were six summer records with singles on May 25, 2021, May 29, 2018, June 14, 2022, June 16, 2017, June 16, 2021, June 24, 2016 and July 3, 2018. In 2020 one stayed through the summer. In this instance I have merged the two fall passages into a single event the fall passage. This passage ran from August 13 (2017) to December 1 (2019, 2022) with high counts of four on October 2, 2021, four on October 28, 2018, five on October 29, 2021, five on November 17, 2022, seven on November 18, 2017, eight on October 29, 2020 and nine on November 3, 2020 the latter is the highest count for the park. Finally, the winter passage ran from December 1 (2021) to December 31 (2018, 2019 and 2020) with high counts of four on December 22, 2018, four on December 31, 2019, five on December 9, 2020, five on December 12, 2022 and five on December 26, 2021.

## Northern Harrier (Circus cyaneus)

An uncommon passage migrant and winter visitor; on occasions they could be seen migrating out at sea. The early spring passage ran from January $1(2017,2022)$ to February 27 (2020) singles were seen on 16 dates with three on February 14, 2022. The late spring passage ran from March 1 (2022) to May 13 (2017) singles were seen except for 2018 when two seen on March 8 with two again on March 20, two on April 7 and three on April 9. In 2022 there were two on March 2, March 23 and April 7. Flying to the north out at sea there were singles on April 9, 2018 , April 14, 2020, April 15, 2020, April 17, 2020, April 26, 2017 and May 13, 2017. For the early fall passage there were singles on September 6, 2019 and September 13, 2022. The late fall passage ran from September 27 (2022) to November 27 (2017) with high counts of three on October 19, 2021, three on October 27, 2018, three on October 25, 2020, three on November 3, 2021, four on October 1, 2016, five on October 29, 2017 and nine on November 14, 2022 the latter is the highest count for the park. There were only nine records for the winter passage there were singles on December 1, 2022, December 2, 2021, December 4, 2019, December 4, 2021, December 5, 2019, December 5, 2020, December 5, 2022, December 11, 2020, December 17, 2022, December 19, 2021, December 19, 2022, December 23, 2022, December 26, 2022, December 30, 2016, December 30, 2022 and December 31, 2018 with two on December 18, 2022.

## Sharp-shinned Hawk (Accipiter striatus)

A scarce passage migrant there are only six winter sightings. All records have been overland. The early spring passage ran from January 1 (2021) to February 26 (2021) singles were seen apart for two on January 4, 2021, two on January 22, 2021, two on January 31, 2022 and
two on February 10, 2017. The late spring passage ran from March 1 (2018, 2021 and 2022) to April 15 (2019, 2020) only singles noted; in 2018 there were two on March 14, four on March 20 and five on March 25. In 2020 there were two on March 17 and three on April 15. There were also two on April 9, 2022. There was a very late individual on May 2, 2020. The fall passage ran from September 11 (2022) to November 28 (2021) with high counts of two on September 26, 2020, October 13, 2020, October 13, 2022, October 21, 2021, October 22, 2021, October 26, 2021, November 6, 2017, November 17, 2017 and November 20, 2016 there were also three on October 29, 2017 and three on November 23, 2020 with six on October 17, 2022 the latter is the highest count for the park. Finally for the winter passage there were singles on December 6, 2020, December 7, 2020, December 8, 2021, December 9, 2019 and December 26, 2021 with two on December 21, 2020.

## Cooper's Hawk (Accipiter cooperii)

They are seen in every month of every year normally only singles noted. They will have bred locally. The higher counts were: for the early spring passage two on February 4, 2016, February 11, 2022, February 17, 2021, February 24, 2017 and February 25, 2020. For the late spring passage there were three on March 2, 2022 and three on March 18, 2016. For the summer passage there were two on May 11, 2018, May 15, 2021, May 21, 2022, June 3, 2021, June 8, 2016 and June 14, 2022. For the early fall passage there were two on July 2, 2020, July 2, 2021, July 5, 2022, July 18, 2018, July 22, 2021, July 29, 2017, August 9, 2022, August 23, 2020, September 9, 2016, September 14, 2016, September 18, 2016 and September 19, 2021. There were also three on July 23, 2017 with four on July 21, 2018 the latter is the highest count for the park. For the late fall passage there were two on October 19, 2022, October 31, 2017, October 31, 2019, November 6, 2017 and November 17, 2022. Only singles were seen for the winter passage except for two on December 21, 2020.

## Red-shouldered Hawk (Buteo lineatus)

Seen in the spring through to mid-May and in the fall from late July there were a scattering of summer sightings. The early spring passage ran from January $1(2017,2021)$ to March 1 (2022) with counts of two on 12 dates there were also three on February 11, 2017 with four on February 18,2021 . The late spring passage ran from March $1(2017,2021)$ to May $17(2020)$ there were two on three dates with three on March 9, 2021, three on March 18, 2017, four on March 22, 2019, four on April 1, 2022 and four on April 26, 2020. The "summer" ran from June 1 (2018) to July 8 (2017) there were singles on ten dates. The early fall passage ran from July 9 (2021) to September 29 (2021) there were counts of two on eight dates with three on July 17, 2021, August

17, 2021 and September 18, 2016, then five seen on September 21, 2022 this is the highest count for the park The late fall passage ran from September $30(2022)$ to November $30(2018,2022)$ with high counts of two on ten dates. The winter passage ran from November 27 (2020) to December 31 (2020) singles noted with two on November 28, 2020, two on December 9, 2022, two on December 18, 2022 and two again on December 26, 2021.

## Broad-winged Hawk (Buteo platypterus)

This is a vagrant there are only 20 sightings; none were seen in 2016. For the fall passage there were two on September 3, 2020 with one on September 7, 2017. There were two on September 14, 2021 with singles on September 15, 2018, September 28, 2021, September 30, 2022, October 5, 2022, October 8, 2021, October 9, 2020, October 10, 2022 and October 16, 2020 then two seen on October 17, 2021, October 19, 2022 and October 20, 2019. The counts of two are the highest counts for the park. There were also singles on October 22, 2019, October 22, 2021, November 11, 2019 and November 26, 2020. For the winter passage there was one on December 26, 2021.

## Short-tailed Hawk (Buteo brachyurus)

In all over the seven years 54 seen, all but 18 were light morphs, this suggests that most were repeat sightings. All were seen towards the river. The spring passage ran from February 11 (2021) to April 9 (2019) with a high count of two on April 9, 2018. The summer passage ran from April 21 (2020) to June 17 (2020) only singles were noted. The early fall passage ran from June 28 (2017) to September 6 (2019) with a high count of two on July 29, 2017. The counts of two are the highest counts for the park. For the late fall passage there were singles on October 4, 2018, October 22, 2021, October 23, 2019, October 23, 2021 and November 19, 2019.

## Swainson's Hawk (Buteo swainsoni)

This is a vagrant there are ten records. For the late fall passage juvenile light morphs were seen on October 16, 2021, October 23, 2020, November 2, 2021, November 7, 2022, November 9, 2021, November 12, 2022, November 14, 2017 and November 20, 2017 with a juvenile dark morph on November 2, 2020. There was also an adult light morph on December 4, 2019.

## Red-tailed Hawk (Buteo jamaicensis)

An uncommon visitor the early spring passage ran from January 1 (2019, 2020 and 2021) to February $28(2019,2020)$ there were counts of two on ten dates with three on January 7,2020 , four on February 16, 2021 and four on February 27, 2022. The late spring passage ran from March 1 (2017, 2018 and 2019) to April 28 (2022) with high counts of two on March 11, 2021, March 18, 2021, March 25, 2018, March 25, 2022, March 27, 2022, March 31, 2022, April 9, 2021 and April 24, 2022. The summer passage ran from May 2 (2018) to June 27 (2021) with high counts of two on May 2, 2018 and two on May 16, 2022. The early fall passage ran from June 29 (2020) to September $26(2017,2021)$ only singles noted except for two on July 22,2021 and two on September 4, 2022. The late fall passage ran from September 29 (2020) to December 1 (2020, 2022) with high counts of, three on October 30, 2021 three on November 11, 2022, five on October 23, 2020 and five on November 9, 2020. The counts of five are the highest counts for the park. The winter passage ran from December $1(2019,2020)$ to December $31(2020,2022)$ only singles were seen.

## Golden Eagle (Aquila chrysaetos)

This is a vagrant there are six records. For the late fall passage an adult flew to the north by the river on October 30, 2017. Another adult flew to the north on October 26, 2020. One in second year plumage flew to the north on October 29, 2021. Note the closeness in the dates. In 2022 there were singles on November 17, November 28 and November 30.

## Crested Caracara (Caracara cheriway)

This is a vagrant for the early fall passage one flew to the north over the barrier island on August 19, 2020 (wind calm).

## American Kestrel (Falco sparverius)

This is a winter resident a male has been coming back each year in the late fall and staying through to the spring. The first dates in the fall were: September 25, 2016, September 23, 2017, October 6, 2018, October 4, 2019, September 29, 2020, October 1, 2021 and October 10, 2022. The wintering bird has been seen in the spring to March 23, 2016, March 25, 2017, March 30, 2018, March 26, 2019, April 5, 2020, March 29, 2021 and April 6, 2022. There were counts of two on January 4, 2021, February 21, 2018, February 22, 2018, March 7, 2017, March 16, 2021 and

March 24, 2021 which may indicate passage. There was a minor spring passage with four on April 7, 2022, eight on April 8, 2020, four on April 8, 2021, three on April 9, 2020, three on April 10, 2020, two on April 15, 2020, one on April 19, 2018, one on April 27, 2018 and one on May 7, 2022. The count of eight is the highest count for the park. In the fall there were counts of three on October 11, 2020 and three on October 18, 2020 again these counts may indicate passage.

## Merlin (Falco columbarius)

A regular passage migrant from early March to mid-May and again from mid-September to late November; there are a few winter and early spring records. In both seasons these falcons can frequently be seen flying in off the sea. For the early spring passage there were singles on 19 dates from January 1 (2017) to February 24 (2017). The late spring passage ran from February 29 (2020) to May 16 (2021) with high counts of three on March 29, 2021, April 3, 2019, April 6, 2021, April 8, 2018, April 9, 2018, April 11, 2018, April 16, 2020, April 20, 2020, April 21, 2019, and April 30, 2018, five on April 11, 2021, April 26, 2020, six on March 25,2018 , six on April 10, 2022, seven on April 12, 2021, seven on April 30, 2021 and 14 on April 21, 2021. There are four very early fall records as singles were seen on August 21, 2022, August 22, 2021, August 27, 2018 and August 29, 2019. The main fall passage ran from September 6 (2022) to December 5 (2020) with high counts of five on October 12, 2016, five on October 7, 2018, six on October 18, 2017, seven on September 30, 2022, eight on September 29, 2020, eight on October 11, 2020, ten on October 12, 2020 and 15 on September 19, 2022. The latter is the highest count for the park. Finally for the winter passage there were singles on December 3, 2019, December 4, 2020, December 5, 2020, December 17, 2018 and December 26, 2019.

## Peregrine Falcon (Falco peregrinus)

Seen in the spring to May and in the fall from September; only in 2017 was there a major fall passage. The majority probably migrated overland but they were frequently seen flying by offshore. Individuals often used the buildings either side of the park as look out sites. In all there are 225 records and of these 175 were seen during the fall passage. The early spring passage ran from January 4 (2020) to February 27 (2021) with high counts of two on January 20, 2017 and February 13, 2018. The late spring passage ran from February 29 (2020) to May 12 (2019) with high counts of two on April 15, 2018, two on April 15, 2021, two on April 24, 2020 and three on March 21, 2018. There was an early fall migrant as one seen on August 6,2020 . The main fall passage ran from September 9 (2017) to November 29 (2016) excluding 2017 the higher counts were 12 on October 12, 2016, 14 on October 10, 2019, 26 on September 30, 2016, 30 on October 18,2020 and 44 on October 5, 2020. In 2017 there were five on September 27 with 19 on October

2, 178 on October 3 and $\mathbf{2 2 1}$ on October 4, then 135 seen on October 5 with seven on October 6 and three on October 7. Later there were 20 on October 14 with 144 on October 18, then ten seen to October 21 with five on October 23 . The count of 221 is the highest count for the park. For the winter passage in 2019 there were singles on four dates from November 26 to December 21. In 2022 there was one on December 18.

## American Coot (Fulica americana)

In November during the seven years (none seen in 2016) a total of nine have been seen sitting on the sea. There was one on November 3, 2021 with two on November 9, 2018 this is the highest count for the park. Later there were singles on November 11, 2017, November 11, 2018, November 14, 2017, November 24, 2020, November 25, 2019, November 27, 2017 and November 27, 2022.

## Sandhill Crane (Grus canadensis)

There are 25 records with five for the winter passage. All were seen over the Halifax River. For the early spring passage there were two on January 26, 2020, three on January 30, 2016, two on February 16, 2022 and two on February 20, 2021. For the late spring passage there were two on March 3, 2019, one on March 11, 2022, one on March 17, 2020, three on March 20, 2022, two on March 25, 2, one on April 7, 2017 and three on April 8, 2022. For the summer passage there were two on May 7, 2022, two on May 8, 2022 and two on May 20, 2022. For the early fall passage there was one on July 9, 2018 with two on September 24, 2020. For the late fall passage there was one on October 14, 2021, two on October 2, 2016 and three on October 31, 2017. Not sure why there are no November records. For the winter passage there was one on December 9, 2020, one on December 11, 2017, one on December 17, 2022, two on December 18, 2019, three on December 12, 2018, and four on December 23, 2018 the latter is the highest count for the park.

## Black-bellied Plover (Pluvialis squatarola)

A quite common passage migrant and winter visitor the fall passages are the heaviest. The early spring passage ran from January 1 (2016, 2020 and 2022) to February 29 (2020) with high counts of nine on January 10, 2016, nine on February 5, 2021, 11 on January 25, 2017 and 17 on February 26, 2021. The late spring passage ran from March 1 (2021) to June 19 (2016) with high counts of nine on five dates, ten on April 15, 2016, ten on May 3, 2021, ten on May 20, 2021, 11 on March 20, 2022, 11 on April 17, 2022 and 15 on March 4, 2020. There was a break in the
summer this varied in length from 14 to 50 days. In 2016 the break was from June 20 to July 2 . In 2017 the break was from June 7 to July 6. In 2018 the break was from June 1 to July 17. In 2019 the break was from May 28 to July 19. In 2020 the break ran from June 10 to August 6. In 2021 the break ran from June 16 to July 12. In 2022 the break ran from June19 to July 2. The early fall passage ran from July $3(2016,2022)$ to September $30(2016,2021)$ with high counts of 12 on August 13, 2018, 13 on August 25, 2017, 15 on September 1, 2016, 18 on September 26, 2021, 22 on September 14, 2019 and 29 on September 2, 2016. The late fall passage ran from September 29 (2019) to December 1 (2017, 2020 and 2021) with high counts of 11 on November 12, 2017, 13 on November 27, 2022, 16 on October 17, 2021, 18 on October 13, 2019, 19 on October 10, 2021, 24 on October 24, 2019, 26 on November 3, 2019, 32 on October 3, 2020 and 35 on October 18, 2020. The latter is the highest count for the park. The winter passage was the weakest event of the year the passage ran from December $1(2018,2019)$ to December 31 (2017, 2022) with high counts of seven on December 14, 2016, nine on December 23, 2016, 16 on December 11, 2022 and 18 on December 4, 2022.

## American Golden-Plover (Pluvialis dominica)

This is a very rare passage migrant there are just 23 records; none seen in 2016. For the early spring passage there was one on February 19, 2020. For the late spring passage there were singles on March 24, 2021, April 4, 2022, April 11, 2019, April 21, 2017, April 24, 2022, April 25, 2021, May 3, 2018, May 6, 2022 and May 16, 2018 with two on April 2, 2021. For the early fall passage there was one on August 1, 2020, one on August 11, 2022, one on August 26, 2022 with three on August 12, 2018 this is the highest count for the park. There were also singles on August 13, 2019, August 14, 2020, August 23, 2020, August 25, 2021 and September 3, 2021. For the late fall passage there were singles on October 23, 2021, November 9, 2020 and November 12, 2020.

## Wilson's Plover (Charadrius wilsonia)

Another very rare visitor there are just nine records. For the early spring passage there were singles on January 3, 2021 and January 11, 2021. For the late spring passage there were singles on May 1, 2020, May 15, 2021, May 17, 2017 and May 20, 2018. For the early fall passage there was one on August 19, 2022 with two on August 26, 2019 this is the highest count for the park. For the winter passage there were singles on November 30, 2016 and December 2, 2016.

## Semipalmated Plover (Charadrius semipalmatus)

A late spring passage migrant there were lower numbers in the fall. For the early spring passage there were singles on January 6, 2018, February 11, 2022, February 14, 2020 and February 27, 2021. For the late spring passage there were four early records with singles on March 7, 2022, March 11, 2018, March 16, 2020 and March 29, 2019. The main late spring passage ran from April $8(2020,2021)$ to June $10(2018)$ with high counts of 13 on May 7,2016 , 15 on May 13, 2017, 15 on May 14, 2018, 15 on May 14, 2019, 16 on May 15, 2021, 20 on April 29, 2018, 25 on May 12, 2017 and 74 on May 13, 2022 the latter is the highest count for the park. The early fall passage ran from July 16 (2020) to September 16 (2018) with high counts of three on August 30, 2021, seven on August 10, 2018, eight on September 6, 2022 and nine on July 21, 2021 (there were also six counts of two). The late fall passage was a minor event the passage ran from September 25 (2019) to November 22 (2017) with a high count of eight on October 9, 2019 (otherwise only singles seen). Exceptionally for the winter passage there was one on December 14, 2016.

## Piping Plover (Charadrius melodus)

This is a vagrant there are just ten records for five of the seven years. For the late spring passage there were singles on March 16, 2018, March 17, 2021 and April 30, 2016. For the summer passage there was one on May 20, 2021. For the early fall passage there were singles on July 25, 2021, August 6, 2021 and August 13, 2016 with two on August 7, 2022 the latter is the highest count for the park. For the late fall passage there were singles on November 14, 2017 and November 24, 2017.

## Killdeer (Charadrius vociferus)

Singles can be seen at any time of the year there is nothing to suggest passage. Most are heard/seen across A1A but they do visit the beach on occasions. The early spring passage ran from January $2(2020)$ to February $28(2016,2017)$ with high counts of three on January 6, 2017, three on February 15, 2017 and four on January 6, 2021. The late spring passage ran from March 7 (2018) to May 6 (2019) with high counts of two on seven dates. The summer passage ran from May 2 (2018) to June 28 (2017) with high counts of two on May 19, 2022, two on May 27, 2016, three on May 14, 2021 and three on May 17, 2021. This event did not occur in 2019. The early fall passage ran from July 1 (2018) to September 30 (2016) with high counts of three on September 18, 2016 and four on July 10, 2018. The late fall passage ran from September 29 (2017) to November $30(2017,2018)$ with high counts of four on October 22, 2016 and eight on

November 20, 2016 the latter is the highest count for the park. The winter passage ran from December $1(2017,2018)$ to December $31(2020)$ singles seen apart from six on December 14, 2019.

## American Oystercatcher (Haematopus palliates)

An irregular passage migrant the late fall passage was the heaviest event; in all 54 seen over the seven years. The late spring passage ran from February 25 (2017) to April 27 (2016) with high counts of two on February 27, 2018, two on March 2, 2019 and five on March 31, 2018 there are seven records. For the summer passage there was one on May 5,2020 with five on May 17, 2020, then singles seen on May 24, 2021, May 28, 2022, June 8, 2016 and June 11, 2020. The early fall passage ran from June 30 (2017) to September 21 (2017) singles seen on five dates with two on July 3, 2022, two on July 29, 2017, two on August 17, 2020, three on September 24, 2022, six on September 21, 2020 and seven on September 16, 2022. The late fall passage ran from October 5 (2018) to November 30 (2019) with high counts of two on November 2, 2016, three on October 28, 2016, three on October 16, 2017, three on October 14, 2018, five on October 27, 2020, five on October 21, 2021, six on November 30, 2019 and eight on October 3, 2020 the latter is the highest count for the park. There were 16 records. There were six records for the winter passage there were two on December 5, 2021, three on December 7, 2019, two on December 15, 2020, one on December 17, 2017, two on December 25, 2019 and one on December 26, 2020.

## Black-necked Stilt (Himantopus mexicanus)

A quite common early fall passage migrant for a fresh water species it is strange to see them flying to the south well out to sea (some did fly south over the river). For the late spring passage there were singles on March 29, 2020, March 31, 2017 and April 8, 2020 with two on April 28, 2022 three on April 2, 2018 and four on April 18, 2021. For the summer passage there were four on May 7, 2017. Now we come to the main event a very early fall passage this ran from June 4 (2018) to August $31(2021,2022)$ with high counts of 22 on July 14, 2019, 23 on June 8, 2016, 23 on June 28, 2020, 24 on August 3, 2018, 27 on June 26, 2016, 27 on July 19, 2021, 27 on June 19, 2022, 28 on August 17, 2021, 30 on June 21, 2020, 31 on August 25, 2017, 36 on July 26, 2018, 36 on August 6, 2020, 44 on July 29, 2018, 45 on August 1, 2022, 56 on August 11, 2020 and $\mathbf{1 1 0}$ on August 24, 2022 the latter is the highest count for the park. There were no later sightings. In 2016117 were seen with 81 in 2018, 160 in 2018, 126 in 2019, 273 in 2020, 184 in 2021 and 384 in 2022. In all this comes to 1,325 migrating to the south.

## American Avocet (Recurvirostra americana)

In all 127 seen and 91 of them were seen during the early fall passage. For the late spring passage there were two on March 19, 2020 with one on March 23, 2021 and one on March 24, 2019. The early fall passage ran from July 19 (2018) to September 24 (2021) with high counts of four on August 2, 2018, four on August 20, 2017, four on August 2, 2022, six on July 30, 2020, six on September 24, 2021, seven on September 1, 2017, seven on July 19, 2018, eight on September 14, 2019, eight on August 3, 2021, ten on August 26, 2021 and 14 on August 19, 2018 the latter is the highest count for the park. For the late fall passage there were four on October 13, 2021, five on October 16, 2019, three on October 30, 2021, six on November 2, 2019, one on November 7, 2021, three on November 13, 2019 and two on November 14, 2020. For the winter passage there were eight on December 3, 2020.

## Greater Yellowlegs (Tringa melanoleuca)

An uncommon passage migrant the early fall passage being the strongest event. In all there are 62 records. The spring passage ran from February 28 (2018) to May 23 (2022) with high counts of two on May 14, 2019, two on March 19, 2020, two on April 21, 2022, three on March 21, 2019, four on April 19, 2021, eight on May 9, 2022, ten on May 14, 2022, 12 on April 26, 2020 and 16 on March 7, 2018. There were summer records as singles seen on May 23, 2020 and June 26,2019 with three on June 14, 2021. The early fall passage ran from July 7 (2017) to September 9 (2020) with high counts of three on August 20, 2017, three on July 17, 2018, three on August 13, 2019, four on September 7, 2017, four on July 25, 2018, five on September 9, 2020, six on July 7, 2017, eight on August 13, 2022, 12 on August 21, 2020 and 30 on August 3, 2018 the latter is the highest count for the park. For the late fall passage there were two on September 28, 2019, with one on October 13, 2022, one on October 21, 2021, one on October 22, 2016 and two on October 22, 2020.

## Lesser Yellowlegs (Tringa flavipes)

Another uncommon passage migrant the early fall passage was the strongest event. In all there are 67 records and 39 of them were for the early fall passage. For the early spring passage there was one on January 25, 2019, one on February 4, 2020, two on February 16, 2021 with two on February 26, 2016. The late spring passage ran from March 3 (2018) to May $14(2019,2022)$ with high counts of three on March 3, 2018, three on March 27, 2022, eight on May 7, 2022, ten on April 19, 2021, 12 on March 21, 2019, 15 on May 13, 2022 and 18 on May 14, 2022. For the summer passage there were two on May 30, 2021. The early fall passage ran from July 1 (2017)
to September 5 (2019) with high counts of four on July 25, 2018, four on August 13, 2017, four on August 17, 2019, four on September 4, 2019, four on August 21, 2020, six on July 17, 2018, six on July 27, 2018, six on September 5, 2019, six on August 24, 2020, ten on August 1, 2018, 12 on September 7, 2021, 14 on September 4, 2019, 15 on August 3, 2018, 17 on August 2, 2018, 20 on August 31, 2022 and $\mathbf{3 5}$ on August 5, $\mathbf{2 0 2 2}$ the latter is the highest count for the park. For the late fall passage there were 17 on November 12, 2020. For the winter passage there were two on December 22, 2020.

## Solitary Sandpiper (Tringa solitaria)

A very uncommon passage migrant they were normally only seen in flight; in all 30 located. For the late spring passage there were singles on March 23, 2021, April 12, 2021, April 15, 2019, April 17, 2021, April 18, 2022, April 21, 2020, April 24. 2016, April 26, 2020, May 1, 2020, May 2, 2017, May 6, 2016 and May 7, 2021. For the early fall passage singles were seen on July 20, 2020, July 25, 2022, August 4, 2021, August 5, 2017, August 7, 2016, August 8, 2018, August 15, 2017, August 16, 2020, August 18, 2019, August 27, 2016, August 27, 2017, September 2, 2021, September 9, 2021, September 9, 2022, September 11, 2016, September 11, 2020, September 13, 2017 and September 17, 2020.

## Willet (Tringa semipalmata)

A common passage migrant, present all year apart for a short period in June. In 2019 I made an attempt to separate out the two forms by their calls on this basis the Eastern race was present from March 5 to September 23 and the Western race was present to May 18. In 2020 the Eastern race was present from March 23 to October 11 and the Western race to April 22 and from August 13. In 2021 the Western race was present from August 16 and the Eastern race to September 30. In 2022 the Eastern race was seen from March 24 to September 27 and the Western race to April 22 and from August 14. The early spring passage ran from January 1 (five years) to March 3 (2016) with high counts of 41 on February 6, 2016, 43 on January 4, 2018, 43 on February 20, 2020, 46 on January 3, 2021, 59 on February 5, 2021, 60 on January 21, 2021, 64 on January 26, 2021, 64 on February 26, 2021 and 95 on February 21, 2021. The late spring passage ran from February 28 (2019) to June 11 (2019) with high counts of 190 on April 10, 2016, 227 on April 9, 2016, 245 on April 8, 2017, 362 on April 17, 2018 and 421 on April 1, 2018. The last dates of this passage were: June 1, 2018, June 7, 2017, June 8, 2016, June 9, 2022 and June 11, 2019. There were three summer sightings there were two on June 14, 2017 with singles on June 16, 2017 and June 18, 2016. In 2020 and 2021 they were present all summer, with a high count of 17 on June 27,2021 . The first dates for the early fall passage were: June 21,2020 , June

22, 2017, June 23, 2017, June 25, 2016, June 25, 2022, June 27, 2019 and July 1, 2021. This passage ran to October 1 (2021) with high counts of 210 on September 5, 2017, 220 on August 22, 2019, 233 on August 18, 2019, 235 on August 6, 2016, 235 on August 16, 2017, 240 on July 30, 2016, 243 on August 20, 2017, 260 on July 24, 2016, 283 on August 7, 2016, 380 on August 20, 2019 and 446 on August 20, 2016. The late fall passage ran from September 30 (2019) to November 30 (five years) with high counts of 140 on October 13, 2019, 144 on November 6, 2019, 152 on October 14, 2018, 181 on October 10, 2021, 220 on October 6, 2019, 240 on November 5, 2021, 245 on October 24, 2020, 250 on November 12, 2020, 300 on November 14, 2020 and 495 on October 19, 2021 the latter is the highest count for the park. The winter passage ran from November 28 (2020) to December 31 (all years) with high counts of 31 on December 12, 2019, 32 on December 25, 2019, 36 on December 3, 2016, 69 on December 26, 2020, 110 on December 16, 2020 and 120 on December 1, 2020.

## Spotted Sandpiper (Actitis macularius)

An uncommon passage migrant with the heaviest passage in the spring; they normally flew by close to the shore landing frequently. In all there are 103 records 58 were for the spring and 45 were for the fall. The late spring passage ran from April $1(2019)$ to May $20(2016,2020)$ with high counts of four on May 18, 2016, four on April 29, 2017, four on April 21, 2019, four on May 6, 2019, four on April 18, 2021, five on May 12, 2017, six on May 16, 2022 and eight on April 27, 2020 the latter is the highest count for the park. The early fall passage ran from July 15 (2022) to September 12 (2022) with high counts of three on July 18, 2018, three on July 19, 2018, three on July 21, 2021 and three on July 23, 2022; there were also six counts of two. For the late fall passage there was one on October 29, 2021.

## Upland Sandpiper (Bartramia longicauda)

This is a vagrant for the early fall passage one flew to the south along the river on July 22, 2022.

## Whimbrel (Numenius phaeopus)

An uncommon passage migrant most were seen during the late spring passage. In all 321 birds counted over the seven years 296 were for the late spring passage and only 25 were for the summer/early fall passage. For the early spring passage there were singles on February 21, 2016 and February 28, 2017. The late spring passage ran from March 17 (2020) to May 31 (2021) with
high counts of 12 on April 1, 2019, 13 on April 11, 2018, 13 on April 15, 2019, 13 on April 17, 2019, 14 on April 16, 2016 and 17 on April 29, 2018 the latter is the highest count for the park. Exceptionally for the summer passage there was one on June 18, 2021 with two on June 19, 2016. The early fall passage ran from July 2 (2017) to September 10 (2016) with high counts of two on July 8, 2020, two on July 21, 2018, two on September 10, 2016 and three on July 27, 2021.

## Long-billed Curlew (Numenius americanus)

This is a vagrant for the late spring passage one flew to the north along the shore on April 15, 2016. For the late fall passage, one flew to the north along the shore on November 6, 2021.

## Hudsonian Godwit (Limosa haemastica)

This is a vagrant for the early spring passage one flew to the north on January 1, 2020. For the late fall passage, one flew to the north on October 9, 2019.

## Marbled Godwit (Limosa fedoa)

An early fall passage migrant no more than two a day were seen except for 2018 when there was an extended heavy passage. For the late spring passage there were singles on March 19, 2019, April 1, 2018, April 10, 2016 and April 18, 2022. The early fall passage ran from July 11 (2019, 2022) to September 23 (2018) except for 2018 up to two a day seen with three on August 22, 2021, then in 2020 five seen on August 4 with six on August 31. In 2018 the high counts were: four on August 31, six on September 5, six on September 10 and ten on September 16, then six seen on September 18 with four on September 20. The count of ten is the highest count for the park. In 2018 and 2020 there was a late fall passage from October 4 (2018) to November 11 (2018) with high counts of three on October 6, 2018, three on October 7, 2018, two on October 14, 2018, two on October 23, 2018, two on October 24, 2020 and two on November 11, 2018. There was no winter passage.

## Ruddy Turnstone (Arenaria interpres)

Seen all year except for a short break in the summer this break often lasted a month but the timing of this break varied. The late spring and early fall passages were the heaviest events. The early spring passage ran from January 1 (all years) to March $1(2017,2022)$ with high counts
of 24 on February 5, 2017, 27 on February 21, 2020 and 52 on February 20, 2017. The late spring passage ran from February 28 (2016) to June 17 (2016) with high counts of 32 on April 30, 2016, 34 on March 7, 2020, 36 on May 7, 2019, 36 on May 11, 2021, 38 on May 13, 2021, 39 on March 5, 2021, 45 on April 6, 2021, 48 on May 13, 2016, 50 on April 17, 2018, 56 on March 2, 2016, 56 on March 29, 2022, 62 on April 26, 2019 and 64 on May 6, 2016. The summer breaks ran from June 18, 2016 to July 2, 2016, June 14, 2017 to July 22, 2017, May 24, 2018 to June 20, 2018, May 29, 2019 to July 12, 2019, June 5, 2020 to July 23, 2020, June 8, 2021 to July 14, 2021 and June 11, 2022 to July 19, 2022. The early fall passage ran from June 21 (2018) to October 1 (2017) with high counts of 43 on September 30, 2017, 44 on August 26, 2017, 45 on August 31, 2016, 65 on September 15, 2021 and 83 on September 4, 2016 the latter is the highest count for the park. The late fall passage ran from September 30 (2021) to December 2 (2016) with high counts of 27 on October 12, 2019, 29 on October 16, 2019, 35 on November 13, 2017, 35 on November 25, 2022, 37 on November 2, 2021, 41 on November 14, 2021, 44 on November 28, 2021 and 45 on November 10, 2021. The winter passage ran from December $1(2018,2021)$ to December 31 (2017, 2019, 2020 and 2022) with high counts of 22 on December 29, 2019, 22 on December 6, 2022, 23 on December 23, 2016, 24 on December 13, 2016, 24 on December 2, 2022, 25 on December 20, 2020, 26 on December 19, 2021, 27 on December 22, 2022, 28 on December 4, 2021, 31 on December 31, 202234 on December 3, 2022, 36 on December 12, 2021 and 45 on December 17, 2022.

## Red Knot (Calidris canutus)

They can be seen in good numbers from November to February but the numbers appear to depend on the state of the beach; when there is a sizeable extent of sand there can be high numbers feeding along the tide line. The early spring passage appears to be the strongest passage this event ran from January 1 (2016, 2017, 2019 and 2021) to March 8 (2020) with high counts of 195 on January 23, 2019, 205 on February 19, 2016, 210 on January 25, 2017, 240 on January 7, 2017, 335 on February 7, 2016, 350 on January 28, 2016, 355 on January 29, 2019 and 420 on February 14, 2016 the latter is the highest count for the park. The late spring passage ran from March 4 (2016) to May 16 (2017, 2018 and 2019) with high counts of 60 on March 5, 2016 and 60 on March 13, 2022. There was a minor early fall passage from July 29 (2021) to September 30 (2017) with a high count of 15 on September 21, 2019. The late fall passage ran from October 5 (2019) to December 2 (2017) with high counts of 146 on November 24, 2017, 180 on November 8, 2016, 235 on November 29, 2020, 250 on November 27, 2016 and 295 on November 13, 2016. The winter passage ran from December 1 (2018) to December 31 (2016, 2017 and 2018) with high counts of 90 on December 6, 2017, 112 on December 27, 2016, 159 on December 14, 2016, 194 on December 21, 2016, 210 on December 7, 2016 and 260 on December 4, 2016.

## Sanderling (Calidris alba)

A common passage migrant and winter visitor with large gatherings on the beach from time to time; there is normally a month-long break in the summer. The early spring passage ran from January 1 (all years) to March 3 (2022) with high counts of 61 on February 25, 2016, 61 on January 21, 2020 and 159 on February 11, 2017. The late spring passage ran from February 28 (2016) to June 13 (2017) with high counts of 170 on May 12, 2017, 170 on May 14, 2021, 172 on May 13, 2016, 180 on March 12, 2021, 183 on March 5, 2017, 195 on April 22, 2021, 240 on April 2, 2021, 274 on May 22, 2018, 290 on March 15, 2017, 370 on May 8, 2019 and 430 on May 5, 2016. Excluding 2016 the summer break ran from: June 14, 2017 to July 1, 2017, May 28, 2018 to July 8, 2018, May 29, 2019 to July 6, 2019, June 5, 2020 to July 20, 2020, June 2, 2021 to July 19, 2021 and June 5, 2022 to July 20, 2022. In 2016 there were singles on June 17, June 18, June 19 and June 29. The early fall passage ran from July 1 (2017) to September 30 (2018) with high counts of 200 on September 10, 2017, 240 on August 13, 2018, 240 on August 10, 2020, 245 on August 9, 2018, 260 on August 2, 2017, 301 on July 30, 2017 and 460 on August 3, 2018 the latter is the highest count for the park. The late fall passage ran from September 28 (2017) to November 30 (all years) with high counts of 170 on October 2, 2017, 218 on October 12, 2019, 273 on October 27, 2019 and 300 on November 25, 2019. The winter passage was a minor event it ran from November 30 (2020) to December 31 (all years) with a high count of 45 on December 4, 2019.

## Semipalmated Sandpiper (Calidris pusilla)

A quite common passage migrant the heaviest passage was in the spring. The late spring passage ran from April 18 (2021) to June 6 (2017) with high counts of 110 on May 8, 2016, 115 on May 5, 2016, 135 on May 13, 2019, 137 on May 22, 2016, 161 on May 6, 2016, 283 on April 29, 2018, 305 on May 14, 2018 and 535 on May 13. 2022 the latter is the highest count for the park. The early fall passage ran from July 16 (2017) to September 14 (2016) with high counts of 63 on September 1, 2016, 63 on August 23, 2022, 68 on July 30, 2018, 70 on August 4, 2017, 70 on August 20, 2021, 78 on August 24, 2020, 87 on July 27, 2019, 96 on July 24, 2019, 97 on August 16, 2019 and 350 on July 24, 2021.

## Western Sandpiper (Calidris mauri)

An uncommon passage migrant and winter visitor the early fall passage being the strongest event. For the early spring passage there were 11 on January 4, 2017 with two on January 8, 2021, one on January 30, 2020, four on February 10, 2016, one on February 24, 2021 and 15 on February 26, 2021. For the late spring passage there was one on March 20, 2019, one
on March 20, 2022, 18 on March 13, 2020 and three on April 20, 2020. There were also singles on May 1, 2016, May 6, 2018 and May 13, 2017 with two on May 7, 2017 and 30 on April 18, 2022. The early fall passage ran from July 17 (2020) to October 3 (2020) with high counts of 27 on September 25, 2016, 40 on August 26, 2019, 40 on September 8, 2019, 60 on September 2, 2018 and $\mathbf{2 0 5}$ on September 29, $\mathbf{2 0 2 0}$ the latter is the highest count for the park. For the late fall passage there were 20 on October 18, 2022 with one on November 1, 2017, three on November 10, 2017 and four on November 15, 2017, then singles seen on November 22, 2016 and November 29, 2017. The winter passage ran from December 3 (2016) to December 27 (2020) with high counts of six on December 16, 2016, eight on December 5, 2017 and 13 on December 11, 2019.

## Least Sandpiper (Calidris minutilla)

A quite common passage migrant for most years; the early fall passage was the stronger event. The late spring passage ran from February 24 (2021) to May 26 (2017) with high counts of 48 on May 6, 2017, 53 on May 7, 2017, 55 on May 11, 2016, 60 on April 29, 2018 and 71 on May 5 , 2017. The early fall passage ran from June 29 (2016) to September 28 (2020) with high counts of 69 on August 26, 2017, 135 on July 31, 2018, 142 on July 18, 2018 and 345 on July 30, 2018 the latter is the highest count for the park. For the late fall passage there were singles on October 17, 2017, October 22, 2019 and November 9, 2017.

## White-rumped Sandpiper (Calidris fuscicollis)

A rare late spring passage migrant there are six records for the early fall passage. The late spring passage ran from April 29 (2018) to May 15 (2021) with high counts of two on May 5, 2016, two on May 10, 2018, two on May 13, 2019, two on May 13, 2022, three on May 6, 2016, three on May 8, 201, three on May 7, 2017, four on May 13, 2021 and seven on May 10, 2022 the latter is the highest count for the park. For the early fall passage there were singles on August 5, 2017 and August 6, 2019 with three on August 13, 2020, then singles seen on August 30, 2020 and August 31, 2021.

## Pectoral Sandpiper (Calidris melanotos)

An uncommon passage migrant the early fall passage is the strongest event. The late spring passage ran from March 26 (2020) (otherwise from May 2 (2020)) to May 14 (2022) with high counts of eight on May 7, 2016 and 14 on May 3, 2017. The early fall passage ran from June

28 (2020) to September 19 (2020) with high counts of 15 on July 25, 2017, 15 on September 7, 2021, 23 on September 3, 2016, 35 on September 2, 2016, 40 on September 6, 2020 and 71 on September 1, 2016 the latter is the highest count for the park.

## Purple Sandpiper (Calidris maritima)

A rare passage migrant there are 21 sightings of 38 birds for the seven years; none were seen in 2016. This species was only seen flying very close to the shore. For the early spring passage there was one on February 20, 2017. For the late spring passage there was one on March 22, 2019, one on March 31, 2022, with three on April 8, 2017, one on April 8, 2018, two on April 11, 2018, one on April 16, 2020, one on April 18, 2021, one on April 19, 2021, two on April 19, 2022 and three on April 21, 2021. For the late fall passage there were three on October 18, 2020, two on October 28, 2020, one on November 14, 2017, one on November 25, 2020 with three on November 20, 2018 and three on November 28, 2021. For the winter passage there were two on December 1, 2018 with one on December 1, 2019, one on December 14, 2017, two on December 14, 2019 and one on December 15, 2022. The counts of three are the highest counts for the park.

## Dunlin (Calidris alpina)

Whilst there are sightings in the spring to late May and in the fall from early September this is really a late fall passage migrant. The early spring passage ran from January 2 (2019) to February 16 (2021) with high counts of 12 on January 15, 2016 and 30 on January 13, 2021. The late spring passage ran from February 27 (2020) to April 20 (2022) also with high counts of 12 on February 27, 2020 and 12 on April 9, 2018. Exceptionally there were indications of a passage in May with one on May 11, 2021, eight on May 21, 2016 and two on May 23, 2017. For the early fall passage there were two on September 5, 2019 with six on September 9, 2021 and two on September 30, 2021. The late fall passage ran from September $29(2019,2020)$ to November 25 (2017) with high counts of 30 on October 9, 2018, 35 on September 29, 2019, 305 on September 30, 2018 and $\mathbf{3 6 0}$ on October 27, 2019 the latter is the highest count for the park. There was a minor winter passage in 2018 from November 29 to December 19 with a high count of three on December 19. In 2020 there was one on December 18.

## Stilt Sandpiper (Calidris himantopus)

A rare passage migrant there are 27 records of 78 birds for the seven years; it was really an early fall passage migrant. For the late spring passage there were singles on May 1, 2018 and May 7, 2019 with four on April 19, 2021. The early fall passage ran from July 11 (2022) to September 9 (2021) with high counts of five on August 2, 2018, five on August 21, 2020, five on September 9, 2021, seven on July 27, 2018, eight on July 31, 2016 and ten on September 6, 2020 the latter is the highest count for the park.

## Buff-breasted Sandpiper (Tryngites subruficollis)

This is a vagrant for the early fall passage one flew to the south on August 25, 2021 (wind calm) it was with an American Golden-Plover.

## Ruff (Philomachus pugnax)

This is a vagrant for the early fall passage one flew to the north along the shore on September 25, 2020 (wind calm).

## Short-billed Dowitcher (Limnodromus griseus)

An uncommon passage migrant with one exception the two passages are evenly matched. The late spring passage ran from March 19 (2017) to April 24 (2016) with high counts of six on March 19, 2017, six on March 22, 2019, nine on April 11, 2018, 14 on March 31, 2018 and 40 on April 1, 2021. There were later records as there were two on May 6, 2016, two on May 10, 2021, two on May 11, 2022, one on May 17, 2022 and one on May 30, 2016. The early fall passage ran from July 8 (2021) to September 21 (2017) with high counts of nine on August 3, 2019, 11 on August 28, 2017, 16 on September 9, 2016, 18 on September 14, 2016, 18 on September 12, 2021, 20 on August 22, 2021, 22 on September 7, 2021, 24 on August 24, 2022, 35 on August 20, 2020, 79 on August 15, 2020 and 88 on August 15, 2019 the latter is the highest count for the park. In 2017 there were records for the late fall passage with singles on November 5 and November 24.

## Long-billed Dowitcher (Limnodromus scolopaceus)

There are just 27 records for the seven years (none seen in 2016) there was a light late spring passage, some early fall sightings and a stronger late fall passage. The late spring passage ran from March 3 (2021) to May 12 (2022) with high counts of three on April 1, 2018, five on March 31, 2018, six on April 1, 2019, seven on April 13, 2021, 26 on May 11, 2022 and 30 on March 3, 2021. There were four early fall records: on July 12, 2017 there was one in breeding plumage on the beach. Later there was one on July 18, 2020, two on August 26, 2017, one on September 8, 2018 and two on September 8, 2019. For the late fall passage there were high counts of ten on September 28, 2019, 12 on October 21, 2021, 20 on September 28, 2020, 24 on October 24, 2017, 30 on November 4, 2021, 35 on October 13, 2020, 50 on October 27, 2019 and 53 on November 12, 2022 the latter is the highest count for the park. This passage ran to November 12 (2020). For the winter passage there were six on December 10, 2021.

## Wilson's Snipe (Gallinago delicta)

This is a vagrant there are only ten records. For the early spring passage there were three on January 8, 2021. For the late spring passage there were three on March 14, 2018 they flew to the north out at sea; later there was one on April 8, 2021 with one on April 29, 2022. The counts of three are the highest counts for the park. For the late fall passage there were two on October 4, 2020 with singles on October 12, 2016, October 31, 2017, November 4, 2020, November 23, 2021 and November 26, 2019.

## Wilson's Phalarope (Phalaropus tricolor)

This is a vagrant for the early fall passage there were singles on August 23, 2021, August 26, 2017, August 31, 2020, August 30, 2022 and September 9, 2021.

## Red-necked Phalarope (Phalaropus lobatus)

A rare passage migrant excepting 2019 when there was a mini-invasion in the early fall. For the late spring passage there were two on April 11, 2018 with singles on April 15, 2016 and May 2, 2019 with eight on May 9, 2022 and one on May 10, 2022. In 2021 there was a minor passage with eight on April 2, two on April 3, one on May 19, four on May 20 and five on May 21. For the early fall passage excluding 2019 there was one on August 2, 2020 and one on September 3, 2018 with two on September 11, 2017, 11 on September 20, 2020, five on September 21, 2020.

For the late fall passage there was one on October 2, 2017, two on October 3, 2018, one on October 10, 2018, one on October 23, 2018, one on November 2, 2020, one on November 13, 2019 and six on November 28, 2022. Now back to 2019 for the early fall passage there were eight on September 14 with ten on September 15, 25 on September 21, 14 on October 1 and 105 on October 6 the latter is the highest count for the park.

## Red Phalarope (Phalaropus fulicarius)

There are just ten records for the seven years (none seen in 2016) all bar one were for the fall passages. For the late spring passage there was one on April 22, 2018. For the early fall passage there were two on September 1, 2019 with one on September 10, 2017 and one on September 21, 2020. For the late fall passage there was one on October 2, 2017 with 14 on October 3, 2018, 30 on October 6, 2019, one on November 2, 2017, one on November 18, 2020 and five on November 21, 2021. The count of 30 is the highest count for the park.

## South Polar Skua (Stercorarius maccormicki)

This is a vagrant for the winter passage a light morph flew to the south on December 21, 2017.

## Pomarine Jaeger (Stercorarius pomarinus)

There is only a limited spring passage most records are for the late fall and winter passages. The early spring passage ran from January 1 (2017, 2019 and 2020) to February 27 (2016) with high counts of six on January 4, 2020, six on February 15, 2017, six on February 12, 2018, seven on January 2, 2021, 12 on January 4, 2022 and 27 on January 3, 2017. The late spring passage ran from March 2 (2016) to March 26 (2018) with high counts of two on March 2, 2016 and two on March 18, 2019. The records up to March $4(2016,2019)$ may be part of the early spring passage. For the early fall passage there was one on September 7, 2017. The late fall passage ran from September 21 (2020) to December 1 (2017) with high counts of 23 on November 24, 2018, 32 on November 28, 2017, 44 on November 9, 2020, 57 on November 23, 2018, 67 on November 2, 2016, 88 on November 11, 2017 and 431 on November 18, 2020 the latter is the highest count for the park. The winter passage ran from December $1(2018,2022)$ to December 31 (2016, 2017, 2018 and 2020) with high counts of 20 on December 17, 2018, 31 on December 8, 2017, 33 on December 15, 2017, 102 on December 6, 2017, 135 on December 12, 2019 and 152 on December 2, 2022.

## Parasitic Jaeger (Stercorarius parasiticus)

The main passage ran from late December to early February; there was a late fall movement in 2017. The early spring passage ran from January 1 (2016, 20172019 and 2021) to March 4 (2017) with high counts of 20 on January 22, 2016, 21 on January 4, 2020, 21 on January 28, 2021, 24 on January 8, 2016, 38 on January 15, 2016, 39 on February 12, 2018, 53 on January 17, 2016 and 70 on January 3, 2017. The late spring passage ran from February 28 (2021) to April 16 (2018) with a high count of seven on March 26, 2018. There were out of season records with singles on May 24, 2020, June 7, 2020, July 6, 2020 and July 18, 2018. The early fall passage ran from August $26(2016,2017)$ to September $29(2018)$ with high counts of seven on August 26, 2017 and August 27, 2017. The late fall passage ran from October 1 (2017, 2018 and 2020) to November 30 (2016) with a high count of ten on October 2, 2018. That leaves 2017 there were 28 on October 2 with 85 on October 3, then 64 seen on October 4 with 32 on November 11. The count of 85 is the highest count for the park. The winter passage ran from November 28 (2021) to December $31(2018,2019)$ with high counts of 16 on December 17, 2018, 16 on December 22, 2018, 16 on December 29, 2018 and 26 on December 14, 2022 (there were four other high counts of five).

## Long-tailed Jaeger (Stercorarius longicaudus)

A very rare passage migrant there are just 13 records and five of them came from 2017 and 2020 (there were no sightings in 2016). For the early spring passage there was one on February 14, 2018. For the early fall passage there were three on September 10, 2017 with singles on September 15, 2020 and September 16, 2020. There were also three on September 21, 2020 with one on September 25, 2020. For the late fall passage there were three on September 30, 2017 with singles on October 18, 2017, November 8, 2021 and November 20, 2020. For the winter passage there were singles on December 17, 2017, December 21, 2019 and December 26, 2017. The counts of three are the highest counts for the park.

## Laughing Gull (Larus atricilla)

Present all year with very high numbers from November to January in contrast numbers were very low for both the summer and early fall passages. Some of the biggest movements took place very early in the morning. The early spring passage ran from January 1 (all years) to March 2 (2016) with high counts of 4,230 on January 27, 2020, 4,950 on January 1, 2017, 5,250 on February 18, 2019, 5,800 on January 20, 2017, 6,550 on January 17, 2021, 7,550 on January 22, 2016 and 10,700 on January 3, 2017. The late spring passage ran from February 28 (2019, 2020
and 2021) to May 2 (2018) with high counts of 2,260 on March 26, 2018, 2,500 on March 4, 2019, 2,670 on March 1, 2020 and 3,550 on March 24, 2019. The summer passage ran from April 30 (2017) to July 2 (2016, 2020, 2021 and 2022) with a high count of 630 on June 6,2018 . The early fall passage ran from July 1 (2018) to October 5 (2022) with a high count of 1,240 on September 23, 2019. The late fall passage ran from September 30 (2017) to December 4 (2022) with high counts of 7,750 on November 12, 2017, 10,350 on November 19, 2016, 12,000 on November 11, 2017, 15,300 on November 24, 2016 and 36,000 on November 20, 2016. The winter passage ran from November 29 (2018) to December 31 (all years) with high counts of 8,270 on December 20, 2017, 9,500 on December 18, 2017, 11,900 on December 15, 2017, 17,540 on December 17, 2017, 17,900 on December 26, 2017, 18,000 on December 12, 2019 and 47,300 on December 16, 2018 the latter is the highest count for the park.

## Franklin's Gull (Larus pipixcan)

For the seven years there are 13 records of 14 birds all bar two were in first-winter plumage. The majority were seen in November and December. For the early spring passage there were singles on January 2, 2016, January 10, 2020 and January 23, 2017. For the late fall passage there were singles on November 6, 2018, November 8, 2022, November 12, 2017, November 18, 2016, November 19, 2021 and November 26, 2016. The individual seen on November 6, 2018 was an adult. For the winter passage there were singles on December 10, 2017, December 17, 2021, December 18, 2016, December 22, 2022, December 24, 2022 with two on December 21, 2019 (one of the two was an adult) the count of two is the highest count for the park.

## Little Gull (Larus minimus)

This is a vagrant for the winter passage there was one in first-winter plumage on December 13, 2022.

## Black-headed Gull (Larus ridibundus)

This is a vagrant, for the early spring passage there were singles on January 31, 2020 and February 8, 2021. There were three sightings for the winter passage; there were singles on December 7, 2019, December 15, 2017 and December 22, 2021.

## Bonaparte's Gull (Larus philadelphia)

This tiny gull when present often works its way along the shore over the shallowest of seas. The highest numbers are seen in January and early February. The early spring passage ran from January $1(2019,2021)$ to February $28(2018)$ with high counts of 18 on January 15, 2018, 18 on February 8, 2021, 21 on February 7, 2016, 21 on January 8, 2018, 22 on February 5, 2017, 28 on January 28, 2019, 28 on February 4, 2020, 29 on February 17, 2021, 60 on January 17, 2020, 70 on February 22, 2020 and 73 on January 23, 2020. The late spring passage ran from March 1 (2022) to April 22 (2016) with high counts of four on March 3, 2021, four on March 30, 2019, five on March 21, 2017, five on April 2, 2019, five on March 1, 2022, 17 on March 21, 2021 and 27 on March 9, 2021. There was only the trace of a late fall passage with sightings from November 2 (2016) to November 30 (2021) the high counts were of two on November 25, 2016, two on November 26, 2021 and four on November 30, 2021. The winter passage ran from December 1 $(2019,2021)$ to December 31 (2020) with high counts of seven on December 17, 2016, 12 on December 6, 2016, 17 on December 16, 2016, 24 on December 14, 2022 and 100 on December 30, $\mathbf{2 0 2 0}$ this is the highest count for the park.

## Ring-billed Gull (Larus delawarensis)

A common gull on the shore and close to the shore from late November to February otherwise it was rather uncommon; there were no sightings in July. The early spring passage ran from January 1 (all years) to March 3 (2022) with high counts of 110 on January 13, 2016, 113 on February 26, 2017, 114 on January 25, 2017, 116 on February 2, 2020, 130 on January 29, 2016, 156 on February 8, 2018, 190 on February 16, 2018, 230 on January 3, 2017, 240 on January 24, 2020, 330 on January 1, 2016 and $\mathbf{8 7 0}$ on January 4, 2016 the latter is the highest count for the park. The late spring passage ran from February 28 (2018) to May 17 (2019) with high counts of 40 on March 22, 2017, 41 on April 9, 2016, 60 on March 9, 2022, 63 on March 13, 2017 and 65 on March 4, 2016. For the summer passage there were singles on May 20, 2022, May 21, 2022, May 26, 2017 and June 3, 2017. The early fall passage was little better with one on July 11, 2022 then sightings later from August 28 (2020) to September 30 (2017); the high count was that of three on September 18, 2017. The late fall passage ran from October $1(2016,2017)$ to December 2 (2016) with high counts of 30 on November 20, 2016, 31 on November 30, 2016, 43 on November 20, 2017, 46 on November 29, 2017 and 57 on November 12, 2017. The winter passage ran from November 29 (2019) to December 31 (all years) with high counts of 55 on December 22, 2018, 58 on December 25, 2019, 60 on December 11, 2016, 62 on December 30, 2017, 72 on December 30, 2016, 77 on December 16, 2016, 96 on December 16, 2022, 100 on December 16, 2018, 100 on December 9, 2022 and 312 on December 14, 2017.

## Herring Gull (Larus argentatus)

Numbers very variable but the heaviest passage is often from mid-December to midFebruary; there are no summer sightings. The early spring passage ran from January 1 (all years) to February 28 (2016, 2018, 2019 and 2020) with high counts of 688 on February 15, 2017, 820 on March 9, 2022, 870 on January 9, 2019, 1,135 on January 22, 2016, 1,240 on February 12, 2016, 1,470 on February 13, 2016 and 1,880 on January 21, 2017. The late spring passage ran from February $28(2017,2021)$ to May $22(2018)$ with high counts of 546 on March 19, 2018 and 1,730 on March 5, 2016. For the early fall passage there were singles on July 6, 2018 and August 1, 2018 then the passage ran from August 27 (2017) to September 28 (2019) with high counts of two on August 28, 2017, 30 on September 21, 2020 and 30 on September 22, 2020. The late fall passage ran from September $28(2017,2022)$ to December $1(2019)$ with high counts of 245 on November 5, 2021, 295 on November 20, 2017 and 485 on November 12, 2017. The winter passage ran from November 28 (2020) to December 31 (all years) with high counts of 1,070 on December 18, 2018, 2,040 on December 15, 2017, 2,530 on December 16, 2017, 2,780 on December 17, 2017, 3,270 on December 24, 2017 and 4,140 on December 26, 2017 the latter is the highest count for the park.

## Iceland Gull (Larus glaucoides)

This is a vagrant there are just 15 records; of these five were for the early spring passage, four for the late fall and six for the winter passage. For the early spring passage there were singles on January 27, 2022, February 10, 2020, February 20, 2019, February 26, 2016 and February 26, 2018. For the late fall passage there were singles on November 10, 2021, November 18, 2020 and November 20, 2021 with two on November 9, 2022 the latter is the highest count for the park. For the winter passage there were singles on November 29, 2022, December 2, 2022, December 6, 2019, December 7, 2020 and December 18, 2016.

## Lesser Black-backed Gull (Larus fuscus)

Whilst there was a noticeable spring passage this was above all a November and December passage migrant. Too many adults were seen the first-winters must have to a degree been overlooked. The early spring passage ran from January $1(2020,2022)$ to February $26(2016$, 2022) with high counts of four on January 23, 2019, five on February 15, 2021, six on January 3, 2018, eight on January 9, 2022 and eight on February 24, 2022 there were also six counts of three. The late spring passage ran from March 1 (2021) to May 4 (2018) with high counts of four on March 13, 2017, four on March 25, 2020, four on April 9, 2019 and ten on April 17, 2021. There
was a trace early fall passage from August 19 (2019) to September 17 (2016) with high counts of two on August 28, 2017 and three on September 16, 2020. The late fall passage ran from September 21 (2018, 2020) to December 3 (2017) with high counts of four on October 3, 2018 four on November 15, 2022, five on November 8, 2018, six on November 16, 2022, six on November 27, 2022, seven on October 22, 2020, ten on November 12, 2018, 12 on September 22, 2020, 22 on November 12, 2020, 24 on November 23, 2018, 25 on November 5, 2021 and 35 on November 1, 2020. For the other years no more than three a day were seen. The winter passage ran from November 30 (2016) to December 30 (2019) with high counts of eight on December 2, 2022, nine on December 18, 2018, nine on December 4, 2020, 14 on December 17, 2019, 15 on December 26, 2017, 26 on December 19, 2021 and 63 on December 13, 2019 the latter is the highest count for the park. On December 18, 2018 there were two adults on the beach which showed the characteristic of the race Larus fuscus intermedius with another on January 6, 2020.

## Glaucous Gull (Larus hyperboreus)

In all 23 seen over the seven years and 13 of them were seen during the early spring passage. The early spring passage ran from January 3 (2017) to February 16 (2021) with high counts of two on January 20, 2017, two on January 23, 2017 and three on January 21, 2017. For the late spring passage there were singles on March 4, 2016, March 7, 2018, March 11, 2018 and March 28, 2022. For the winter passage there were singles on December 3, 2017, December 13, 2022 and December 17, 2017 with three on December 26, 2017. The counts of three are the highest counts for the park.

## Great Black-backed Gull (Larus marinus)

There was a significant spring passage but the numbers for the late fall and winter passages were higher. The early spring passage ran from January $1(2016,2017)$ to March 2 (2016) with high counts of seven on February 26, 2016, seven on February 4, 2022, eight on January 24, 2016, eight on January 3, 2017 and 12 on January 9, 2016. The late spring passage ran from March 1 (2021) to May 14 (2016) with high counts of five on April 16, 2017, nine on April 16, 2016 and 18 on April 15, 2016; there were also five counts of four. There was a very early fall record as there was one on July 30, 2017. The limited early fall passage then ran from August 12 (2017) to September 30 (2017) with high counts of five on August 27, 2017 and 28 on September 21, 2020. The late fall passage ran from September 28 (2022) to December 2 (2016) with high counts of nine on October 3, 2017, ten on November 12, 2017, ten on October 31, 2020, 13 on November 30, 2016, 14 on November 24, 2018 and 31 on November 23, 2018 the
latter is the highest count for the park. The winter passage ran from December $1(2017,2021)$ to December 31 (2016, 2018 and 2020) with high counts of nine on December 4, 2016, 15 on December 26, 2017, 17 on December 16, 2016, 17 on December 30, 2020, 24 on December 17, 2016 and 29 on December 15, 2017.

## Sabine's Gull (Xema sabini)

A major rarity there are just nine records of 12 birds (none were seen in 2016 and 2021). For the fall passage there were singles on September 4, 2018, September 10, 2017, September 20,2020 and September 23, 2022 with two on September 14, 2019, then singles seen on October 1, 2017 and October 2, 2017 with two on October 3, 2017. There was also one on October 19, 2020. The counts of two are the highest counts for the park.

## Black-legged Kittiwake (Rissa tridactyla)

This was another rarity there are only 13 records of 18 birds. For the late spring passage there was one on March 6, 2016. For the late fall passage there were singles on October 19, 2018, November 2, 2020, November 5, 2021 and November 9, 2020 with two on November 11, 2017, then singles seen on November 14, 2017, November 20, 2021 and November 20, 2022. For the winter passage there were singles on December 12, 2019, December 14, 2022, December 19, 2019 and December 29, 2017 with five on December 13, 2022 the latter is the highest count for the park.

## Gull-billed Tern (Geochelidon nilotica)

Over the seven years a total of 91 seen; 53 were for the late spring passage, 11 for the summer passage, 26 for the early fall passage and one for the late fall passage. The late spring passage ran from March $18(2019,2020)$ to May $26(2020)$ with high counts of, three on March 31, 2022, three on April 1, 2021, three on April 28, 2022, four on April 16, 2021 and four on April 17, 2021. For the summer passage there were singles on May 3, 2022, May 18, 2021, May 19, 2022, May 21, 2021, June 11, 2017, June 14, 2021 and June 26, 2020 with two on May 28, 2022 and two on June 15, 2019. The early fall passage ran from July 1 (2018) to September 24 (2022) with high counts of two on July 4, 2016, two on August 11, 2019, two on September 17, 2016, three on September 11, 2021, four on August 30, 2019, six on August 27, 2017 and six on September 19, 2020 the counts of six are the highest counts for the park. For the late fall passage there was one on October 5, 2022.


2016: Cory's Shearwater photographed by Michael Brothers


2016: Black Tern Photographed by Mike Brothers


2017: Ruddy Turnstone Photographed by Eli Schaperow


2017: Pomarine Jaeger Photographed by Mike Brothers


2018: Snowy Egret photographed by Tatyana St Laurent


2018: Osprey photographed by Eli Schaperow


2019: Black-headed Gull photographed by Michael Brothers


2019: Thick-billed Murre photographed by Eli Schaperow


2020: Brown Booby photographed by Kim Ramos


2020: Wilson's Plover photographed by Eli Schaperow


2021: Leach's Storm-Petrel photographed by Sam Krah


2021: Sabine's Gull photographed by Lorri Lilja


2022: Common Ringed Plover photographed by David Flumm


2022: Least Sandpiper photographed by Kim Ramos

## Caspian Tern (Hydroprogne caspia)

Normally seen in very low numbers throughout the year there was an exceptional passage in October, 2019. The early spring passage ran from January $1(2016,2019)$ to February 27 (2018) with high counts of two on January 1, 2019, two on January 4, 2020, two on February 17, 2020, three on February 6, 2021 and four on January 13, 2019. The late spring passage ran from March $2(2021,2022)$ to April $30(2021)$ singles seen except for four on April 15, 2020 and nine on April 9, 2017. The summer passage ran from May 2 (2020) to July 1 (2018) with counts of two on four dates and four on June 23, 2017. The early fall passage ran from June 29 (2016) to September 30 (2016) with high counts of three on July 8, 2016, three on August 4, 2021, three on September 2, 2021, three on September 15, 2021, four on June 29, 2016, four on August 5, 2016, five on September 24, 2016, seven on July 16, 2016 and 11 on September 21, 2020. No more than two a day seen for the other years. The late fall passage ran from October 1 (2017) to November 30 (2016) excluding 2019 the high counts were six on November 9, 2016, six on October 22, 2017, six on October 23, 2017, seven on October 26, 2018, eight on October 27, 2017, eight on October 15, 2020, nine on October 23, 2018 and 21 on October 24, 2017. Now to 2019 there were four on October 19 with 24 on October 25 and 164 on October 26, then 65 seen on October 27 with 56 on October 29, ten on October 30, eight on November 6 and four on November 14. The count of 164 is the highest count for the park. The winter passage ran from December 1 (2019) to December 31 (2018) with six counts of two, three on December 23, 2018 and four on December 18, 2021. There was no winter passage in 2020.

## Royal Tern (Thalasseus maxima)

A very common late fall to spring passage migrant only low numbers seen during the summer and early fall passages. The early spring passage ran from January 1 (all years) to March 3 (2020) with high counts of 375 on February 26, 2016, 390 on January 18, 2022, 429 on January 29, 2016, 466 on February 27, 2016, 500 on February 16, 2020, 520 on February 27, 2018, 533 on February 9, 2020, 630 on February 13, 2016, 684 on February 9, 2019, 852 on February 5, 2016 and 879 on February 10, 2017. The late spring passage ran from March $1(2017,2021)$ to May 1 (2019) with high counts of 360 on April 20, 2018, 450 on March 5, 2017, 838 on March 7, 2021 and 2,284 on March 3, 2017 the latter is the highest count for the park. The summer passage ran from April 29 (2017) to July 1 (2016, 2017 and 2020) with high counts of 73 on June 11, 2016, 78 on May 10, 2020, 81 on May 21, 2021, 84 on May 7, 2020, 86 on June 19, 2016 and 121 on May 5,2018 . The early fall passage ran from June $28(2022)$ to October $2(2021,2022)$ with high counts of 188 on September 28, 2018, 190 on September 24, 2017, 202 on September 11, 2017, 210 on August 26, 2017, 210 on September 21, 2017, 225 on September 19, 2017 and 255 on September

29, 2017. The late fall passage ran from September 29 (2019) to December 1 (2017) with high counts of 393 on October 5, 2016, 404 on November 2, 2016, 408 on October 16, 2020, 483 on October 6, 2017, 517 on November 11, 2017, 532 on October 16, 2017, 571 on October 26, 2019, 602 on November 6, 2019, 630 on October 16, 2017, 635 on October 29, 2019, 720 on October 28, 2016, 814 on October 4, 2017, 1,095 on October 2, 2017 and 1,270 on October 21, 2020. The winter passage ran from November $29(2020,2022)$ to December 31 (all years) with high counts of 303 on December 22, 2017, 357 on November 30, 2019, 400 on December 26, 2017 and 480 on December 1, 2020.

## Sandwich Tern (Thalasseus sandvicensis)

Present all year the summer was by far the quietest passage and the early fall passage was the heaviest. The early spring passage ran from January 1 (all years) to March 2 (2020) with high counts of 58 on January 14, 2019, 103 on January 16, 2018, 125 on January 27, 2022, 191 on January 6, 2022, 240 on February 5, 2022, 405 on January 27, 2017 and 479 on February 25, 2017. The late spring passage ran from February $28(2019,2021)$ to May $1(2020,2021$ and 2022) with high counts of 63 on April 20, 2018, 73 on March 15, 2017, 79 on March 14, 2018, 99 on April 1, 2019 and 145 on March 10, 2017. The summer passage ran from April 29 (2018) to June 30 (2018, 2019 and 2022) with high counts of 15 on June 27, 2017, 15 on April 30, 2018, 25 on June 23, 2019, 31 on June 28, 2017 and 49 on June 24, 2019. The early fall passage ran from July 1 (2018, 2019, 2021 and 2022) to September 30 (2016, 2017, 2019 and 2022) with high counts of 62 on August 24, 2016, 71 on September 15, 2020, 74 on September 20, 2018, 76 on September 28, 2018, 80 on September 9, 2016, 105 on September 26, 2018, 114 on August 10, 2022, 125 on September 10, 2018, 138 on August 14, 2016, 174 on September 4, 2017, 237 on August 28, 2017, 237 on September 16, 2017, 489 on August 29, 2017 and 490 on September 23, 2017 the latter is the highest count for the park. The late fall passage ran from September 30 (2018) to December 1 (2019) with high counts of 87 on October 5, 2018, 88 on November 18, 2016, 89 on November 5, 2016, 108 on October 22, 2016, 111 on October 30, 2016 and 125 on October 1, 2017. The winter passage ran from November 28 (2022) to December 31 (all years) with high counts of 88 on December 4, 2016, 90 on December 17, 2022, 132 on December 24, 2018, 134 on December 13, 2022, 144 on December 13, 2017, 146 on December 25, 2018, 146 on December 27, 2022, 335 on December 3, 2016 and 386 on December 22, 2017.

## Roseate Tern (Sterna dougallii)

In all 48 were seen: 23 were seen for the late spring passage, one for the summer passage and 24 for the early fall passage all bar nine were singles. For the late spring passage nine singles were seen from April $5(2019)$ to May $22(2021,2022)$ with two on April 17, 2020, two on May 12, 2022, two on May 13, 2021, two on May 15, 2021, two on May 18, 2022, three on May 10, 2020, five on May 22, 2021 and six on May 20, 2021 the latter is the highest count for the park. For the summer passage there was one on June 17, 2020. The early fall passage ran from July 4 (2018) to September 16 (2017) singles were seen on 19 dates with two on August 10, 2016, two on September 8, 2017, two on September 2, 2018, two on August 15, 2019 and three on September 3, 2018.

## Common Tern (Sterna hirundo)

This was an early fall passage migrant on occasions there were some major movements; only low numbers seen for the rest of the year. For the early spring passage there were singles on January 21, 2018, February 10, 2019 and February 23, 2021. The late spring passage ran from March 2 (2022) to May 20 (2017) with high counts of six on April 9, 2016, six on April 17, 2020, seven on April 30, 2018, eight on March 19, 2021, nine on May 12, 2017, ten on April 2, 2016 and 14 on April 20, 2018. The summer passage ran from May 28 (2018) to July 1 (2019) with high counts of seven on June 24,2019 and 29 on June 19, 2016. Now to the main event the early fall passage this event ran from June 29 (2018) to October 1 (2017) with high counts of 405 on September 3, 2016, 434 on September 25, 2018, 442 on September 3, 2017, 480 on September 11, 2016, 568 on September 10, 2016, 845 on September 21, 2017, 1,030 on September 23, 2017, 1,080 on August 27, 2017 and 1,805 on September 20, 2018. The late fall passage ran from September 26 (2021) to November 17 (2018) with high counts of 13 on October 5, 2016, 19 on October 6, 2018, 22 on October 22, 2016, 29 on October 15, 2016, 59 on October 2, 2021, 134 on October 8, 2021, 1,620 on October 13, 2022 and 2,420 on October 14, 2020 this is the highest count for the park. Finally for the winter passage there were singles on December 11, 2017, December 14, 2018 and December 19, 2019.

## Arctic Tern (Sterna paradisaea)

For the seven years a total of 40 recorded 18 were for the early fall passage. It is highly likely that this species has been under-recorded. For the late spring passage there was one on May 4, 2018, one on May 15, 2021, one on May 20, 2017, one on May 21, 2021, one on May 31, 2021 with two on May 9, 2022, two on May 10, 2020, two on May 27, 2018, three on May 5,

2018, four on May 22, 2021 and 15 on May 20, 2021 the latter is the highest count for the park. For the summer passage there was one on June 11, 2017, three on June 17, 2019 and two on June 19, 2016. The early fall passage ran from August 2 (2020) to September 28 (2022) there were singles on seven dates with two on August 21, 2020, two on August 27, 2016, two on August 27, 2018, two on August 27, 2021, two on September 4, 2018, three on September 2, 2016, four on August 2, 2020 and six on September 28, 2022. For the late fall passage there were in 2017 singles on October 2 and October 3 with three on October 4.

## Forster's Tern (Sterna forsteri)

An early spring passage migrant much lower numbers seen for the other passages; there was only one summer sighting. The early spring passage ran from January 1 (all years) to March 1 (2017) with high counts of 208 on January 10, 2018, 245 on January 4, 2018, 254 on February 3, 2018, 259 on January 22, 2021, 261 on February 9, 2018, 267 on January 21, 2018, 280 on February 10, 2019, 317 on February 3, 2019, 419 on February 13, 2016, 460 on February 2, 2019, 467 on February 2, 2020, 506 on January 30, 2020, 515 on January 13, 2021, 576 on January 26, 2018, 786 on February 12, 2018, 1,019 on January 16, 2018 and 1,485 on January 17, 2018 the latter is the highest count for the park. The late spring passage ran from March 1 (2018, 2019, 2021 and 2022) to April 24 (2018) with high counts of 24 on March 6, 2020, 35 on March 26, 2018, 38 on April 1, 2019, 44 on March 13, 2018, 63 on March 1, 2022 and 87 on March 22, 2021. For the summer passage there was one on May 26, 2020. The early fall passage ran from July 14 (2017) to September 29 (2017) with high counts of 25 on September 16, 2017 and 120 on September 23,2017 . For the other years no more than four a day were seen. The late fall passage ran from September 30 (2017) to December 2 (2016) with high counts of 20 on November 28, 2017, 21 on October 17, 2017, 23 on November 27, 2016, 24 on November 21, 2019, 24 on November 19, 2021 and 44 on November 6, 2016. The winter passage ran from November 30 (2021) to December 31 (all years) with high counts of 27 on December 4, 2017, 29 on December 8, 2017, 39 on December 13, 2017, 54 on December 27, 2019, 55 on December 27, 2020, 58 on December 29, 2018, 66 on December 15, 2017 and 72 on December 21, 2016.

## Least Tern (Sternula antillarum)

Present from late March to late September the spring passage is often the heaviest event. There were very early records as singles seen on March 8, 2018 and March 10, 2020. The main spring passage ran from March $20(2018,2019)$ to May $2(2017,2019)$ with high counts of 40 on April 9, 2018, 47 on April 15, 2016, 57 on April 20, 2018, 59 on April 29, 2018, 81 on April 23, 2017, 123 on April 16, 2016 and 153 on April 17, 2016 the latter is the highest count for the park.

The summer passage ran from May $1(2016,2018$ and 2020$)$ to June $30(2017,2020)$ with high counts of 41 on May 13, 2016, 46 on June 11, 2016, 47 on May 15, 2016, 48 on June 7, 2017, 49 on May 26, 2017, 49 on June 28, 2017, 64 on May 7, 2017 and 76 on May 28, 2017. The early fall passage ran from June $30(2018,2019)$ to September $29(2019)$ with high counts of 46 on July 25, 2017, 62 on August 10, 2022 and 73 on July 15, 2016. There were no later records.

## Bridled Tern (Onychoprion anaethetus)

A very rare visitor in the storms there were sightings for six of the seven years; in all there are 13 records of 49 birds. For the late spring passage there was one on April 2, 2021. For the fall passage there were 11 on August 2, 2020, 13 on August 3, 2020 (wind W 16) (T.S. Asaias), two on September 4, 2019 then in 2017 there was one on September 10, three on September 11, one on September 15, four on September 16, three on October 2, three on October 3 and five on October 4. Finally, there was one on September 28, 2022 and one on October 8, 2018. The count of 13 is the highest count for the park.

## Sooty Tern (Onychoprion fuscata)

A very rare visitor in the storms there were sightings for four of the years; in all there are 14 records of 107 birds. For the fall passage in 2019 there were eight on September 4 (wind NW 35) (Hurricane Dorian) and one on September 12 (wind E 15). In 2017 there was one on September 9 with 24 on September 10 (wind NE 23) (Hurricane Irma), 31 on September 11 (wind S 35) (Hurricane Irma), one on September 12, one on September 16, two on October 2 (wind ENE 18) and two on October 4 (wind ENE 25). In 2020 there were three on August 2,28 on August 3 (wind W 16) (T.S. Asaias) and two on September 21. The count of 31 is the highest count for the park. In 2022 there was one on September 28. There was a late sighting of two on November 9, 2020.

## Black Tern (Chlidonias niger)

An early fall passage migrant there was a major event in three (2016, 2017 and 2022) of the seven years. For the late spring passage there were singles on April 2, 2021, April 29, 2022 and April 30, 2018. For the summer passage there were singles on May 10, 2020, May 17, 2017, May 24, 2022, June 5, 2021 and June 9, 2019 with six on May 1, 2018. The early fall passage ran from July 6 (2016) to October 16 (2019) with high counts of 596 on August 26, 2017, 754 on September 11, 2016, 773 on September 3, 2017, 905 on August 22, 2022, 920 on September 2,

2016, 1,450 on September 9, 2016, 1,620 on September 10, 2016, 1,926 on August 27, 2017 (wind SW 8), 2,142 on August 26, 2022 and 2,600 on August 27, 2022 (wind calm) the latter is the highest count for the park.

## Brown Noddy (Anous stolidus)

A real rarity there are 12 records of 27 birds. In 2017 there were three on September 10 (wind NE 23) with two on September 11 (wind S 35), one on September 30 (wind E 7), two on October 2 (wind ENE 18), two on October 3 (wind ENE 20), seven on October 4 (wind ENE 25) and one on October 5 (wind E5). The count of seven is the highest count for the park. For 2019 there was one on October 2 (wind NE 11). In 2020 there was one on August 2 with five on August 3 (wind W 16). In 2021 there was one on August 27 (wind E 7). In 2022 there was one on September 28 (wind NE 20).

## Black Skimmer (Rynchops niger)

From March to September only low numbers seen however in 2016 there were strong late fall and winter passages with, in 2022 a heavy passage in late December for the other years the low numbers continued. Finally for the early spring passage there were strong events in 2016, 2018 and 2019 but only low numbers in 2017 and 2020. This species was also different in that the direction of movement could vary from year to year. The early spring passage ran from January 1 (all years) to March 1 (2019) with high counts of 135 on January 15, 2018, 150 on January 30, 2022, 160 on January 26, 2019, 316 on January 14, 2018, 345 on January 6, 2018, 385 on January 24, 2016, 415 on January 22, 2019 and 865 on January 4, 2018. The late spring passage ran from March $2(2016,2018$ and 2021$)$ to April $30(2018,2021)$ with high counts of 20 on April 8, 2016, 20 on March 29, 2017, 23 on March 17, 2021 and 51 on March 7, 2020. The summer passage ran from May $1(2020)$ to June $29(2020,2022)$ with a high count of 27 on May 12, 2018. For six of the years (not 2017) there was a minor break lasting from 20 to 27 days. The early fall passage ran from July $2(2021)$ to September $29(2018,2019)$ with high counts of 13 on September 2, 2019 and 16 on September 20, 2018. The late fall passage ran from September 27 (2020) to December 1 (2020) with high counts of 16 on November 17, 2017, 19 on November 13, 2016, 20 on November 4, 2020, 23 on November 22, 2016, 90 on November 20, 2021 and a high 204 on November 15, 2016. The winter passage ran from November 29 (2019) to December 31 (2017, 2018 and 2019) with high counts of 33 on December 14, 2018, 35 on November 29, 2019, 38 on December 22, 2018, 75 on December 31, 2016, 187 on December 16, 2016, 665 on December 25, 2022 and $\mathbf{1 , 1 5 0}$ on December 24, 2022 on both days in 2022 they flew to the south
the latter is the highest count for the park. If it had not been for those two higher counts the late fall and winter passages would have joined the events with only low numbers.

## Dovekie (Alle alle)

This is a vagrant for the winter passage there was one on December 12, 2019 (wind NE 17).

## Thick-billed Murre (Uria lomvia)

This is a vagrant for the early spring passage there was one fishing close to the shore on January 14, 2019 with another on the sea on January 3, 2021. For the late fall passage there was one on November 9, 2020.

## Razorbill (Alca torda)

This is a vagrant there are six records. For the early spring passage there were singles on January 4, 2019, February 1, 2019 and February 8, 2022. For the late fall passage there were singles on October 6, 2017 and November 2, 2020. For the winter passage there were two on December 2, 2022 this is the highest count for the park.

## Black Guillemot (Cepphus grille)

This is a vagrant for the early spring passage an adult in winter plumage flew to the south on January 23, 2016; this is the first record for Florida.

## Rock Pigeon (Columba livia)

A common resident that is seen in varying number; counts from July to December tend to be a bit higher. The early spring passage ran from January 1 (2016, 2017, 2019 and 2021) to February 29 (2020) with high counts of 32 on January 21, 2017, 35 on January 24, 2018, 36 on January 12, 2018 and 39 on February 25, 2017. The late spring passage ran from February 28 (2016) to May 3 (2020) with high counts of 17 on April 5, 2018, 24 on March 18, 2017, 32 on March 14, 2021, 45 on March 21, 2020 and 68 on March 10, 2019. The summer passage ran from

April 30 (2018, 2019 and 2022) to July 1 (2019) with high counts of 31 on June 18, 2019, 33 on June 3, 2017 and 35 on June 27, 2017. The early fall passage ran from June 29 (2016) to October 3 (2017) with high counts of 40 on July 7, 2017, 42 on August 22, 2017, 45 on September 14, 2018, 45 on September 16, 2019, 47 on August 18, 2017, 49 on July 30, 2017 and 59 on July 8, 2017. The late fall passage ran from September 29 (2018) to December 3 (2022) with high counts of 44 on November 5, 2018, 48 on October 6, 2018, 51 on November 26, 2017 and 120 on November 16, 2022 the latter is the highest count for the park. 2. The winter passage ran from November 29 (2016) to December 31 (2016, 2017 and 2022) with high counts of 47 on December 7, 2018, 50 on December 27, 2017, 57 on December 1, 2017 and 62 on December 6, 2017.

## Eurasian Collared-Dove (Streptopelia decaocto)

A common resident that shies away from the actual coast; as with the Rock Pigeon the greatest numbers were seen from July to December. The early spring passage ran from January 1 (2016, 2017, 2019 and 2021) to March 2 (2021) with high counts of ten on January 21, 2018, ten on February 28, 2018, 12 on January 8, 2020 and 14 on February 1, 2017. The late spring passage ran from March 1 (2017, 2019 and 2020) to May 1 (2022) with high counts of eight on March 8, 2019 and 12 on March 18, 2020; there were six counts of seven. The summer passage ran from April $29(2020,2021)$ to July $1(2019,2021)$ with high counts of ten on June 5, 2018, ten on June 23, 2018, ten on June 29, 2018, ten on May 18, 2020, 11 on May 20, 2019, 11 on May 1, 2020, 13 on April 29, 2020 and 20 on June 7, 2017. The early fall passage ran from June 29 (2016) to October 4 (2018) with high counts of 14 on July $31,2016,14$ on July 19, 2017, 14 on July 26, 2017, 14 on July 5, 2018, 15 on July 16, 2019, 15 on August 4, 2019, 16 on August 9, 2017, 17 on August 10, 2016, 17 on September 14, 2016, 19 on July 29, 2017 and 23 on September 3, 2019 the latter is the highest count for the park. The late fall passage ran from September 29 (2021) to November $30(2016,2018)$ with high counts of 13 on November 2, 2019, 15 on November 26, 2019, 16 on October 31, 2019 and 18 on November 5, 2019. The winter passage ran from November 30 (2017, 2019, 2020 and 2022) to December 31 (all years) with high counts of 14 on December 6, 2016, 14 on December 8, 2018, 15 on December 14, 2019, 15 on December 17, 2019, 17 on December 2, 2016 and 21 on December 21, 2016.

## White-winged Dove (Zenaida asiatica)

Seen in every month in all 134 located the majority were seen from May to August. The early spring passage ran from January 1 (2019) to February 24 (2019) with high counts of two on February 6, 2018, two on January 13, 2022, two on February 6, 2019, two on February 8, 2019, two on February 13, 2019, two on February 20, 2019, three on January 9, 2019 and three on

February 7, 2019 (singles were seen on 12 dates). The late spring passage ran from March 2 (2020) to April 25 (2017) with a high count of two on April 13, 2019 (singles were seen on 12 dates). The summer passage ran from May 1 (2020) to June 28 (2019) with high counts of two on June 5, 2016, two on May 9, 2017, two on June 14, 2017, three on June 24, 2016 and five on June 4, 2020 (there were singles on 23 dates). The early fall passage ran from July $1(2016,2021)$ to September 30 (2021) with high counts of two on July 1, 2016, two on July 2, 2016, two on July 4, 2016 and two on August 3, 2016 (there were singles on 25 dates). The late fall passage ran from October 8 (2022) to November 28 (2020) with a high count of five on November 5, 2018 otherwise singles seen on 19 dates. The counts of five are the highest counts for the park. The winter passage ran from December 1 (2018) to December 29 (2019) there were singles on nine dates.

## Mourning Dove (Zenaida macroura)

A common resident they can be found throughout the area. The lightest numbers occurred during the spring passages. The early spring passage ran from January 1 (all years) to March $2(2021,2022)$ with high counts of 18 on February 9, 2018, 19 on January 9, 2020, 23 on January 1, 2022, 24 on February 27, 2022, 26 on January 24, 2021 and 27 on January 24, 2020. The late spring passage ran from February 28 (2016, 2018 and 2019) to May 4 (2020) with high counts of 15 on April 27, 2018, 15 on March 10, 2019, 16 on April 16, 2021, 17 on April 25, 2018, 18 on April 30, 2020 and 20 on April 1, 2022. The summer passage ran from April 30 (2021) to July 3 (2021) with high counts of 26 on May 29, 2018, 27 on June 5, 2018, 27 on June 17, 2018, 34 on June 6,2018 and 34 on June 30,2018 . For the other years the high counts ranged from 20 to 22. The early fall passage ran from June 29 (2016) to October 1 (2021) with high counts of 25 on July $25,2017,25$ on July 13, 2018, 27 on August 13, 2016, 27 on August 6, 2018, 27 on September 6, 2019, 30 on August 22, 2021, 32 on July 21. 2017, 32 on July 10, 2022, 32 on September 25 , 2022, 34 on September 7, 2020, 35 on July 17, 2022, 36 on August $9,2022,39$ on July 28, 2022, 43 on September 4, 2022, 44 on September 18, 2022 and 84 on September 3, 2019 the latter is the highest count for the park. This count was made during Hurricane Durian. The late fall passage ran from September 29 (2019) to December 3 (2020) with high counts of 20 on November 9, 2017, 20 on November 29, 2017, 20 on November 2, 2019, 20 on November 9, 2021, 21 on October 3, 2021, 21 on October 31, 2021, 25 on November 14, 2021, 25 on October 2, 2022, 27 on November 28, 2021, 34 on October 19, 2022, 38 on November 19, 2022, 39 on November 3, 2022, 50 on November 12, 2019, 52 on October 28, 2022, 57 on November 13, 2022 and 59 on October 11, 2022. The winter passage ran from November 29 (2018) to December 31 (all years) with high counts of 16 on December 21, 2016, 16 on December 1, 2017, 16 on December 31, 2019, 17 on December 3, 2022, 18 on December 9, 2021, 18 on December 19, 2021, 19 on December 2, 2021, 23 on December 15, 2021, 23 on December 9, 2022, 23 on December 21, 2022, 25 on December 29, 2021, 25 on December 31, 202227 on December 5, 2021, 28 on December 11, 2019, 36 on December 20, 2020, 42 on December 27, 2019, 44 on December 26, 2021 and 50 on December 26, 2022.

## Common Ground-Dove (Columbina passerina)

A summer visitor there was only a trace presence in the winter and the early spring. The early spring passage ran from January $1(2021,2022)$ to February $28(2021)$ up to three a day were seen with four on February 11, 2022. The late spring passage ran from February 28 (2022) to April $30(2019,2022)$ with high counts of four on March 2, 2022, four on March 4, 2022, March 13, 2021, four on March 29, 2020, four on April 7, 2021, five on March 24, 2021 and five on April 26, 2021. The summer passage ran from April 29 (2021) to July 1 (2022) with a high count of six on May 6, 2021. The early fall passage ran from June 29 (2020) to September $30(2018,2019$ and 2021) with high counts of six on July 18,2021 , six on July 28,2021 , seven on July 24,2021 , eight on August 30, 2021, nine on September 11, 2022 and 11 on September 18, 2022 the latter is the highest count for the park. Passage was now limited the late fall passage ran from October 1 $(2019,2021)$ to November $28(2019,2021)$ with high counts of four on October 17, 2021, four on October 21, 2019, four on November 22, 2019, four on November 23, 2019, four on October 24, 2021, four on October 30, 2022, five on October 8, 2021, eight on November 2, 2021 and eight on October 9, 2022. The winter passage ran from November 29 (2020) to December 31 (2018, 2021 and 2022) with high counts of three on December 10, 2019, three on December 13, 2021, three on December 17, 2021, three on December 25, 2021, three on December 28, 2021, four on December 5, 2022, four on December 6, 2022, four on December 8, 2022, four on December 9, 2022, four on December 10, 2022 and six on December 13, 2020.

## Nanday Parakeet (Nandayus nenday)

This is a vagrant an acceptable exotic. An irregular late spring visitor there are occasional sightings at other times. For the late spring passage there were two on March 26, 2016, two on April 3, 2016, two on April 13, 2016, 11 on March 4, 2017, one on April 22, 2017 and two on March 29, 2019. The count of 11 is the highest count for the park. For the summer passage there was one on May 17, 2022 with two on June 1, 2016. For the early fall passage there were two on July 6, 2018. For the late fall passage there were two on October 7, 2021 and for the winter passage there was one on December 19, 2017.

## Cockatiel (Nymphicus hollandicus)

An exotic for the late spring passage there was one on April 8, 2018.

## Yellow-billed Cuckoo (Coccyzus americanus)

A very uncommon passage migrant there are eight records for the late spring, three for the summer, four for the early fall and one for the late fall passage. For the late spring passage there were singles on April 15, 2021, April 20, 2019 and April 21, 2021 with two on April 22, 2019, then singles seen on April 24, 2018, April 25, 2017, May 2, 2021 and May 4, 2019. For the summer passage there were singles on June 7, 2022 and June 8, 2022 with two on June 10, 2022. For the early fall passage there were singles on July 17, 2020, August 13, 2018, August 22, 2017 and September 5, 2019. For the late fall passage there was one on October 19, 2018. The counts of two are the highest counts for the park.

## Eastern Screech-Owl (Otus asio)

This is a vagrant for the early spring passage there were singles on January 14, 2021, February 16, 2022 and February 23, 2022. For the late spring passage there were singles on March 26,2022 and April 8, 2018. For the early fall passage there were singles on July 10, 2022 and August 3, 2022. In 2020 there were five records for the second half of the year. For the early fall passage there were singles on July 29 and September 3. For the late fall passage there were singles on October 24 and November 26. Finally for the winter passage there was one on December 11.

## Great Horned Owl (Bubo virginianus)

This is a vagrant (except for 2020, 2021 and 2022) for the winter passage there was one on December 19, 2018. In 2020 there were eight "winter" records with one in June. For the early spring passage there were singles on January 12 and January 25 . For the summer passage there was one on June 26. For the winter passage there were singles on November 29 and December 11 with two on December 15 and December 19 and then singles heard on December 21 and December 24. In 2021 for the early spring passage there were singles on January 3, January 18, January 29 and February 14. For the late spring passage there was one on April 7. For the summer passage (their winter) there were singles on May 1 and June 13. For the late fall passage there were two on October 4 with singles on October 8 and October 9. There were two on October 12 and October 14 with one on October 16. There were two on October 22 with one on November 1. There were also two on November 12 and November 14. For the winter passage there were singles on December 2, December 4 and December 25 . In 2022 for the early spring passage there was one on January 8. For the late spring passage there was one on March 2. For the early fall passage there were two on September 1 and two on September 2 with singles on September 3 and September 18. For the late fall passage there were singles on October 1, October 7, October

18, October 25, October 26 and November 20. For the winter passage there was one on December 8 . The counts of two are joint high counts for the park.

## Barred owl (Strix varia)

This is a vagrant for the early spring passage there was one on January 12, 2020. For the summer passage there was one on June 30, 2022. For the early fall passage there were singles on August 11, 2021, September 6, 2022 and September 16, 2021. For the winter passage there was one on December 27, 2019.

## Common Nighthawk (Chordeiles minor)

A total of 22 records of 78 birds over the seven years: nine for the spring, four for the summer, seven for the early fall and two for the late fall. At times they have been seen migrating out at sea. For the spring passage there were singles on eight dates from April $21(2019,2021)$ to May 11 (2016) with two on April 25, 2021. For the summer passage there were singles on May 20, 2017, June 4, 2017 June 24, 2020 and June 29, 2020. For the early fall passage, one flew to the south offshore with 12 Black Terns on August 26, 2017. A total of 22 flew to the south offshore on September 3, 2018 with 19 likewise on September 4, 2018. On September 12, 2017 11 flew to the south. On September 18, 2020 seven flew to the south out at sea. The count of 22 is the highest count for the park. Otherwise for this passage there were singles in the area on September 17, 2022 and September 26, 2022. For the late fall passage there were singles on September 30, 2019 and October 7, 2019.

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

There were eight sightings for the first five years most were seen flying in off the sea. For the late spring passage, one came in off the sea on March 31, 2017 with one flying to the north out at sea on April 1, 2019! Coming in off the sea were singles on April 2, 2018, April 4, 2017, April 14, 2019 and April 25, 2017. For the late fall passage flying to the south out at sea there were two on September 24, 2018 with one on October 8, 2019. 2020 was different there were two late spring sightings then one took up residence for two months in the early fall. For the late spring passage there were singles on March 15 and March 29. In the early fall one stayed in the area from June 30 to August 28 with two on July 20. 2021 again had more records: Initially a male heard singing then a female took up residence through the summer to October. There were singles on March 12 and April 1. On April 6 there was one in the area and one came in off the sea.

There were also singles on April 7, April 8, April 18 and April 19. From April 30 the female was present with two on June 5. Records were frequent until September 6 . Later there were singles on September 23, September 25, October 6 and October 10. In 2022 seen from March 28 to October 10 there are 65 records. Initially three males heard on March 28 with two (one male) on March 29 then only females noted. The count of three is the highest count for the park. From March 29 there was a female by the river with a second female by A1A from April 28. Both continued to be heard through to August 17 the individual by the river was heard to October 10.

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

This is a vagrant there are 11 sightings; for the early spring passage one came in off the sea on February 19, 2021. For the late spring passage there were singles on March 26, 2022, March 27, 2022, March 28, 2022 and April 4, 2022. One also came in off the sea on April 26, 2019. For the late fall passage there were singles on October 11, 2022, October 28, 2021 and November 21, 2020. For the winter passage there were singles on December 8, 2022 and December 15, 2017.

## Chimney Swift (Chaetura pelagica)

A summer visitor with perhaps two pairs breeding locally. The spring passage ran from March 24 (2020) to May 13 (2018) with high counts of ten on April 26, 2017, 16 on May 7, 2017, 23 on April 26, 2019 and 51 on April 22, 2021 the latter is the highest count for the park. The summer passage ran from May $11(2016,2019)$ to June $30(2019,2021$ and 2022) with high counts of seven on May 15, 2021, eight on May 22, 2016, eight on May 11, 2020, eight on June 25,2020 , eight on June 1, 2022 and 12 on May 7, 2021. The early fall passage ran from June 28 (2020) to October 1 (2016) with high counts of 15 on July 30, 2016, 17 on August 19, 2017, 17 on August 8, 2019, 20 on August 9, 2019, 20 on August 12, 2022, 21 on September 14, 2020, 22 on September 8, 2017, 26 on August 6, 2017 and 27 on July 23, 2019. Finally for the late fall passage there were singles on October 12, 2018, October 17, 2022 and October 26, 2022.

## Ruby-throated Hummingbird (Archilochus colubris)

There are 29 records of 31 birds for the first five years but in 2021 and 2022 there were 23 records. For the early spring passage there was one on January 26, 2022. For the late spring passage there were singles on 17 dates from March 14 (2021) to April 28 (2021) with two on April 1, 2021. For the summer passage there was one on May 17, 2020 with two on June 25,
2019. For the early fall passage there were singles on 16 dates from July 6 (2021) to September 26 (2021). For the late fall passage there were singles from October 2 (2022) to November 13 (2021) with two on October 3, 2021 and two on October 22, 2022. For the winter passage there was one on December 13, 2019. The counts of two are the highest counts for the park.

## Black-chinned Hummingbird (Archilochus alexandri)

This is a vagrant for the late fall passage there was one on November 10, 2020. For the winter passage there was one on December 10, 2022.

## Belted Kingfisher (Megaceryle alcyon)

Whilst they could be seen over the river the majority flew by offshore. For the early spring passage there were singles on January 20, 2020 and February 8, 2017. The late spring passage ran from March 19 (2021) to May 5 (2021) with high counts of two on April 7, 2021, two on April 8, 2016, two on April 19, 2021 and three on April 9, 2018. For the summer passage there was one on June 27, 2017. The early fall passage ran from July 1 (2022) to September 30 (2020, 2021 and 2022) with high counts of two on August 7, 2016, two on September 12, 2021, two on September 17, 2022, two on September 21, 2021, two on September 24, 2022, two on September 25, 2016, two on September 13, 2017, three on August 27, 2017 and three on September 22, 2021. The counts of three are the highest counts for the park. The late fall passage ran from October 1 (2020) to November 19 (2016) with high counts of two on October 8, 2021, two on October 12, 2020 and two on October 16, 2017. For the winter passage there were singles on December 3, 2019, December 8, 2018 and December 13, 2016 with two on December 20, 2020.

## Red-headed Woodpecker (Melanerpes erythrocephalus)

This is a vagrant for the late spring passage singles flew to the south on March 12, 2021, April 3, 2020, April 7, 2021, April 15, 2018, April 15, 2022 and April 24, 2022. For the early fall passage, singles flew to the north on September 12, 2022, September 14, 2020 and September 18, 2022.

## Red-bellied Woodpecker (Melanerpes carolinus)

At least three pairs are resident in the area up to four a day seen regularly. There were high counts of seven on February 11, 2022, March 18, 2022, September 3, 2022, October 10, 2022, October 18, 2022 and October 21, 2021. There were also eight on July 24, 2022 and nine on October 17, 2022 the count of nine is the highest counts for the park.

## Yellow-bellied Sapsucker (Sphyrapicus varius)

A rare migrant there are only eight records for the first five years six were for the late fall passage. There were no records for 2017. In 2021 there were 24 records: 14 for the early spring, four for the late spring, four for the late fall and two for the winter. In 2022 there were 22 records 14 for the early spring, six for the late spring and two for the late fall passage. For the early spring passage there was one on January 30, 2018. For the late fall passage there were singles on October 1, 2019, October 24, 2020, November 7, 2018, November 8, 2019, November 11, 2019 and November 19, 2016. For the winter passage there was one on December 10, 2020. Then there was 2021 for the early spring passage there were singles on January 15, January 27, February 6 and February 7 with two on February 9, then one seen on February 10. There were two on February 11 with singles on February 13 and February 15. There were two on February 17 with singles on February 18 and February 24. There were two on February 27 with one on February 28. For the late spring passage there were singles on March 2, March 3, March 4, March 29, April 1 and April 15. For the late fall passage there were singles on October 17, October 29 and November 2 with three on November 3. For the winter passage there were singles on December 3, December 5, December 7 and December 27. The count of three is the highest count for the park. For the early spring passage in 2022 there were singles on January 1, January 2, January 7, January 13 and January 24 with two on February 2, then singles seen on February 3, February 4, February 15, February 17, February 23, February 25, February 26 and February 27. For the late spring passage there were two on March 2 and March 5 with singles on March 6 and March 15. For the late fall passage there were singles on October 7 and November 12.

## Downy Woodpecker (Picoides pubescens)

Whilst there are records for every month the bulk were seen from May to September i.e., a summer visitor? There were at least two pairs in 2021 and 2022. The early spring passage ran from January 4 (2021) to February 28 (2021) with singles on 29 dates there were also two on January 2, 2022. The late spring passage ran from March $2(2018,2022)$ to April $27(2020)$ there were singles on 49 dates with two on March 5, 2021, two on March 11, 2022, two on March 22, 2022, two on April 2, 2022, and two on April 3, 2022 with three on March 6, 2022 and three on March 11, 2021. The summer passage ran from April 30 (2021) to June 29 (2021) with high counts
of two on May 10, 2021, two on June 22, 2018 and two on June 24, 2021; there were also singles on 42 dates. The early fall passage ran from July 1 (2019, 2021 and 2022) to September 26 (2022) with high counts of three on July 4, 2021, three on July 17, 2022, three on July 23,2022 , three on August 24, 2021, three on August 25, 2021 and four on July 5, 2021 the latter is the highest count for the park. There were also singles on 92 dates with two on 13 dates. The late fall passage ran from September 25 (2021) to November 28 (2022) with a high count of three on October 3, 2021, there were singles on 44 dates with two on 14 dates. The winter passage ran from November 29 (2017) to December 31 (2021) with high counts of two on December 8, 2021, two on December 11, 2022, two on December 19, 2021, two on December 26, 2021 and two on December 27, 2021; there were singles on 20 dates.

## Hairy Woodpecker (Picoides villosus)

This is a vagrant for the summer passage there was one on June 16, 2021.

## Northern Flicker (Colaptes auratus)

This is a very rare visitor there are only 18 sightings. For the early spring passage there were singles on January 19, 2022, January 26, 2021 and January 31, 2021. For the late spring passage there were singles on March 3, 2022, March 14, 2019, March 24, 2020 and March 29, 2022. For the summer passage there was one on June 11, 2022. For the early fall passage there were singles on July 15, 2018, August 10, 2021, September 22, 2022, September 23, 2020 and September 30, 2020. For the late fall passage there were singles on October 18, 2018, October 21, 2022 and November 16, 2017. Finally for the winter passage there were singles on December 3, 2021, December 27, 2019 and December 28, 2022.

## Pileated Woodpecker (Dryocopus pileatus)

An unexpected visitor seeing as there is no woodland still 60 were seen over the first five years, with 81 sightings in 2021 and 79 sightings in 2022. The early spring passage ran from January 1 (2022) to February 26 (2022) with singles on 34 dates, two on January 7, 2021, two on January 16, 2020, three on February 7, 2021 and three on February 25, 2021. The late spring passage ran from March $2(2021,2022)$ to April $24(2020,2021$ and 2022) with high counts of two on March 16, 2021, two on March 30, 2021, two on April 6, 2022, two on April 13, 2016, two on April 15, 2021, two on April 18, 2021, two on April 19, 2021, three on March 31, 2021 and
three on April 3, 2022. The summer passage ran from May 4 (2022) to June 24 (2021) there were singles on 27 dates with two on June 19, 2021. The early fall passage ran from July 6 (2021) to September 25 (2022) there were singles on 30 dates with two on July 6, 2021, two on July 9, 2021, two on July 27, 2021, two on August 20, 2022, two on August 29, 2022, two on August 31, 2022, two on September 5, 2022, two on September 7, 2022 and two on September 10, 2022 with three on August 28, 2022 and four on August 19, 2020 this is the highest count for the park. The late fall passage ran from September 29 (2021) to November 27 (2021) there were singles on 23 dates. For the winter passage there were singles on four dates in 2020 from December 6 to December 31, on 11 dates in 2021 from December 1 to December 31 and on four dates from December 7 to December 27 in 2022 with two on December 29, 2022.

## Olive-sided Flycatcher (Contopus cooperi)

This is a vagrant for the early fall passage there was one on September 8, 2022.

## Eastern Wood-Pewee (Contopus virens)

This is a vagrant. For the early fall passage there was one on September 19, 2021. For the late fall passage there were singles on October 11, 2021, October 12, 2021, October 15, 2022 and November 2, 2021.

## Acadian Flycatcher (Empidonax virescens)

This is a vagrant for the early fall passage there was one on September 9, 2022.

## Eastern Phoebe (Sayornis phoebe)

In 2017, 2019 and 2021 there was a noticeable late fall passage with a marked winter passage in 2019; the spring passages were lower in numbers. The early spring passage ran from January $1(2020,2022)$ to February $28(2022)$ with high counts of two on 14 dates with three on February 18, 2020; there were singles seen on 64 dates. The late spring passage ran from February 29 (2020) to March 31 (2017) with high counts of two on March 2, 2022, two on March 3, 2022, two on March 5, 2020 and two on March 30, 2018; there were singles seen on 22 dates. On March 31, 2017 one was seen to fly in off the sea. The late fall passage ran from October 14
(2020) to November 30 (2019, 2021 and 2022) with high counts of three on October 29, 2021, three on November 14, 2021, three on November 22, 2019, three on November 25, 2021, three on November 26, 2017, three on November 26, 2019, three on November 27, 2021, six on November 2, 2021 and seven on November 3, 2021. The count of seven is the highest count for the park. There were also 19 counts of two with 37 counts of one. The winter passage ran from November $27(2020)$ to December $31(2019,2021)$ with high counts of three on December 1, 2019, three on December 3, 2019, three on December 5, 2019, three on December 5, 2021, three on December 10, 2019, three on December 13, 2020, three on December 17, 2021 and five on December 1, 2021. There were also 11 counts of two and 24 counts of one for this event.

## Vermillion Flycatcher (Pyrocephalus rubinus)

This is a vagrant for the early spring passage there was one on February 2, 2022.

## Great Crested Flycatcher (Myiarchus crinitus)

An uncommon passage migrant there are a surprising number of sightings in June. The spring passage ran from March 27 (2022) to May 15 (2021) singles were seen on 16 dates with two on May 6, 2020, two on May 15, 2021 and three on April 25, 2021. The summer passage ran from May $26(2021)$ to June $26(2017,2019)$ singles were seen on 18 dates with two on June 6, 2021 and June 10, 2021. In 2020 one was present from May 26 to July 6. There were fewer records for the early fall passage but the counts were higher. This event ran from July 1 (2016, 2017 and 2021) to July 25 (2021) with high counts of two on July 1, 2017, two on July 14, 2018 and three on July 4, 2017 the counts of three are the highest count for the park. There were later records as singles seen on August 9, 2021 and September 27, 2021.

## Eastern Kingbird (Tyrannus tyrannus)

An uncommon late spring and early fall passage migrant with a heavier passage on one date thanks to a hurricane. The late spring passage ran from April 1 (2022) to May 14 (2017) with high counts of ten on April 26, 2017, ten on April 24, 2019, 16 on April 8, 2017, 24 on April 20, 2020, 26 on May 1, 2020, 34 on April 1, 2022 and 35 on May 10, 2017. For the summer passage there were singles on June 9, 2022, June 11, 2019 and June 13, 2021. The early fall passage ran from August 5 (2016) to October 2 (2022) with high counts of 12 on September 1, 2017, 14 on September 19, 2022, 16 on August 30, 2021, 17 on September 9, 2022, 24 on September 16,

2022, 25 on August 5, 2016, 37 on September 3, 2016, 38 on September 9, 2021, 65 on September 23, 2021 and 273 on September 4, 2019 these flew to the south during Hurricane Durian. The count of 273 is the highest count for the park.

## Gray Kingbird (Tyrannus dominicensis)

There are just 23 sightings for the seven years with records from March to September. For the late spring passage there were singles on March 23, 2018, March 26, 2021 and April 16, 2018. For the summer passage there were singles on May 1, 2020, May 4, 2022, May 9, 2022, May 20, 2022, May 22, 2019, May 26, 2017, May 26, 2021, May 29, 2017, June 1, 2022, June 16, 2017 and June 24, 2021. For the early fall passage there were singles on July 8, 2016, July 10, 2016, July 18, 2021, July 31, 2019, August 6, 2022, August 30, 2021 September 6, 2019, September 14, 2017 and September 24, 2020 with two on July 10, 2021, two on July 19, 2022 and two on September 6, 2020 the counts of two are the highest counts for the park.

## Loggerhead Shrike (Lanius ludovicianus)

They can be found in any month and one or two can stay for extended periods immediately after the breeding season. The early spring passage was a minor event from January 1 (2019) to February 26 (2019) with a high count of two on January 1, 2019 singles were also seen on 19 dates. The late spring passage ran from February 28 (2016) to April 27 (2018) singles were seen on 14 dates with two on March 20, 2022. In 2019 there was one present from March 2 to March 16. The summer passage ran from May 9 (2017) to June 29 (2021) with a high count of two on May 9, 2017 singles were also seen on ten dates. To detail the extended summer stays in 2016 there was one from July 2 to July 24 with two on July 2, July 4 and July 24. In 2017 there was one from June 9 to August 13 with two on seven dates and three on July 26. In 2018 one was present from June 7 to July 30 with two on June 26. In 2019 there was one present from June 30 to July 31 with a high count of two on July 3 . In 2020 there was one present from March 1 to June 6 with two on March 12 and March 13. In 2020 there was also one on June 28. In 2021 there was one from September 17 to November 10. In 2022 there weas one present from June 15 to August 11, then three seen on August 12. After that date one stayed to the end of the year with two on November 6, November 13 and December 30. For the balance of the early fall passage there were three on August 20, 2016 with singles on 11 dates. The counts of three are the highest counts for the park. There was a minor late fall passage from September 29 (2021) to November 19 (2016) there were singles on 19 dates. The winter passage another minor event ran from

November 29 (2021) to December 30 (2021) with high counts of two on December 12, 2021, two on December 22, 2018 and two on December 30, 2021 there were singles on 12 dates.

## White-eyed Vireo (Vireo griseus)

They were only seen in 2021 and 2022; there was one sighting for the late spring, two for the early fall, nine sightings for the late fall and one for the winter. For the late spring passage there was one on April 16, 2022. For the early fall passage there were singles on September 7, 2022 and September 8, 2022. For the late fall passage singles seen on September 29, 2021, October 3, 2021, October 5, 2021, October 6, 2021, October 12, 2022, October 29, 2021, October 30, 2021, November 6, 2021 and November 13, 2021. For the winter passage there was one on December 5, 2021.

## Yellow-throated Vireo (Vireo flavifrons)

This is a vagrant for the early fall passage there were singles on September 7, 2022 and September 20, 2022.

## Blue-headed Vireo (Vireo solitarius)

This is a rare passage migrant, there are 18 records. For the early spring passage there were singles on January 3, 2022, January 6, 2022, February 4, 2022, February 10, 2022, February 12, 2021, February 20, 2022, February 23, 2022 and February 25, 2022. For the late spring passage there were singles on March 2, 2022, March 8, 2022, March 9, 2022, March 11, 2022, March 16, 2022, March 18, 2022, March 19, 2021 and April 2, 2022. For the winter passage there were singles on December 26, 2021 and December 31, 2021.

## Red-eyed Vireo (Vireo olivaceus)

This is a vagrant there are just four sightings for the first five years however in 2021 there were 24 records with in 2022 a total of 25 sightings. For the early fall passage there were singles on June 20, 2020, July 9, 2016 and July 9, 2018. For the late fall passage there was one on October 8 , 2017. For 2021 there were: for the early fall passage one on August 22 with two on September 5, then one seen on September 17. There were three on September 19 with five on September 20, then singles seen on September 21 and September 22. There were four on September 23 with three to September 26 and two to September 28. There were six on September 29 with one on September 30. For the late fall passage there were two on October 1 with seven on October

3, then singles seen on October 4 and October 7. There were two on October 10 with one on October 12. There were also two on October 13 with one on October 22. For 2022 there was for the late spring passage one on March 23. For the early fall passage there were singles on six dates from July 15 to September 10. There were three on September 11 with singles to September 16. There were five on September 18 with seven on September 20, then three seen on September 21 with one on September 23. There were three on September 25 with two on September 26. There were five on September 27 and September 30 with one on October 1. For the late fall passage there were four on October 2 with singles on October 9, October 12, October 16, October 22 and October 23. The counts of seven are the highest count for the park.

## Blue Jay (Cyanocitta cristata)

A resident there are at least three pairs in the area. The early spring passage ran from January 1 (2017, 2019, 2021 and 2022) to February 28 (all years) with high counts of six on February 2, 2018, six on January 7, 2021, six on January 16, 2021, six on February 11, 2021, six on February 26, 2022, seven on January 21, 2022, eight on February 12, 2021 and eight on February 27, 2021. The late spring passage ran from March 1 (2017, 2018, 2019 and 2022) to May 3 (2019) with high counts of seven on March 17, 2017, seven on April 6, 2022, eight on April 14, 2022, eight on April 20, 2022, nine on April 4, 2021, nine on April 10, 2022, ten on March 14, 2022 and ten on March 23, 2022. The summer passage ran from April $30(2021,2022)$ to July $1(2016,2018)$ with high counts of six on May 30, 2021, six on June 14, 2021, six on June 18, 2021, seven on May 8, 2022, seven on May 12, 2022, eight on May 4, 2021, nine on May 29, 2022 and 13 on May 5, 2022. The early fall passage ran from June 30 (2019) to October 1 (2021) with high counts of six on July 1, 2021, six on July 8, 2016, six on July 25 , 2021, six on September 17, 2022, six on September 25, 2022, seven on July 16, 2022, seven on September 8, 2022 and seven on September 28, 2017. The late fall passage ran from October 1 (2016, 2020 and 2022) to December 2 (2022) with high counts of six on October 21, 2021, six on November 2, 2021, seven on November 12, 2022, eight on October 5, 2022, nine on November 2, 2022, ten on November 17, 2021, 12 on October 22, 2022 and 14 on October 14, 2022 the latter is the highest count for the park. The winter passage ran from November 30 (2021) to December 31 (2016, 2017, 2018 and 2020) with high counts of six on December 31, 2018, seven on December 30, 2022, ten on December 19, 2022 and ten on December 20, 2022.

## Florida Scrub-Jay (Aphelocoma coerulescens)

This is a vagrant there are only ten records. For the early spring passage there was one on February 1, 2020. For the late spring passage there were singles on March 18, 2021 and April 11,
2022. For the summer passage there was one on June 14, 2018. For the early fall passage there were singles on July 6, 2019 and September 5, 2022. For the late fall passage there were singles on October 23, 2020, October 24, 2022 and November 19, 2019. For the winter passage there was one on December 27, 2021.

## American Crow (Corvus brachyrhynchos)

I always understood that this species did not occur on the barrier island but that is far from the case the number of sightings has been increasing each year until in 2021 it had resident status. There are records for every month. The early spring passage ran from January 1 (2020, 2021 and 2022) to February 29 (2020) with high counts of four on January 17, 2019, five on January 5, 2021, five on February 4, 2021 and six on February 1, 2018. The late spring passage ran from March 1 (2020, 2021 and 2022) to May $1(2021,2022)$ with high counts of four on March 2, 2022 and four on March 30, 2020. The summer passage ran from May 2 (2022) to July 1 (2022) with a high count of four on May 22, 2020. The early fall passage ran from June 29 (2020) to October 1 (2021) with high counts of five on September 20, 2017, five on August 23, 2021, five on September 5, 2021, seven on August 16, 2020 and eight on September 10, 2021. The late fall passage ran from October $1(2020,2022)$ to November $30(2022)$ with high counts of four on October 17, 2022, four on November 19, 2020 and five on October 26, 2022. The winter passage ran from December $1(2021,2022)$ to December $31(2021,2022)$ with a high count of seven on December 26,2020 . The count of eight is the highest count for the park.

## Fish Crow (Corvus ossifragus)

There was a strong spring passage from late February to early April but from May to the end of the year only low numbers seen. The early spring passage ran from January 1 (five years) to February 27 (2016, 2018 and 2019) with high counts of 115 on January 17, 2018, 133 on January 26, 2020, 191 on February 14, 2019, 200 on January 5, 2018 and 372 on February 26, 2018. The late spring passage ran from February 26 (2021) to May 1 (2016) with high counts of 142 on March 29, 2017, 170 on March 21, 2017, 178 on March 28, 2022, 180 on April 9, 2020, 183 on April 13, 2018, 193 on April 6, 2022, 195 on March 31, 2021, 220 on April 15, 2021, 250 on March 4, 2019, 303 on March 19, 2018, 350 on March 29, 2020, 384 on March 8, 2017, 452 on April 7, 2018, 530 on March 24, 2021 and 1,607 on March 25, 2018 the latter is the highest count for the park. The summer passage ran from April $25(2021,2022)$ to July $1(2020)$ with high counts of 15 on June 4, 2017, 15 on June 28, 2021, 18 on June 3, 2017, 23 on June 10, 2021 and 42 on May 7, 2022; there were also five counts of 11 . The early fall passage ran from June 29
(2016) to September 30 (2016, 2021 and 2022) with high counts of 27 on July 14, 2017, 28 on July 19, 2018, 33 on August 12, 2017 and 33 on August 19, 2017. The late fall passage ran from September $30(2019,2020)$ to December $1(2017,2021)$ with high counts of 24 on November 2, 2022, 24 on November 12, 2016, 25 on October 2, 2016, 29 on October 25, 2022, 32 on October 20, 2018, 33 on October 28, 2021, 48 on November 6, 2022, 60 on October 4, 2021, 113 on November 14, 2022 and 215 on November 25, 2022. The winter passage ran from November 30 (2019, 2020 and 2022) to December 31 (five years) with high counts of 33 on December 27, 2019, 44 on December 26, 2021, 49 on December 31, 2019, 77 on December 6, 2017 and 87 on December 11, 2020.

## Purple Martin (Progne subis)

A spring passage migrant there was only a trace summer and early fall passage. It seems that birds were continuing to migrate north whilst others were breeding locally. The spring passage ran from January 17 (2021) to April 30 (2020) with high counts of 41 on March 19, 2017, 45 on April 10, 2018, 47 on April 9, 2018 and 145 on April 25, 2017 the latter is the highest count for the park. The summer passage (all comers) ran from May $1(2020)$ to June $8(2016,2020)$ with high counts of six on May 7, 2017, seven on May 14, 2017 and eight on May 26, 2017. For the other years the high counts were of three on May 1, 2020, three on May 7, 2021, three on May 28, 2020 and three on May 29, 2016. The fall passage ran from June 9 (2017) to September 23 (2021) with high counts of three on June 11, 2021, three on August 28, 2017, four on July 12, 2018, four on August 13, 2020, five on August 3, 2021, six on September 9, 2022 and 14 on July 4, 2021.

## Tree Swallow (Tachycineta bicolor)

A common passage migrant from November to March. The early spring passage ran from January $1(2016,2020)$ to February $29(2020)$ with high counts of 400 on February 16, 2018, 480 on February 6, 2019, 915 on February 12, 2017, 1,330 on February 25, 2020, 3,570 on February 19, 2021 and $\mathbf{1 0 , 9 5 0}$ on February 25, 2017 the latter is the highest count for the park. The late spring passage ran from March 1 (2017, 2018, 2019 and 2021) to May 15 (2022) with high counts of 1,040 on March 1, 2018, 1,065 on March 21, 2017, 1,230 on March 10, 2017, 1,530 on March 28, 2022, 1,730 on March 18, 2018, 1,800 on March 3, 2019, 2,940 on March 4, 2016, 3,480 on April 7, 2021 and 4,550 on March 12, 2020. For the summer passage there were singles on June 19, 2022, July 3, 2016, July 4, 2022, July 18, 2022, July 26, 2018, July 28, 2017, July 29, 2017 and July 31, 2021. The early fall passage ran from August 7 (2019) to October 1 (2016) with a high
count of 40 on September 28, 2016. The late fall passage ran from October $2(2020,2022)$ to December 1 (2022) with high counts of 750 on November 16, 2016, 1,020 on November 19, 2018, 2,605 on November 7, 2017 and 6,325 on November 11, 2016. The winter passage ran from December $1(2019,2022)$ to December 31 (2018) with high counts of 760 on December 6, 2017, 1,080 on December 2, 2017 and 1,890 on December 3, 2017. For the other years the high count was only that of 65 on December 3, 2019.

## Northern Rough-winged Swallow (Stelgidopteryx serripennis)

There have only been 94 records of 161 birds nearly all occurred in the late spring and early fall passages. The late spring passage ran from February 25 (2020) to April $26(2017,2020)$ with high counts of four on March 24, 2022, four on March 26, 2022, four on April 21, 2022, four on April 26, 2017, eight on April 25, 2017 and nine on April 8, 2022. There were four counts of three, seven of two and 24 of one. During the summer there were singles on 16 dates with two on June 17, 2020, two on June 21, 2022 and three on June 23, 2021. The early fall passage ran from July 2 (2020) to September 20 (2017) with high counts of two on July 2, 2020, two on July 28, 2021, two on August 11, 2017, two on August 22, 2021, two on August 23, 2021, two on September 5, 2019, three on August 3, 2021, four on August 17, 2022 and 11 on August 13, 2022 the latter is the highest count for the park; there were also 19 counts of one. For the late fall passage there was one on October 6, 2020, one on October 25, 2022 with two on October 13, 2021 and two on October 25, 2021.

## Bank Swallow (Riparia riparia)

A quite common spring passage migrant there was a similar fall passage in just one year. The spring passage ran from March 21 (2022) to May 12 (2017) with high counts of nine on April 19, 2018, ten on April 25, 2017, 11 on April 21, 2021, 13 on May 6, 2016, 15 on April 13, 2021 and 52 on May 7, 2017 the latter is the highest count for the park. For the summer passage there was one on June 29, 2016. The early fall passage ran from July 21 (2018) to September 18 (2020) with high counts of 14 on August 3, 2016, 14 on August 16, 2019, 15 on August 17, 2019, 16 on August 13, 2020 and 48 on August 7, 2019.

## Cliff Swallow (Petrochelidon pyrrhonota)

A rarer species there are in all 29 sightings for the spring, one for the summer and 52 for the fall passage. The spring passage ran from March 29 (2022) to May 17 (2020) with high counts of two on five dates, three on May 1, 2020, five on April 13, 2021 and six on May 7, 2017. For the summer passage there was one on May 30, 2021. The early fall passage ran from July 23 (2021) to October 3 (2020) with high counts of four on July 29, 2017, four on August 13, 2020, five on September 3, 2016, seven on September 7, 2020, eight on August 17, 2019, 11 on August 7, 2019, 16 on August 16, 2020, 36 on August 23, 2021, 161 on August 31, 2020, 211 on August 11, 2022, 224 on September 1, 2020, 224 on September 9, 2021, 435 on August 17, 2022, 565 on August 4, 2021, 1,075 on August 3, 2021 and 1,168 on August 13, 2022 the latter is the highest count for the park. For the late fall passage there was one on October 1, 2021 with two on November 14, 2021.

## Cave Swallow (Petrochelidon fulva)

This is a vagrant for the early fall passage there were singles on July 12, 2020 and September 1, 2020. For the late fall passage there were singles on November 2, 2020, November 8, 2022, November 17, 2021, November 18, 2019, November 26, 2022 and November 30, 2019 with two on November 12, 2020, three on October 27, 2021 and four on November 9, 2021. The latter is the highest count for the park.

## Barn Swallow (Hirundo rustica)

A common late spring and early fall passage migrant on a few days very large numbers were seen; the spring passage being the heavier event. Exceptionally for the early spring passage there was one on January 14, 2022. The spring passage ran from March 1 (2019) to June 20 (2019) with high counts of 1,053 on April 24, 2016, 1,070 on April 23, 2018, 1,095 on April 10, 2020, 1,140 on May 8, 2016, 1,180 on May 1, 2020, 1,250 on April 9, 2018, 1,270 on April 29, 2018, 1,360 on April 22, 2021, 1,470 on May 5, 2017, 1,720 on April 13, 2021, 2,120 on April 24, 2018, 2,210 on April 21, 2021, 2,350 on April 19, 2018, 2,910 on April 27, 2018, 4,540 on May 7, 2017, 5,700 on May 7, 2016, 8,460 on May 6, 2016, 9,150 on April 26, 2017 and $\mathbf{1 0 , 1 7 0}$ on April 25, 2017 the latter is the highest count for the park. The early fall passage ran from June 12 (2016) to October 1 (2020) with high counts of 1,250 on August $6,2016,1,429$ on August 5, 2016, 1,520 on September 9, 2021, 1,785 on August 29, 2017, 1,885 on September 4, 2019, 2,500 on August 18, 2019, 2,800 on August 16, 2019, 3,770 on September 5, 2019 and 4,380 on August 17, 2019.

The late fall passage ran from September 25 (2016) to November 18 (2017) with high counts of 87 on September 28, 2016 and 830 on October 3, 2020.

## Carolina Chickadee (Poecile carolinensis)

This is a vagrant for the late spring passage there was one on March 25, 2021. In 2022 there were seven records for the early fall passage and one for the late fall passage. For the early fall passage there were two on July 16, August 1 and August 14 with singles on August 31, September 2, September 9 and September 26. The counts of two are the highest counts for the park. For the late fall passage there was one on November 14.

## Tufted Titmouse (Baeolophus bicolor)

This is a very rare visitor there are just seven sightings for the first five years then in 2021 there were 20 sightings with 15 sightings in 2022. For the early spring passage there were singles on January 18, 2017, February 3, 2022 and February 23, 2021. For the late spring passage there were singles on March 4, 2022, March 6, 2022, March 13, 2022, March 14, 2022, March 25, 2022, April 4, 2018, April 12, 2022 and May 8, 2016. For the summer passage there was one on June 6, 2021. For the early fall passage there were singles on July 6, 2016, July 9, 2016, July 16, 2022, July 26, 2022, August 1, 2022, August 28, 2020, August 31, 2022, September 3, 2022, September 4, 2021, September 5, 2021, September 5, 2022, September 6, 2021 and September 26, 2021. For the late fall passage there were singles on 15 dates from October 3 (2021) to November 12 (2021). For the winter passage there were singles on December 14, 2021 and December 19, 2021. None were seen in 2019.

## Carolina Wren (Thryothorus Iudovicianus)

A resident there may be four to five pairs in the immediate area. There were 41 counts of three, 28 of four, 17 of five, four of six with eight on February 12, 2021 these higher counts were all in the spring. The count of eight is the highest count for the park.

## House Wren (Troglodytes aedon)

There is a tendency for an individual to winter by the park it did not do so in 2017, the fall of 2020 and the spring of 2021. These birds were seen from January 1, 2016 (when the survey started) to April 1, 2016, November 8, 2018 to April 2, 2019, November 2, 2019 to April 5, 2020, November 22, 2021 to April 11, 2022. On top of this there were a number of migrants there were two on January 4, 2022, two on January 15, 2022, two from January 3, 2020 to January 7, 2020 with two on March 27, 2020. For the late spring passage there were singles on March 1, 2018, March 11, 2016, March 23, 2021, April 7, 2017, April 7, 2019, April 8, 2017, April 13, 2019, April 13, 2021, April 17, 2018 and April 17, 2021 the April 17 records are the latest for the spring. For the early fall passage there was one on September 23, 2021. For the late fall passage there were singles on October 4, 2019 (the earliest fall record), October 6, 2022, October 12, 2020, October 14, 2019, October 17, 2022, October 25, 2020, October 26, 2017, November 7, 2017, November 7, 2022, November 8, 2017 and November 11, 2020. There were higher counts of two on November 25, 2021, three on November 26, 2021, three on November 27, 2021, three on November 29, 2019 and three on December 1, 2019. For the winter passage there were two on December 4, 2019, two on December 5, 2019, two on December 6, 2019, two on December 23, 2021, two on December 25, 2021, two on December 26, 2021 and three on December 26, 2021. The counts of three are the highest counts for the park.

## Sedge Wren (Cistothorus platensis)

This is a vagrant for the late fall passage there was one on October 22, 2016.

## Marsh Wren (Cistothorus palustris)

This is a vagrant for the late fall passage there was one on October 26, 2021. For the winter passage there was one on December 6, 2018.

## Ruby-crowned Kinglet (Regulus calendula)

A rare passage migrant there are 38 records for the seven years. For the early spring passage there were singles on 12 dates from January 7 (2022) and February 19 (2021. For the late spring passage there were singles on March 3, 2019 and March 16, 2021 with two on March 1, 2020. For the late fall passage there were singles on 16 dates from October 13 (2019) to

November 27 (2019), with two on October 25, 2017. The counts of two are the highest counts for the park. For the winter passage there were singles on seven dates from December 1 (2021) to December 29 (2022).

## Blue-gray Gnatcatcher (Polioptila caerulea)

For the first five years this was a rare passage migrant in this case there are 17 records. In 2021 this changed as there were 50 records with 46 records for 2022. Excluding 2021 and 2022 for the early spring passage there was one on January 25, 2020. For the late spring passage there were singles on March 1, 2017, March 3, 2019, April 2, 2016, April 7, 2020 and April 27, 2018. For the summer passage there was one on June 6, 2020. For the early fall passage there were singles on July 7, 2017, July 19, 2020 and September 23, 2016. For the late fall passage there were singles on October 13, 2019, October 16, 2020, October 21, 2020, October 25, 2017 and November 23, 2019 with two on November 27, 2018. For the winter passage there was one on December 24, 2020. To detail the 2021 records separately: there were 11 records for the early spring passage, four for the late spring, one for the summer, 11 for the early fall, 16 for the late fall and seven for the winter passage. The high count was that of five on October 24 this is the highest count for the park. The early spring passage ran from January 26 to February 27 with high counts of two on February 9 and February 12. There were singles on January 26, January 30 and February 7 with two on February 9, then one seen on February 11. There were two on February 12 with singles on February 13, February 15, February 19, February 23 and February 27. For the late spring passage there were singles on March 15, April 4, May 3 and May 5 . For the summer passage there was one on June 4. For the early fall passage there were two on July 13 with singles on August 6, August 15, September 10, September 12 and September 17. There were two on September 19 with singles on September 20 and September 25. Finally, there were two on September 26 and September 29. For the late fall passage there were three on October 3 with four on October 6, then three seen on October 10. There were four on October 11 and October 17 with one on October 20. There were two on October 21 with three on October 22 and five on October 24, then singles seen to October 29. The count of five is the highest count for the park. There were four on October 30 with two on October 31 and singles on November 9 and November 18. For the winter passage there were singles on December 5, December 9, December 12 and December 19 with two on December 24 and December 26, then singles seen on December 29 and December 31. To detail the 2022 sightings there are 13 records for the early spring, ten for the late spring, three for the summer, 12 for the early fall, seven for the late fall and one for the winter passage. The highest count was that of four on May 1. For the early spring passage there was one on January 2 with three on January 6, then two seen on January 7 with singles to January 31 . There were two on February 1 and February 3 with singles on six dates to February 27. For the late spring passage there were two on March 2 and March 6 with singles on five dates to March 27. There were two on April 2 with one on April 16. For the summer passage there were two with two fledged young on May 1 (i.e., a party of four) with singles later on May 5 and June 12. For the early fall passage there were singles on four dates from July 13 to September 7 with two on September 11, then singles seen to September 18. There were two on September 20 with three
on September 25, then two seen to September 27. For the late fall passage there were two on October 2 with singles on six dates to November 26. For the winter passage there was one on December 7.

## Eastern Bluebird (Sialia sialis)

This is a vagrant for the early spring passage there were two on January 7, 2021 with two on February 5, 2020 and three on February 6, 2021, then singles seen on February 9, 2018 and February 10, 2021. The count of three is the highest count for the park. For the late spring passage there were singles on March 3, 2022, March 20, 2020, March 27, 2020, April 1, 2021 and April 27, 2022. For the summer passage there was one on June 14, 2022. For the late fall passage there were singles on October 12, 2020, November 2, 2021 and November 2, 2022.

## Migrant thrushes:

2020 is the first year where I have walked around the area in the dark of the early morning and therefore paid attention to the nocturnal flight calls of the thrushes.

## Veery (Catharus fuscescens)

This is an uncommon migrant for the late fall passage there was one on October 1, 2020. To detail the 2021 sightings there were 11 records in all: two for the late spring, five for the early fall and four for the late fall passage; up to three a night heard. For the late spring passage there were two on April 16 and April 21. For the early fall passage there were three on September 3 with singles on September 7, September 24 and September 25 . There were also three on September 26. For the late fall passage there were three on October 1 with two on October 2 and singles on October 11 and October 13. For 2022 there are nine records two for the late spring, four for the early fall and three for the late fall passage. The high count was that of seven on October 9 this is the highest count for the park. For the late spring passage there were singles on April 26 and May 2. For the early fall passage there were singles on September 2, September 13, September 15 and September 23. For the late fall passage there was one on October 3 with seven on October 9, then six heard on October 15.

## Gray-cheeked Thrush (Catharus minimus)

This is an uncommon migrant for the late fall passage there was one on October 16, 2017. In 2020 for the late fall passage there were three on October 8 with singles on October 9, October

24 and October 26. There were ten on October 27 with singles on October 31 and November 1. To detail the 2021 sightings there were eight records this year there were two for the late spring, two for the early fall and four for the late fall passage. The high count was of three on November 5. For the late spring passage there were singles on May 7 and May 12. For the early fall passage there were singles on September 24 and September 25. For the late fall passage there were singles on October 1, October 13 and October 27 with three on November 5. To detail the 2022 records there are six records this year there were two for the late spring and four for the late fall passage. For the late spring passage there was one on May 7 with two on May 15. For the late fall passage there were two on October 9 with 51 on October 15, then two heard on October 16 and October 18. The count of 51 is the highest count for the park.

## Bicknell's Thrush (Catharus bicknelli)

This is a vagrant for the late fall passage there were singles on September 26, 2021, October 13, 2021, October 15, 2022, October 27, 2020 and November 5, 2021.

## Swainson's Thrush (Catharus ustulatus)

This is an uncommon late spring passage and commoner late fall passage migrant. For the late spring passage there was one on April 28, 2021, two on May 2, 2022, three on April 21, 2021 and three on May 7, 2022. For the late fall passage in 2020 there were singles on October 2 and October 7 with four on October 8, then singles noted on October 13 and October 18. In 2021 they were heard on 16 dates two were for the late spring, nine for the early fall and five for the late fall passage. For the early fall passage there were two on September 3 with four on September 7, then one heard on September 9. There were two on September 17 with one on September 19. There were two on September 24 with one on September 25. There were six on September 26 with one on September 27. For the late fall passage there were four on October 1 with two on October 2. There were two on October 13 with three on October 14, then one heard on October 23. In 2022 there was one on September 3 with three on September 13, then one heard on September 15. There were two on September 16 with one on September 23. There was also two on September 30. For the late fall passage there were two on October 5 with 32 on October 9, then one heard on October 10. There were three on October 13 with 49 on October 15, then two heard on October 17. The count of 49 is the highest count for the park.

## Hermit Thrush (Catharus guttatus)

This is an uncommon late fall passage migrant with a single winter record. In 2020 for the late fall passage there were singles on October 17 and October 21 with two on October 26 and three on October 27, then two noted on November 1 and November 3 with one on November 4.

For the winter passage there was one on December 21. In 2021 they were heard on 11 dates with one for the early spring, two for the late spring and eight for the late fall passage. The high count was that of 11 on November 5 this is the highest count for the park. For the early spring passage there was one on January 6. For the late spring passage there were two on March 22 with one on March 25. For the late fall passage there was one on October 19 with four on October 27, then singles heard on October 28, October 30 and November 4. There were 11 on November 5 with two on November 8 and one on November 19. The count of 11 is the highest count for the park. For 2022 and the late spring passage there were singles on March 4 and March 19. For the later fall passage there were two on October 15 with singles on October 27, November 13 and November 21.

## Wood Thrush (Hylocichla mustelina)

This is a vagrant there are six records. For the late spring passage there was one on April 16, 2021. For the early fall passage there were singles on September 7, 2021 and September 27, 2021. For the late fall passage there were two on October 9, 2022 with singles on October 15, 2022 and October 18, 2022. The count of two is the highest count for the park.

## American Robin (Turdus migratorius)

This is above all else an early spring passage migrant sometimes they go to the north and at other times they fly to the south. By comparison the late fall and winter passages are minor events. The early spring passage ran from January 1 (2017, 2019 and 2021) to March 13 (2019) (there was a late bird on March 20, 2018) with high counts of 3,540 on January 15, 2021, 3,750 on January 12, 2018, 3,920 on February 8, 2017, 4,120 on February 5, 2019, 4,690 on January 5, 2021, 4,870 on February 17, 2021, 4,930 on January 2, 2021, 5,500 on February 8, 2021, 5,540 on January 18, 2019, 6,250 on January 8, 2021, 6,460 on January 24, 2019, 6,800 on January 24, 2021, 6,810 on January 25, 2019, 8,040 on January 9, 2021, 9,130 on February 12, 2019, 13,360 on February 4, 2019, 13,650 on January 27, 2021 and 23,270 on January 26, 2021 the latter is the highest count for the park. As you can see the best years were 2019 and 2021. The late fall passage ran from October 21 (2022) to November 30 (2017) with a high count of 425 on November 25, 2016. The winter passage ran from November 30 (2022) to December 31 (five years) with high counts of 885 on December 30, 2016, 1,090 on December 29, 2019, 1,310 on December 30, 2019, 3,620 on December 29, 2020 and 3,860 on December 21, 2020.

## Gray Catbird (Dumetella carolinensis)

In all for the first five years 21 recorded ten were seen in the late spring and eight in the early fall. In 2021 there were 62 records with 34 sightings in 2022 . The early spring passage ran from January 1 (2022) to March 1 (2022) with high counts of four on February 11, 2021, February 12, 2021, February 14, 2021 and February 15, 2021. The late spring passage ran from March 1 (2021) to May 9 (2020) with high counts of two on March 9, 2022, two on April 24, 2020, three on March 5, 2021, three on March 10, 2021, three on March 15, 2021 and three on April 25, 2021. For the early fall passage there were singles on June 28, 2018, July 7, 2018, September 7, 2018, September 20, 2017, September 22, 2021, September 26, 2021 and September 27, 2017. For the late fall passage there were singles on September 30, 2020, October 5, 2021, October 10, 2020, October 12, 2021, October 18, 2018 and October 31, 2017 with two on October 1, 2020, two on October 17, 2021 and four on October 15, 2022; singles then seen on 20 dates to November 17. For the winter passage there were singles on nine dates from December 3 (2021) to December 31 (2021) with two on December 3, 2022 and two on December 26, 2021. The counts of four are the highest counts for the park.

## Northern Mockingbird (Mimus polyglottos)

A common resident there were some nine pairs in the area. For much of the year some five to ten a day seen but numbers were higher during February when pairs are being formed and in July when the young fledged. The early spring high counts were 12 on February 6, 2018, 12 on February 10, 2020, 12 on February 26, 2020, 12 on February 28, 2018, 12 on February 22, 2021, 13 on February 9, 2018, 13 on February 6, 2019, 14 on February 27, 2019, 15 on February 3, 2022, 16 on February 10, 2022, 16 on February 12, 2021, 16 on February 19, 2018, 16 on February 25, 2021 and 17 on February 23, 2022. The late spring high counts were of 12 on March 18, 2021, 13 on March 4, 2020, 13 on March 4, 2022, 13 on March 25, 2021, 13 on March 30, 2022, 13 on April 27, 2022, 14 on April 14, 2021, 14 on April 15, 2022, 15 on March 9, 2022, 17 on March 24, 2022, 17 on March 28, 2021, 19 on March 13, 2021 and 19 on March 15, 2021. The summer high counts were 11 on May 12, 2022, 11 on June 13, 2017, 12 on June 25, 2019, 12 on June 10, 2021, 13 on May 12, 2021, 13 on May 20, 2022, 13 on June 5, 2020, 14 on May 16, 2022, 14 on June 6, 2021, 14 on June 18, 2022, 15 on May 9, 2022, 15 on May 29, 2022, 15 on June 24, 2021, 15 on June 28,2021 and 16 on June 6, 2020. The early fall high counts were of 11 on July $26,2017,12$ on July $20,2019,14$ on July $14,2022,14$ on July $22,2021,14$ on September 11,2022 , 15 on July 4, 2022, 15 on September 14, 2022, 16 on July 15, 2021, 17 on July 11, 2019, 18 on July 3, 2021, 18 on September 27, 2022 and $\mathbf{2 3}$ on July 10, 2021 the latter is the highest count for the park. The late fall high counts were 12 on October 7, 2020, 12 on October 8, 2020, 12 on October

21, 2021, 13 on October 11, 2022, 13 on October 30, 2022, 14 on October 2, 2022, 15 on October 16, 2022 and 15 on October 27, 2022. The winter high counts were of 11 on December 29, 2021 and 13 on December 18, 2021.

## Brown Thrasher (Toxostoma rufum)

An uncommon summer visitor there may be two pairs locally; in 2020 a pair raised one young. They have been seen from February 13 (2021) to September 20 (2021) with late individuals on September 25, 2020, September 26, 2022, October 2, 2020 and October 19, 2021 with two on October 10, 2022. In the spring up to two a day were seen with three on March 5, 2021, four on February 28, 2018 and four on April 3, 2022. In the summer up to three a day were seen with four on June 16, 2017. In the early fall only one to two a day seen with three on July 13,2016 . The three counts of four are the highest counts for the park. For the late fall passage in 2021 singles were seen on six dates from October 4 to October 19.

## European Starling (Sturnus vulgaris)

A common resident I do not know the number of pairs. This is also a passage migrant and winter visitor the higher numbers being in the late fall and winter passages. For the early spring passage there were high counts of 160 on February 4, 2017, 170 on February 7, 2016, 180 on February 19, 2021, 220 on January 27, 2019, 220 on January 1, 2020, 260 on February 6, 2021, 310 on January 13, 2016, 340 on January 25, 2021, 350 on January 19, 2021, 420 on February 8, 2022, 460 on January 27, 2022, 470 on January 8, 2016, 580 on January 13, 2021, 640 on January 23, 2022, 650 on January 1, 2021, 730 on January 8, 2021 and 820 on January 7, 2022. The late spring is really the summer for this species as they breed so early the high counts were only that of 60 on March 3, 2017, 70 on March 3, 2021 and 70 on March 12, 2022. For the summer (by calendar) the high counts were 155 on June 23, 2017, 170 on June 19, 2018 and 195 on June 28, 2017. For the early fall passage, the high counts were 190 on July 23, 2017, 190 on July 7,2018 , 195 on June 28, 2017, 195 on July 11, 2018, 205 on July 29, 2017, 210 on July 8, 2017, 210 on July 18, 2018, 210 on August 25, 2018, 240 on July 16, 2017, 240 on September 12, 2021, 250 on August 10, 2020, 250 on September 17, 2022, 340 on September 3, 2019, 350 on September 23, 2022 and 370 on September 4, 2019. For the late fall passage, the high counts were 240 on November 24, 2019, 240 on October 3, 2020, 260 on October 28, 2021, 310 on November 9, 2016, 320 on October 19, 2022, 330 on November 7, 2022, 380 on November 24, 2022, 460 on November 13, 2021, 480 on November 29, 2016, 540 on November 24, 2016, 580 on November 21, 2022, 610 on November 3, 2022, 650 on November 18, 2020, 670 on November 26, 2021,

720 on November 18, 2021, 730 on November 22, 2018, 810 on November 6, 2021, 1,170 on November 15, 2022 and 1,400 on October 25, 2018. The 1,400 were stretched out along the utility wires in a rain storm during the passage of a warm front. For the winter passage the high counts were 280 on December 9, 2019, 320 on December 15, 2021, 320 on December 23, 2022, 390 on December 1, 2022, 440 on December 3, 2018, 460 on December 20, 2016, 530 on December 6, 2016, 540 on December 9, 2022, 550 on December 5, 2019, 560 on December 8, 2020, 560 on December 3, 2021, 650 on December 12, 2021, 760 on December 7, 2016, 840 on December 31, 2021, 850 on December 26, 2020, 940 on December 27, 2021 and 1,450 on December 19, 2021 the latter is the highest count for the park. There was a leucistic juvenile on June 20, 2017 and June 28, 2017 with two present on June 30, 2017 and July 7, 2017.

## Common Myna (Acridotheres tristis)

This is a vagrant for the summer passage there was a juvenile with the European Starlings on June 16, 2017.

## American Pipit (Anthus rubescens)

This is a vagrant there are 11 records. For the early spring passage there were six on January 12, 2018 with four on January 26, 2021, one on February 5, 2022 and three on February 16, 2019. For the late fall passage there were singles on October 25, 2021 and November 23, 2020 with two on November 13, 2022. For the winter passage there were singles on November 29, 2019, December 6, 2020 and December 17, 2022 with two on December 13, 2021. The count of six is the highest count for the park.

## Cedar Waxwing (Bombycilla cedrorum)

A common spring passage migrant with three exceptional flights; there was only the trace of passage in the late fall and winter. The early spring passage ran from January 2 (2021) to March 1 (2020) with high counts of 104 on January 27, 2017, 130 on January 29, 2018, 145 on February 12, 2018, 155 on January 18, 2017, 160 on January 30, 2016, 205 on January 4, 2019, 300 on January 22, 2018, 340 on January 26, 2021, 375 on February 2, 2018, 500 on February 18, 2022, 510 on January 23, 2018, 670 on February 4, 2020, 675 on January 9, 2021, 830 on February 15, 2022, 1,380 on February 28, 2020 and 1,460 on January 12, 2018 the latter were seen in the warm sector of a front the wind was SW 12. The late spring passage ran from February 26 (2022) to

April 27 (2022) with high counts of 110 on March 28, 2016, 115 on March 11, 2018, 120 on April 18, 2022, 145 on March 13, 2021, 155 on April 2,2022, 175 on March 4, 2022, 190 on April 12, 2017, 210 on April 1, 2021, 275 on March 1, 2022, 285 on March 2, 2019, 320 on March 11, 2022, 325 on March 4, 2020, 400 on March 12, 2020, 410 on March 1, 2019, 450 on March 1, 2019, 500 on March 8, 2022, 700 on March 26, 2022, 1,490 on March 17, 2022 and 1,840 on March 14, 2022 the latter is the highest count for the park. For the late fall passage there was one on November 9, 2021, five on November 26, 2017, 12 on November 22, 2020, 13 on November 11, 2016, 20 on November 26, 2016, 25 on November 16, 2022 and 50 on November 25, 2020. For the winter passage there were five on December 31, 2017, 12 on December 19, 2022, 15 on December 8, 2022, 20 on December 27, 2020, 20 on December 29, 2019, 30 on December 30, 2019, 40 on November 27, 2020, 40 on December 29, 2020, 40 on Dec ember 10, 2022, 50 on December 14, 2022, 60 on December 26, 2022, 85 on December 31, 2019 and 120 on December 17, 2019.

## Tennessee Warbler (Vermivora peregrina)

This is a vagrant there are just four records. For the late spring passage there were singles on April 26, 2019 and May 5, 2017. For the early fall passage there was one on September 22, 2017. For the late fall passage there was one on October 27, 2021.

## Orange-crowned Warbler (Vermivora celata)

This is a vagrant there are eight sightings. For the early spring passage there were singles on January 26, 2021, February 10, 2021, February 18, 2021 and February 26, 2021. For the late spring passage there was one on March 18, 2022. For the late fall passage there were singles on October 26, 2020, November 24, 2022 and November 25, 2021.

## Nashville Warbler (Vermivora ruficapilla)

This is a vagrant, for the late spring passage there was one on May 6, 2020. For the late fall passage there was one on October 29, 2021.

## Northern Parula (Parula americana)

A rare passage migrant there are only 11 sightings for the first five years but there were 34 records for 2021 with 29 records for 2022. For the late spring passage there were singles on March 4, 2020, March 14, 2018, March 17, 2017, April 6, 2019, April 24, 2020 and May 9, 2020. For the early fall passage there were singles on July 8, 2016 and July 10, 2019. For the late fall passage there were two on October 4, 2020, one on October 5, 2020 and one on October 25, 2017. For 2021 they were seen in the spring from February 12 to April 7 only singles noted. They were seen in the summer from April 30 to June 4 with a high count of two on four dates. Seen in the fall from September 19 to November 2 with high counts of two on five dates. There was a single winter record. For the early spring passage there were singles on February 12, February 15 and February 24. For the late spring passage there were singles on eight dates from March 11 to April 7. For the summer passage there were singles on April 30 and May 3 with two on May 5, then singles seen to May 7. There were two on May 9 and later on May 29, then singles seen on May 30, June 4 and June 11. For the early fall passage there were singles on September 19 and September 20. For the late fall passage there were singles on five dates from September 28 to October 24 with two from October 25 to October 30, then one seen on October 31. There were also two on November 2. For the winter passage there was one on December 24. To detail the 2022 sightings there were singles for the early spring passage on February 3, February 20, February 24 and February 27. For the late spring passage there were singles on March 2, March 9 and March 10 with two on March 11, then singles seen on March 13 and March 14. There were two on March 16 with one on March 17. There were two on March 18, March 19 and March 25 with one on March 26. There were two on March 27 and March 30 with one on April 3. For the summer passage there was one on May 1 with two on May 8 and May 16, then one seen on June 2. For the early fall passage there were singles on August 14, September 9, September 20, September 26 and September 27. For the late fall passage there was one on November 12. The counts of two are the highest count for the park.

## Yellow Warbler (Dendroica petechia)

Another rare passage migrant there are 16 records all were for the fall passages. For the early fall passage there were singles on July 16, 2017, August 3, 2019, August 3, 2021, August 3, 2022, August 10, 2016, August 12, 2021, August 15, 2020, August 23, 2018, August 27, 2018, September 5, 2021, September 12, 2021, September 18, 2022 and September 22, 2021 with two on July 9,2021 the latter is the highest count for the park. For the late fall passage there were singles on October 4, 2020 and October 5, 2020.

## Magnolia Warbler (Dendroica magnolia)

This is a vagrant for the late spring passage there were singles on April 25, 2021 and May 5, 2020. For the early fall passage there was one on August 29, 2021. For the late fall passage there were singles on October 2, 2022, October 9, 2022 and October 12, 2018.

## Cape May Warbler (Dendroica tigrina)

This is a vagrant there are just 13 records for the late spring, one for the early fall and one for the late fall passage. For the late spring passage there were singles on March 21, 2021, April 25, 2021, April 30, 2021, May 3, 2019, May 4, 2020, May 6, 2017, May 6, 2021, May 17, 2022, May 18, 2020, May 22, 2022 and May 29, 2022. There were also three on May 9, 2020 and four on May 5, 2021 the latter is the highest count for the park. For the early fall passage there was one on September 5, 2021. For the late fall passage there was also one on October 30, 2021.

## Black-throated Blue Warbler (Dendroica caerulescens)

Another rare passage migrant there are 12 records for the late spring passage and four for the early fall passage. For the late spring passage there were singles on March 29, 2020, April 11, 2021, April 22, 2019, April 24, 2020, April 25, 2018, April 29, 2018, May 3, 2021, May 4, 2021, May 5, 2017, May 6, 2017 and May 6, 2021 with two on April 30, 2021 and two on May 6, 2020 these are the highest counts for the park. For the early fall passage there were singles on August 9, 2021, September 18, 2022, September 19, 2021 and September 20, 2021.

## Yellow-rumped Warbler (Dendroica coronata)

A passage migrant in very variable numbers some are present all winter. The early spring passage ran from January 1 (2017, 2019 and 2021) to February 28 (all years) with high counts of 55 on February 1, 2017, 57 on January 1, 2019, 63 on January 12, 2018, 64 on January 21, 2017, 72 on February 4, 2016, 81 on January 31, 2021, 181 on January 20, 2020, 259 on February 12, 2019, 372 on February 7, 2019 and 383 on January 25, 2021. The late spring passage ran from March 1 (2017, 2018 and 2019) to April 16 (2021) with a late individual on April 21, 2018. The high count was that of 17 on March 3, 2017. The late fall passage ran from October 2 (2019) to December 1 (2017) with high counts of 104 on November 20, 2016, 121 on November 18, 2017, 263 on November 7, 2017, 354 on November 23, 2020 and 1,140 on November 8, 2017 the latter
is the highest count for the park. Only very low numbers were seen in 2018 and 2019. The winter passage ran from November 29 (2021) to December 31 (all years) with high counts of 35 on December 30, 2016, 38 on December 8, 2022 and 91 on December 2, 2017. Again, only low numbers were seen in 2018 and 2019.

## Black-throated Green Warbler (Dendroica virens)

This is a vagrant for the late fall passage there was one on October 24, 2019.

## Blackburnian Warbler (Dendroica fusca)

This is a vagrant for the late fall passage there was one on October 28, 2021.

## Yellow-throated Warbler (Dendroica dominica)

This is now an uncommon passage migrant it was a rarity until 2020. There have now been 25 records for the early spring, 23 for the late spring, one for the summer, eight for the early fall, 19 for the late fall and 12 for the winter passage. For the early spring passage in 2021 there were singles on 11 dates from January 10 to February 11. There were two on February 14 with singles on eight dates to February 27. For the late spring passage in 2021 singles seen on 13 dates from March 2 to March 23 with two on March 7. An individual was singing on March 12. For the summer passage in 2021 there was one on June 11. In 2022 there were singles on five dates from January 13 to February 20. For the late spring passage there were singles on six dates from March 2 to March 18 with two on March 19, then singles seen on three dates to March 25. For the early fall passage (all years) there were singles on July 16, 2022, July 26, 2022, August 20, 2020 August 23, 2021, September 12, 2022, September 26, 2017 and September 27, 2021 with two on September 4, 2016. For the late fall passage there were singles on October 1, 2022, October 2, 2022, October 7, 2022, October 8, 2020, October 9, 2022, October 14, 2022, October 17, 2020, October 17, 2021, October 18, 2021, October 21, 2022, October 24, 2022, October 27, 2021, November 1, 2021, November 2, 2021, November 2, 2022, November 6, 2020, November 8, 2020, November 10, 2021, November 11, 2020, November 15, 2020 and November 21, 2022 with two on October 11, 2022. Finally, for the winter passage there were singles on December 1, 2021, December 1, 2022, December 3, 2022, December 6, 2022, December 7, 2022, December 12, 2022, December 20, 2022, December 24, 2021, December 27, 2022, December 28, 2022, December 29, 2022 and December 30, 2023. The counts of two are the highest counts for the park.

## Pine Warbler (Dendroica pinus)

This is a vagrant there are only five records. For the late spring passage there were singles on April 26, 2019 and April 30, 2021. For the late fall passage there were singles on September 30, 2017, October 6, 2020 and October 9, 2020.

## Prairie Warbler (Dendroica discolor)

In all 12 seen over the first five years seven were for the late spring passage, three for the early fall passage, one for the late fall passage and one for the winter passage. In 2021 there were 25 records three for the early spring, 11 for the late spring, seven for the early fall and four for the late fall passage. In 2022 there were 17 records two for the early spring, six for the late spring, six for the early fall, two for the late fall and one for the winter passage. For the early spring passage there were singles on five dates from January 6 (2022) to February 22 (2021). For the late spring passage there were singles on nine dates from March 1 (2020) to March 29 (2022) with two on March 26, 2022 and March 28, 2021, then singles seen on ten dates from April 1 (2016) to April 22 (2019). There were also two on April 25, 2021 with one on May 5, 2021. For the early fall passage there were singles on ten dates from June 29 (2022) to September 20 (2021, two on September 23, 2021, three on July 21, 2022 and three on August 31, 2022. For the late fall passage there were singles on six dates from September 29 (2021) to November 1 (2022) with two on October 3, 2021. For the winter passage there were singles on December 6, 2022 and December 13, 2020. The counts of three are the highest counts for the park.

## Palm Warbler (Dendroica palmarum)

One to three are present from October to April each year there are a number of higher counts. The spring passage ran from January 1 (five years) to May 8 (2020) with high counts of six on January 5, 2019, six on January 30, 2022, six on February 3, 2019, six on February 15, 2021, six on March 14, 2021, six on March 23, 2021, six on March 27, 2022, seven on January 25, 2019 and 14 on January 25,2021 . No more than three a day for the earlier years. The late fall passage ran from September $14(2021,2022)$ to November 30 (five years) with high counts of five on October 30, 2017, five on November 21, 2018, five on November 28, 2018, six on October 25, 2017, six on October 30, 2020, seven on November 9, 2021, eight on November 14, 2021, eight on November 25, 2021, eight on November 3, 2022, nine on November 17, 2018, nine on October 22, 2022, 11 on October 21, 2021, 12 on October 12, 2021, 12 on October 28, 2022, 19 on October 26, 2021 and $\mathbf{3 3}$ on September 30, 2022 the latter is the highest count for the park. The winter
passage ran from December 1 (five years) to December 31 (six years) with high counts of five on December 16, 2018, five on December 31, 2021, six on December 5, 2021, six on December 23, 2022, seven on December 19, 2020, eight on December 24, 2021, nine on December 18, 2018, ten on December 26, 2020 and 11 on December 13, 2020.

## Blackpoll Warbler (Dendroica striata)

A very uncommon spring passage migrant there are records for every year with two late fall records. For the late spring passage there were singles on 22 dates from April 25 (2021) to May 30 (2021) with high counts of two on April 25, 2021, two on May 10, 2021, two on May 17, 2022 three on May 4, 2020, three on May 9, 2021, three on May 14, 2017, four on May 6, 2021, six on May 11, 2021, seven on May 13, 2017, seven on May 7, 2021 and eight on April 30, 2021 the latter is the highest count for the park. For the summer passage there was one on May 30, 2021. For the late fall passage there were singles on October 16, 2018 and October 30, 2021.

## Cerulean Warbler (Dendroica cerulea)

This is a vagrant for the early fall passage there was an immature on September 20, 2022.

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

This is a vagrant there are only five sightings for the first five years for 2021 there were 15 records with seven sightings in 2022. For the late spring passage there were singles on April 24, 2020, May 1, 2020, May 6, 2018 and May 7, 2018. For the early fall passage there was one on August 29, 2017. To show the 2021 records separately there were ten sightings for the late spring, one for the early fall and four for the late fall passage no more than two a day seen. For the late spring passage there was one on March 21 with two on March 26, then singles seen on April 13, April 15, April 16, April 30, May 3 and May 5. There were two on May 7 with one on May 10. For the early fall passage there was one on September 19. For the late fall passage there were two on October 5, October 10 and October 17 with one on October 30. To detail the 2022 records there were six sightings for the late spring and one for the early fall. Only singles recorded. For the late spring passage there were singles on March 2, March 6, March 18, March 25, April 17 and May 8 . For the early fall passage there was one on August 31 . The counts of two are the highest counts for the park.

## American Redstart (Setophaga ruticilla)

An uncommon late spring passage migrant with only a trace passage in the fall; in all there were 86 records 43 for the spring and 43 for the fall. The late spring passage ran from April 10 (2020, 2021) to May 30 (2021) with high counts of two on May 5, 2017, two on May 7, 2022, two on May 8, 2021, two on May 12, 2017, two on May 12, 2021, two on May 14, 2017, two on May 16, 2022, two on May 17, 2018, two on May 19, 2022, two on May 30, 2021, three on May 4, 2020, three on May 6, 2020, three on May 7, 2021, three on May 13, 2017, four on May 10, 2021, five on May 4, 2021, five on May 11, 2021, six on May 6, 2021 and nine on April 30, 2021 the latter is the highest count for the park. For the early fall passage there were singles on 16 dates from August 17 (2021) to September $30(2016,2022)$ with two on August 22, 2021, two on August 27, 2020, two on September 25, 2022, three on September 25, 2022 and three on September 27, 2022. For the late fall passage there were singles on 16 dates from September 29 (2020) to November 2 (2021) with two on October 29, 2021, two on October 30, 2021, three on October 4, 2020 and three on October 10, 2021.

## Prothonotary Warbler (Protonotaria citrea)

This is a vagrant for the late spring passage there were singles on April 12, 2020 and April 12, 2021. For the early fall passage there was one on September 18, 2022.

## Worm-eating Warbler (Helmitheros vermivora)

This is a vagrant for the late spring passage there was one on April 30, 2021.

## Ovenbird (Seiurus aurocapilla)

This is a vagrant for the late spring passage there were singles on March 21, 2021, April 26, 2019 and May 9, 2020.

## Northern Waterthrush (Seiurus noveboracensis)

This is a vagrant there are only six records. For the late spring passage there were singles on April 6, 2020, April 15, 2016 and April 24, 2020. For the late fall passage there was one on

September 28, 2021. For the winter passage there were singles on December 4, 2021 and December 15, 2017.

## Louisiana Waterthrush (Seiurus motacilla)

This is also a vagrant there are six sightings. For the early spring passage there were singles on February 5, 2018 and February 27, 2020. For the late spring passage there was one on March 25, 2021. For the early fall passage there were singles on August 2, 2021, August 5, 2016 and August 16, 2017.

## Kentucky Warbler (Oporornis formosus)

This is a vagrant for the late fall passage there was one on October 17, 2021.

## Connecticut Warbler (Oporornis agilis)

This is a vagrant for the late spring passage there was a female on May 6, 2019.

## Common Yellowthroat (Geothlypis trichas)

An expected passage migrant although numbers are always low it is a late spring passage migrant with a lighter early fall passage. For the early spring passage there were singles on January 2, 2020, January 3, 2020, January 11, 2021, January 23, 2021, February 23, 2020 and February 25, 2021 with two on February 20, 2020. The late spring passage ran from March 4 (2021) to June 2 (2017) with high counts of four on May 14, 2017, four on May 4, 2021, five on May 6, 2019, seven on May 13, 2017 and seven on May 4, 2019. The counts of seven are the highest counts for the park. There were also nine counts of three. For the early fall passage there was one on July 10, 2019 otherwise this passage ran from July 22 (2021) to September 30 (2016, 2017) with high counts of two on ten dates with five on September 10, 2021 and five on September 22, 2021. The late fall passage ran from October $1(2016,2022)$ to November 26 (2021) with high counts of two on October 1, 2016, October 4, 2020, October 9, 2021, October 17, 2021 and October 24, 2017. For the winter passage there were singles on 12 dates from December $1(2021,2022)$ to December $28(2020,2021)$.

## Hooded Warbler (Wilsonia citrina)

This is a vagrant there are just three records. For the early fall passage there was one on September 3, 2016 and for the late fall passage there were singles on October 12, 2018 and October 27, 2021.

## Canada Warbler (Wilsonia canadensis)

This is a vagrant for the early fall passage there was one on September 22, 2021.

## Wilson's Warbler (Wilsonia pusilla)

This is a vagrant for the late fall passage there was one on October 7, 2020.

## Summer Tanager (Piranga rubra)

This is an uncommon passage migrant there are 16 records. For the late spring passage there were singles on April 6, 2018, April 6, 2019, April 13, 2021 and May 5, 2017, May 5, 2022 with two on April 23, 2021. For the summer passage there were singles on June 5, 2022, June 13, 2021 and June 23, 2022. For the early fall passage there were singles on August 19, 2021, September 7, 2018, September 13, 2021 and September 18, 2020 with two on July 8, 2022. For the late fall passage there was one on October 15, 2020. For the winter passage there was one on December 10, 2020. The counts of two are the highest counts for the park.

## Scarlet Tanager (Piranga olivacea)

This is a vagrant for the early fall passage there were two on September 17, 2022 this is the highest count for the park. For the late fall passage there was one on October 9, 2020.

## Eastern Towhee (Pipilo erythrophthalmus)

This is a rare passage migrant there are 11 records. For the early spring passage there was one on February 16, 2022 and one on February 23, 2021. For the late spring passage there were singles on March 3, 2018, March 3, 2019, March 13, 2020, March 15, 2022 and March 30, 2016.

For the late fall passage there were singles on November 5, 2022, November 8, 2019 and November 30, 2022. For the winter passage there was one on December 6, 2021.

## Chipping Sparrow (Spizella passerina)

This is a vagrant for the early spring passage there were singles on January 15, 2020 and February 6, 2021. For the late spring passage there was one on March 15, 2022. For the late fall passage there were singles on October 7, 2021, October 15, 2021 and November 24, 2022. For the winter passage there was one on December 13, 2016.

## Clay-colored Sparrow (Spizella pallida)

This is a vagrant for the late spring passage there was one on April 13, 2022. For the late fall passage there were singles on October 15, 2021, November 25, 2020 and November 26, 2020.

Vesper Sparrow (Pooecetes gramineus)
This is a vagrant for the winter passage there was one on December 17, 2020.

## Savannah Sparrow (Passerculus sandwichensis)

A very uncommon passage migrant. For the early spring passage there were singles on ten dates from January 6 (2021) to February 28 (2022) with two on January 26, 2020. The count of two is the highest count for the park. For the late spring passage there were singles on March 8, 2022, March 26, 2019, March 27, 2016, April 4, 2017 and April 28, 2017. For the late fall passage there were singles on 15 dates from October 12 (2020) to November 22 (2022). Finally for the winter passage there were singles on November 30, 2018 and December 24, 2018.

Grasshopper Sparrow (Ammodramus savannarum)
This is a vagrant for the winter passage there was one on December 1, 2022.

## Song Sparrow (Melospiza melodia)

This is a vagrant for the early spring passage there was one on February 13, 2019.

## Swamp Sparrow (Melospiza georgiana)

This is a vagrant for the late spring passage there were singles on April 10, 2020 and April 21, 2021. For the late fall passage there was one on November 2, 2021.

## White-crowned Sparrow (Zonotrichia leucophrys)

This is also a vagrant for the late fall passage there were singles on October 5, 2021 and November 26, 2016.

## Snow Bunting (Plectrophenax nivalis)

This is a real rarity for the late fall passage a female flew to the north on November 14, 2017.

## Northern Cardinal (Cardinalis cardinalis)

There are some eight pairs nesting in the area they were singing from February to late July. The higher counts (four or above) ran from January 3 (2022) to October 24 (2022) the highest counts were 13 on February 12, 2021, 13 on May 1, 2021, 14 on March 31, 2021, 14 on April 21, 2021, 14 on May 15, 2022, 15 on April 12, 2021, 15 on March 18, 2022, 16 on May 27, 2021 and 17 on May 10, 2021 the latter is the highest count for the park.

## Rose-breasted Grosbeak (Pheucticus ludovicianus)

This is a vagrant there are just ten records. For the late spring passage there were singles on April 13, 2022, April 18, 2021, April 19, 2018, April 24, 2020, April 26, 2019 and May 7, 2022. For the early fall passage there were singles on September 16, 2021 and September 25, 2022. For the late fall passage there were singles on October 13, 2020 and November 3, 2020.

## Blue Grosbeak (Guiraca caerulea)

This is a rare passage migrant there are 14 records for the seven years. For the late spring passage there were singles on April 8, 2020, April 16, 2018, April 16, 2021, April 21, 2019, April 27, 2022 and May 2, 2020. For the early fall passage there were singles on July 29, 2016, August 19, 2017, September 16, 2021, September 18, 2021 and September 22, 2021. For the late fall passage there were singles on September 27, 2020 and October 24, 2022 with two on October 15, 2020 the latter is the highest count for the park.

## Indigo Bunting (Passerina cyanea)

This is another rare passage migrant there are 19 records for the seven years. For the late spring passage there were singles on April 12, 2021, April 14, 2021, April 16, 2022, April 19, 2020, April 28, 2017, May 3, 2019 and May 4, 2020 with four on April 24, 2020 the latter is the highest count for the park. For the early fall passage there was one on September 21, 2021 with two on September 14, 2022 and three on September 1, 2018. For the late fall passage there were singles on October 10, 2020, October 10, 2021, October 10, 2022, October 15, 2022, October 17, 2021, October 23, 2021, October 26, 2017, October 28, 2021 and October 28, 2022.

## Painted Bunting (Passerina ciris)

This is a vagrant for the late spring passage there were singles on April 21, 2021, April 24, 2020 and April 25, 2021. For the late fall passage there were singles on October 25, 2021 and October 26, 2017.

## Dickcissel (Spiza americana)

This is a vagrant for the early fall passage there were four on August 18, 2022, then two seen on September 7, 2021 with another two on September 14, 2021. For the late fall passage there were singles on October 1, 2020, October 12, 2022 and October 20, 2021. The count of four is the highest count for the park.

## Bobolink (Dolichonyx oryzivorus)

An uncommon spring passage migrant significant numbers were only seen in 2017, 2018 and 2022; passage in the fall was light with the exception of 2021. The spring passage ran from April 2 (2020) to May 14 (2017) with high counts of 24 on April 27, 2018, 25 on April 4, 2018, 40 on April 14, 2020, 42 on May 10, 2017, 65 on May $8,2016,78$ on April 28, 2018, 86 on April 24, 2018, 120 on May 7, 2022 and 150 on April 26, 2020 the latter is the highest count for the park. The early fall passage ran from September 1 (2017, 2020 and 2021) to September 29 (2017) with high counts of 12 on September 1, 2017, 20 on September 4, 2019, 21 on September 3, 2021, 30 on September 10, 2022, 49 on September 7, 2021, 110 on September 16, 2020 and 140 on September 9, 2021. For the late fall passage there were high counts of two on October 4, 2018, two on October 7, 2020, two on October 8, 2020, three on October 5, 2021, six on October 20, 2019 with nine on October 14, 2017.

## Red-winged Blackbird (Agelaius phoeniceus)

Surprisingly uncommon visitors to the park normally only singles were seen. The early spring passage ran from January 1 (2017) to February 28 (2016) with high counts of 20 on January 30, 2016 and 25 on February 28, 2016. The late spring passage ran from March 6 (2018) to April 27 (2016) with a high count of seven on March 7, 2019. The summer passage ran from May 1 (2022) to June 27 (2019) with a high count of ten on June 11, 2017. The early fall passage ran from July 1 (2022) to September 27 (2019) with a high count of 14 on August 9, 2018. The late fall passage ran from October 6 (2021) to November 30 (2017, 2019 and 2021) with a high count of 35 on November 18, 2017. The winter passage ran from December 1 (2019) to December 28 (2021) with a high count of 42 on December 27, 2019 this is the highest count for the park. Apart from this high count the next highest count for the winter was that of three on December 26, 2017.

## Eastern Meadowlark (Sturnella magna)

This is a vagrant for the late fall passage there was one on October 19, 2021 with two on November 3, 2022 the latter is the highest count for the park.

## Yellow-headed Blackbird (Xanthocephalus xanthocephalus)

This is a vagrant for the early spring passage there was one on January 11, 2021.

## Brewer's Blackbird (Euphagus cyanocephalus)

This is a vagrant for the early spring passage there were single adult males on January 30, 2022 and February 6, 2022. For the late fall passage there were single adult males on October 12, 2019 and October 21, 2019 presumably the same individual. In 2020 there was a female on November 17.

## Common Grackle (Quiscalus quiscula)

Present for most of the year with passage from November to January; there was a summer break as follows. In 2016 there was a break from July 23 to October 1 except for September 4. In 2017 the break ran from August 20 to August 30. In 2018 the break ran from August 31 to October 11. In 2019 the break ran from July 31 to September 5 except for August 19. In 2020 the break was from August 22 to September 21. In 2021 the break was from July 23 to September 22. In 2022 the break ran from August 20 to September 24. The early spring passage ran from January 1 (six years) to February 29 (2020) with high counts of 53 on January 15, 2017, 62 on January 31, 2018, 66 on January 22, 2017, 70 on February 9, 2018, 105 on January 6, 2017, 114 on February 8, 2017 and 245 on January 12, 2018. The late spring passage ran from February 26 (2021) to May 1 (2019), 2022) with high counts of 30 on February 28, 2018, 30 on March 6, 2018, 32 on March 7, 2022, 33 on March 1, 2019, 41 on March 13, 2019, 42 on March 25, 2020 and 49 on March 1, 2022. The summer passage ran from April 29 (2021) to July 1 (2022) with high counts of 27 on June 18, 2017 and 38 on June 13, 2017. The early fall passage ran from July 1 $(2016,2017$ and 2018) to September $27(2017,2019)$ with a high count of 20 on July 29, 2017. The late fall passage ran from October 1 (2019) to December 2 (2020) with high counts of 33 on November 27, 2017, 34 on November 30, 2019, 34 on November 16, 2022, 41 on November 13, 2022, 125 on November 8, 2018 and 325 on November 22, 2017 the latter is the highest count for the park. The winter passage ran from November 30 (2017) to December 31 (all years) with high counts of 32 on December 30, 2016, 32 on December 22, 2022, 35 on December 12, 2021, 51 on December 8, 2022, 54 on November 30, 2017 and 76 on December 6, 2017.

## Boat-tailed Grackle (Quiscalus major)

Unlike the last species these grackles are normally present all year (there was a break in 2018 from July 7 to July 25); numbers are always low. Counts were significantly lower in 2018 and 2019. The early spring passage ran from January 1 (all years) to February 29 (2020) with high counts of 40 on January 16, 2017, 40 on February 4, 2017, 42 on January 30, 2016 and 50 on February 14, 2016. The late spring passage ran from February 27 (2016) to May 1 (2020) with high counts of 13 on March 13, 2020, 18 on March 2, 2020, 26 on April 8, 2021, 32 on March 19, 2016, 34 on March 4, 2016 and 92 on March 6, 2022. The summer passage ran from May 1 (2016, 2018, 2019 and 2021) to June 30 (2017, 2019 and 2021) with high counts of 15 on June 13, 2017, 17 on June 27, 2021, 23 on June 13, 2020, 23 on June 19, 2021, 36 on June 11, 2020 and 39 on May 21, 2016. The early fall passage ran from June 28 (2020) to October 1 (five years) with high counts of 14 on July 29, 2016, 15 on July 2, 2020, 22 on July 22, 2017, 22 on August 22, 2021, 27 on July 18, 2021, 27 on August 31, 202243 on July 23, 2021, 47 on August 28, 2021, 53 on July 4, 2021 and 93 on July 9, 2021 the latter is the highest count for the park. The late fall passage ran from October $1(2022)$ to December $1(2017,2021)$ with high counts of ten on October 23, 2016, 11 on October 19, 2017, 12 on October 9, 2017, 13 on November 30, 2017, 16 on November 25, 2017, 18 on October 2, 2021, 19 on October 2, 2022, 20 on October 30, 2022, 21 on October 10, 2021, 24 on October 17, 2021, 26 on October 15, 2022, 30 on October 9, 2022, 55 on October 21, 2021 and 64 on October 31, 2021. The winter passage ran from December $1(2018,2022)$ to December 31 (2016, 2018, 2019 and 2022) with high counts of 23 on December 19, 2021, 30 on December 17, 2022, 41 on December 23, 2022, 44 on December 24, 2016, 62 on December 12, 2021 and 68 on December 26, 2021 otherwise no more than seven a day seen.

## Shiny Cowbird (Molothrus bonariensis)

A very rare passage migrant. For the early spring passage there were singles on January 6, 2020 and January 27, 2021. For the summer passage there were singles on May 17, 2021 and June 2, 2022. For the early fall passage there were singles on June 12, 2018, June 16, 2018, July 15,2022 , July 19, 2017 and July 19, 2019. For the late fall passage there was one on October 24, 2018 with four (two males and two females) on November 9, 2021 and November 16, 2021. The counts of four are the highest counts for the park.

## Bronzed Cowbird (Molothrus aeneus)

This is a vagrant for the late fall passage there was a female on November 7, 2022. For the winter passage there was a female on December 9, 2020.

## Brown-headed Cowbird (Molothrus ater)

Large flocks can be seen from November to March with declining numbers to early May. There is just the trace of a summer event followed by an early fall passage that only ran to September 9 (2018, 2019). The late fall passage starts early in late September but passage then runs as normal. The early spring passage ran from January $1(2022)$ to March $1(2018,2019)$ with high counts of 305 on February 26, 2018, 320 on January 16, 2016, 335 on February 21, 2018, 360 on January 24, 2021, 410 on January 1, 2020, 450 on January 21, 2017, 500 on January 16, 2021, 560 on February 20, 2017, 615 on January 16, 2017, 675 on February 25, 2017, 910 on January 12, 2018 and 950 on January 9, 2021 the latter is the highest count for the park. The late spring passage ran from February 27 (2022) to May 13 (2020) with high counts of 225 on March 1, 2017, 225 on March 4, 2019, 250 on March 12, 2017, 265 on March 8, 2017, 320 on March 12, 2018, 340 on March 14, 2022, 360 on March 6, 2021 and 850 on March 18, 2017. The summer passage ran from May 23 (2018) to July 12 (2019) with high counts of three on May 23, 2018, three on July 12, 2019 and five on June 22, 2022. The early fall passage ran from June 26 (2018) to September $9(2018,2019)$ with high counts of six on July 19,2017 , six on July 26,2018 , six on August 1, 2021 and ten on August 16, 2022. The late fall passage ran from September 19 (2019) to December $1(2018,2022)$ with high counts of 225 on November 26, 2019, 280 on November 27, 2018, 290 on November 13, 2018, 450 on November 26, 2022, 560 on November 27, 2020, 580 on November 29, 2022, 645 on November 20, 2019, 670 on November 15, 2022 and 850 on November 23, 2019. The winter passage ran from December 1 (2017, 2019 and 2021) to December 31 (all years) with high counts of 200 on December 2, 2017, 220 on December 23, 2017, 230 on December 2, 2018, 250 on December 31, 2020, 260 on December 31, 2019, 280 on December 16, 2022, 290 on December 19, 2019, 320 on December 7, 2016, 350 on December 31, 2022, 420 on December 9, 2019, 420 on December 16, 2021, 430 on December 28, 2021, 440 on December 2, 2022, 550 on December 3, 2019, 630 on December 10, 2022, 680 on December 23, 2022, 780 on December 4, 2022 and 840 on December 27, 2022.

## Orchard Oriole (Icterus spurius)

This is a vagrant for the late spring passage there was one on April 9, 2017. For the summer passage there was one on June 2, 2020.

## Baltimore Oriole (Icterus galbula)

A very uncommon passage migrant there are just 32 sightings for the seven years; of these nine were for the early spring passage. The early spring passage ran from January 16 (2021) to February 26 (2017) there were singles on nine dates perhaps just five birds involved. The late spring passage ran from March 1 (2017) to May 14 (2021) there were singles on six dates with two on April 10, 2016. For the early fall passage there were singles on September 7, 2019, September 13, 2022 and September 22, 2022. The late fall passage ran from September 30 (2021, 2022) to November 20 (2016) there were singles on eight dates with two on October 5, 2020. For the winter passage there was one on December 18, 2017. The counts of two are the highest counts for the park.

## Purple Finch (Carpodacus purpureus)

This is a vagrant for the winter passage there were two males on December 12, 2020 with one male on December 29, 2020. In 2021 for the early spring passage there were two (a male and a female) on January 25, 2021. The counts of two are the highest counts for the park.

## House Finch (Carpodacus mexicanus)

Highest numbers are seen from February to June there was only a trace passage in December. The early spring passage ran from January 1 (2016, 2019 and 2022) to February 28 $(2018,2020)$ with high counts of eight on February 15, 2019, nine on January 25, 2022, 20 on February 12, 2018 and 24 on February 9, 2018. The late spring passage ran from February 27 (2022) to May 2 (2020) with high counts of 14 on March 15, 2018, 18 on March 25, 2017, 21 on March 5, 2018, 21 on March 7, 2022, 24 on March 10, 2018, 34 on April 11, 2017 and 45 on March 28, 2017 the latter is the highest count for the park. The summer passage ran from May 1 (2018, 2019 and 2022) to July 2 (2022) with high counts of 14 on June 6, 2018, 17 on June 23, 2021, 21 on June 17, 2018 and 24 on June 25, 2019. The early fall passage ran from June 30 (2021) to September $26(2017,2021)$ with high counts of 12 on July $1,2017,12$ on July $12,2017,13$ on July 11, 2021, 14 on July 30, 2022, 18 on July 21, 2017, 20 on August 12, 2022 and 21 on August 16, 2022. For the other years the highest count was that of ten on August 7, 2016. The late fall passage ran from September $29(2021)$ to November $30(2019,2022)$ with high counts of eight on November 15, 2019, eight on October 23, 2022, eight on November 4, 2022, nine on October 6, 2022, nine on November 23, 2022, 15 on November 15, 2022 and 25 on October 26, 2022. The winter passage ran from November 30 (2020) to December 31 (2019, 2021 and 2022) with high counts of four on December 2, 2019, seven on November 27, 2020, seven on December 18, 2022,

12 on December 8, 2022 and 16 on December 3, 2022. There were no records for December 2016 and 2017.

## Pine Siskin (Spinus pinus)

This is a vagrant for the winter passage there was one on November 29, 2020.

## American Goldfinch (Spinus tristis)

A passage migrant that is only seen infrequently, there are sightings from October to early March. The early spring passage ran from January 1 (2019) to March 7 (2020) with high counts of 14 on January 3, 2019, 14 on February 5, 2020, 16 on January 1, 2019, 22 on January 5, 2020, 22 on February 7, 2021, 29 on February 14, 2020, 30 on January 31, 2018, 42 on January 15, 2021, 45 on February 23, 2020, 50 on March 4, 2019, 60 on February 16, 2022, 62 on January 12, 2018, 80 on February 24, 2019 and 105 on February 5, 2018 the latter is the highest count for the park. For the late spring passage there were two on April 5, 2021. The late fall passage ran from October 21 (2022) to November 28 (2019) with high counts of 12 on November 22, 2018, 15 on November 28, 2019, 20 on November 27, 2020, 30 on November 23, 2020 and 50 on November 26, 2018. For the other years no more than six a day were seen. The winter passage ran from December 2 (2017) to December 29 (2021) with high counts of eight on December 24, 2018, 15 on December 8, 2018, 15 on December 17, 2020, 16 on December 31, 2018, 22 on December 2, 2017, 35 on December 18, 2022, 40 on December 8, 2022 and 45 on December 14, 2022.

## House Sparrow (Passer domesticus)

A resident there are probably eight pairs in the immediate area the highest numbers were in the early fall with the fledged young. For the early spring the higher counts were 15 on January 1, 2019, 15 on January 1, 2021, 16 on February 26, 2016, 16 on January 10, 2022, 18 on January 15, 2022, 18 on February 3, 2022, 19 on February 1, 2018, 19 on January 1, 2022, 19 on February 10, 2022, 19 on February 22, 2022, 21 on January 19, 2021, 21 on February 17, 2022 and 26 on February 13, 2022. For the late spring the higher counts were 14 on March 20, 2016, 14 on March 13, 2021, 14 on April 1, 2022, 15 on March 31, 2021, 15 on March 8, 2022, 16 on March 2, 2021, 16 on March 19, 2022, 17 on April 15, 2022, 18 on March 14, 2022, 19 on March 2, 2016 and 25 on March 3, 2022. For the summer the higher counts were 15 on May 21, 2017, 15 on May 27, 2021, 16 on May 3, 2022, 16 on June 11, 2021, 17 on May 27, 2017, 18 on June 23, 2017, 19 on

May 17, 2022, 19 on June 5, 2021, 19 on June 20, 2021, 20 on May 19, 2017, 22 on June 11, 2020, 23 on June 25, 2021, 26 on June 4, 2022, 27 on June 23, 2022 and 28 on June 13, 2017. For the other years the high counts were of 13 . For the early fall the higher counts were 25 on July 8, 2021, 25 on July 16, 2021, 25 on July 29, 2022, 25 on September 4, 2022, 26 on September 7, 2020, 27 on August 17, 2016, 27 on July 1, 2021, 28 on August 15, 2021, 30 on July 25, 2021, 30 on July 1, 2022, 32 on July 31, 2021, 33 on August 1, 2017, 34 on August 30, 2021, 37 on August 4, 2021, 38 on September 20, 2022, 39 on September 24, 2022, 44 on August 10, 2021, 44 on August 16, 2022, 45 on September 19, 2021, 49 on July 26, 2017 and 53 on August 11, 2022 the latter is the highest count for the park. For the late fall there were 16 on November 3, 2017, 16 on November 13, 2021, 17 on October 27, 2021, 17 on November 14, 2022, 18 on November 26, 2017, 18 on November 30, 2021, 18 on October 3, 2022, 20 on October 10, 2021, 22 on November 1, 2021, 22 on October 22, 2022, 25 on October 17, 2020, 26 on October 18, 2021, 27 on October 18, 2022, 29 on November 24, 2022, 32 on October 30, 2022, 36 on October 9, 2022, 42 on November 3, 2022 and 43 on October 15, 2022. For the winter there were 14 on December 7, 2018, 14 on December 18, 2018, 14 on December 17, 2020, 16 on December 24, 2020, 16 on December 3, 2021, 16 on December 12, 2021, 17 on December 7, 2020, 18 on December 5, 2017, 18 on December 19, 2021, 19 on December 28, 2018, 19 on December 13, 2020, 20 on December 31, 2022, 21 on December 9, 2022, 21 on December 18, 2022, 22 on December 27, 2021 and 27 on December 3, 2022.

TABLE A

## SURVEY STATISTICS

The following table shows the effort that was involved in finding the various species.

|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | Totals |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | 186 | 222 | 218 | 219 | 220 | 270 | 262 | $\mathbf{3 1 3}$ |
| Species seen |  |  |  |  |  |  |  |  |
| New species | 115 | 49 | 15 | 12 | 21 | 19 | 10 |  |
|  |  |  |  |  |  |  |  |  |
| Surveys <br> conducted | 227 | 292 | 365 | 365 | 366 | 365 | 365 | $\mathbf{2 , 1 3 2}$ |
|  | 1,165 | 1,528 | 1,682 | 1,624 | 2,022 | 2,196 | 2,088 | $\mathbf{1 2 , 3 0 5}$ |
| Hour's <br> surveying |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## TABLE B

## THE HIGHEST DAILY BIRD COUNTS

The following table gives the highest daily count that occurred in 2016, 2017, 2018, 2019, 2020, 2021 or 2022 for each species. This table will be updated annually.

| Species | Highest daily count | Date of highest count |
| :--- | :---: | :---: |
|  |  |  |
| Red-throated Loon | 5 | 12.13 .17 |
| Pacific Loon | 1 | 1.29 .21 |
| Common Loon | 31 | 11.16 .22 |
| Pied-billed Grebe | 2 | 9.25 .19 |
| Horned Grebe | 12 | 11.13 .16 |
| Red-necked Grebe | 1 | 2.26 .21 |
| Eared Grebe | 4 | 12.4 .20 |
| Yellow-nosed Albatross | 1 | 5.31 .21 |
| Northern Fulmar | 4 | 10.5 .17 |
| Cory's Shearwater | 147 | 6.26 .22 |
| Scopoli's Shearwater | 5 | 10.2 .17 |
| Great Shearwater | 15 | 10.2 .17 |
| Sooty Shearwater | 16 | 10.2 .17 |
| Manx Shearwater | 2 | 10.4 .17 |
| Audubon's Shearwater | 28 | 8.2 .20 |
| Wilson's Storm-Petrel | 307 | 5.21 .21 |
| Leach's Storm-Petrel | 1 | 5.21 .21 |
| Grant's Storm-Petrel | 6 | 6.26 .22 |
| Madeiran Storm-Petrel | 1 | 5.20 .21 |
| White-tailed Tropicbird | 1 | 4.18 .19 |
| Masked Booby | 4 | 12.24 .17 |
| Brown Booby | 4,897 | 11.2 .17 |
| Northern Gannet | 120 | 12.14 .17 |
| American White Pelican | 2,536 | 1.24 .18 |
| Brown Pelican | 2,650 | 3.26 .18 |
| Double-crested Cormorant |  | 4.3 .19 |


| Great Cormorant | 1 | 12.3.17 |
| :---: | :---: | :---: |
| Anhinga | 417 | 9.1.20 |
| Magnificent Frigatebird | 5 | 9.11 .19 |
| American Bittern | 1 | 10.6.17 |
| Least Bittern | 1 | 6.15 .20 |
| Great Blue Heron | 206 | 9.18.20 |
| Great White Heron | 1 | 12.5.22 |
| Great Egret | 204 | 3.23 .19 |
| Snowy Egret | 212 | 10.17.17 |
| Western Reef Heron | 1 | 11.5.20 |
| Little Blue Heron | 120 | 9.1.21 |
| Tricolored Heron | 107 | 10.17.17 |
| Reddish Egret | 2 | 11.26 .17 |
| Cattle Egret | 210 | 9.18 .21 |
| Green Heron | 4 | 10.17.17 |
| Black-crowned Night-Heron | 5 | 4.18.21 |
| Yellow-crowned Night-Heron | 12 | 7.2.16 |
| White Ibis | 508 | 10.19.22 |
| Glossy Ibis | 63 | 10.18.20 |
| Roseate Spoonbill | 73 | 9.30 .22 |
| Wood Stork | 119 | 1.1.21 |
| Black Vulture | 425 | 10.16.20 |
| Turkey Vulture | 1,906 | 11.12.20 |
| Black-bellied Whistling-Duck | 14 | 6.12 .21 |
| Fulvous Whistling-Duck | 2 | 8.23 .19 |
| Greater White-fronted Goose | 4 | 10.28.18 |
| Snow Goose | 4 | 12.2.20 |
| Canada Goose | 4 | 3.31 .21 |
| Brant | 1 | 11.6.16 |
| Tundra Swan | 1 | 1.13.18 |
| Muscovy Duck | 4 | 6.18 .21 |
| Egyptian Goose | 4 | 4.25 .17 |
| Wood Duck | 2 | 3.12.19 |
| Gadwall | 30 | 11.8.22 |
| American Wigeon | 42 | 11.11.18 |
| American Black Duck | 1 | 11.2.21 |
| Mallard | 3 | 11.12.16 |
| Mottled Duck | 3 | 12.2.20 |
| Blue-winged Teal | 2,015 | 9.29 .20 |
| Northern Shoveler | 35 | 11.21 .22 |
| Northern Pintail | 225 | 11.12.16 |
| Green-winged Teal | 850 | 11.11.17 |


| Canvasback | 65 | 12.8.20 |
| :---: | :---: | :---: |
| Redhead | 735 | 12.23.17 |
| Ring-necked Duck | 345 | 11.8.22 |
| Greater Scaup | 15,800 | 12.23 .21 |
| Lesser Scaup | 10,770 | 11.22 .16 |
| Common Eider | 2 | 11.12.18 |
| Harlequin Duck | 1 | 11.6.18 |
| Surf Scoter | 36 | 11.4.22 |
| White-winged Scoter | 9 | 12.3.20 |
| Black Scoter | 8,490 | 12.4.18 |
| Long-tailed Duck | 2 | 12.31.17 |
| Bufflehead | 24 | 12.3.20 |
| Common Goldeneye | 2 | 11.27 .18 |
| Hooded Merganser | 36 | 11.29 .19 |
| Common Merganser | 1 | 11.20 .17 |
| Red-breasted Merganser | 449 | 11.20 .17 |
| Ruddy Duck | 15 | 11.23.21 |
| Osprey | 58 | 3.12.22 |
| Swallow-tailed Kite | 27 | 7.5.20 |
| Snail Kite | 1 | 8.1.21 |
| Mississippi Kite | 2 | 7.2.19 |
| Bald Eagle | 9 | 11.3.20 |
| Northern Harrier | 9 | 11.14 .22 |
| Sharp-shinned Hawk | 6 | 10.17 .22 |
| Cooper's Hawk | 4 | 7.21.18 |
| Red-shouldered Hawk | 5 | 9.22 .22 |
| Broad-winged Hawk | 2 | 10.20.19 |
| Short-tailed Hawk | 2 | 7.29 .17 |
| Swainson's Hawk | 1 | 11.14.17 |
| Red-tailed Hawk | 5 | 10.23.20 |
| Golden Eagle | 1 | 10.30.17 |
| Crested Caracara | 1 | 8.19.20 |
| American Kestrel | 8 | 4.8.20 |
| Merlin | 15 | 9.19 .22 |
| Peregrine Falcon | 221 | 10.4.17 |
| American Coot | 2 | 11.9.18 |
| Sandhill Crane | 4 | 12.23 .18 |
| Black-bellied Plover | 35 | 10.18.20 |
| American Golden-Plover | 3 | 8.12.18 |
| Wilson's Plover | 2 | 8.26.19 |
| Semipalmated Plover | 74 | 5.13 .22 |
| Piping Plover | 2 | 8.7.22 |


| Killdeer | 8 | 11.20.16 |
| :---: | :---: | :---: |
| American Oystercatcher | 8 | 10.3.20 |
| Black-necked Stilt | 110 | 8.24 .22 |
| American Avocet | 14 | 8.19 .18 |
| Greater Yellowlegs | 30 | 8.3.18 |
| Lesser Yellowlegs | 35 | 8.5.22 |
| Solitary Sandpiper | 1 | 4.24 .16 |
| Willet | 495 | 10.19.21 |
| Spotted Sandpiper | 8 | 4.27 .20 |
| Upland Sandpiper | 1 | 7.22.22 |
| Whimbrel | 17 | 4.29 .18 |
| Long-billed Curlew | 1 | 4.15.16 |
| Hudsonian Godwit | 1 | 10.9.19 |
| Marbled Godwit | 10 | 9.16 .18 |
| Ruddy Turnstone | 83 | 9.4 .16 |
| Red Knot | 420 | 2.14 .16 |
| Sanderling | 460 | 8.3.18 |
| Semipalmated Sandpiper | 535 | 5.13 .22 |
| Western Sandpiper | 205 | 9.29.20 |
| Least Sandpiper | 345 | 7.30.18 |
| White-rumped Sandpiper | 7 | 5.10 .22 |
| Pectoral Sandpiper | 71 | 9.1.16 |
| Purple Sandpiper | 3 | 4.8.17 |
| Dunlin | 360 | 10.27.19 |
| Stilt Sandpiper | 10 | 9.6.20 |
| Buff-breasted Sandpiper | 1 | 9.25 .21 |
| Ruff | 1 | 9.25.20 |
| Short-billed Dowitcher | 88 | 8.15 .19 |
| Long-billed Dowitcher | 53 | 11.12.22 |
| Wilson's Snipe | 3 | 3.14 .18 |
| Wilson's Phalarope | 1 | 8.26 .17 |
| Red-necked Phalarope | 105 | 10.6.19 |
| Red Phalarope | 30 | 10.6.19 |
| South Polar Skua | 1 | 12.21 .17 |
| Pomarine Jaeger | 431 | 11.18.20 |
| Parasitic Jaeger | 85 | 10.3.17 |
| Long-tailed Jaeger | 3 | 9.10 .17 |
| Laughing Gull | 47,300 | 12.16.18 |
| Franklin's Gull | 2 | 12.21.19 |
| Little Gull | 1 | 12.13.22 |
| Black-headed Gull | 1 | 12.15.17 |
| Bonaparte's Gull | 100 | 12.30.20 |


| Ring-billed Gull | 870 | 1.4.16 |
| :---: | :---: | :---: |
| Herring Gull | 4,140 | 12.26 .17 |
| Iceland Gull | 2 | 11.9.22 |
| Lesser Black-backed Gull | 63 | 12.13.19 |
| Glaucous Gull | 3 | 1.21.17 |
| Great Black-backed Gull | 31 | 11.23 .18 |
| Black-legged Kittiwake | 5 | 12.13.22 |
| Sabine's Gull | 2 | 10.3.17 |
| Gull-billed Tern | 6 | 8.27.17 |
| Caspian Tern | 164 | 10.26.19 |
| Royal Tern | 2,284 | 3.3.17 |
| Sandwich Tern | 490 | 9.23 .17 |
| Roseate Tern | 6 | 5.20 .21 |
| Common Tern | 2,420 | 10.14.20 |
| Arctic Tern | 15 | 5.20 .21 |
| Forster's Tern | 1,485 | 1.17.18 |
| Least Tern | 153 | 4.17 .16 |
| Bridled Tern | 13 | 8.3.20 |
| Sooty Tern | 31 | 9.11 .17 |
| Black Tern | 2,600 | 8.27 .22 |
| Brown Noddy | 7 | 10.4.17 |
| Black Skimmer | 1,150 | 12.24.22 |
| Dovekie | 1 | 12.12.19 |
| Thick-billed Murre | 1 | 1.14.19 |
| Razorbill | 2 | 12.2.22 |
| Black Guillemot | 1 | 1.23.16 |
| Rock Pigeon | 120 | 11.16.22 |
| Eurasian Collared-Dove | 23 | 9.3.19 |
| White-winged Dove | 5 | 11.5 .18 |
| Mourning Dove | 84 | 9.3.19 |
| Common Ground-Dove | 11 | 9.18 .22 |
| Budgerigar | 1 | 7.31 .21 |
| Nanday Parakeet | 11 | 3.4.17 |
| Cockatiel | 1 | 4.8.18 |
| Yellow-billed Cuckoo | 2 | 4.22.19 |
| Eastern Screech-Owl | 1 | 4.8.18 |
| Great Horned Owl | 2 | 12.15 .20 |
| Barred Owl | 1 | 12.27 .19 |
| Common Nighthawk | 22 | 9.3.18 |
| Chuck-will's-widow | 3 | 3.28 .22 |
| Eastern Whip-poor-will | 1 | 12.15.17 |
| Chimney Swift | 51 | 4.22.21 |


| Ruby-throated Hummingbird | 2 | 6.25 .19 |
| :---: | :---: | :---: |
| Black-chinned Hummingbird | 1 | 11.10.20 |
| Belted Kingfisher | 3 | 8.27.17 |
| Red-headed Woodpecker | 1 | 4.15 .18 |
| Red-bellied Woodpecker | 9 | 10.17.22 |
| Yellow-bellied Sapsucker | 3 | 11.3.21 |
| Downy Woodpecker | 4 | 7.5.21 |
| Hairy Woodpecker | 1 | 6.16 .21 |
| Northern Flicker | 1 | 11.16.17 |
| Pileated Woodpecker | 4 | 8.19.20 |
| Olive-sided Flycatcher | 1 | 9.8.22 |
| Eastern Wood-Pewee | 1 | 9.19.21 |
| Acadian Flycatcher | 1 | 9.9.22 |
| Eastern Phoebe | 7 | 11.3.21 |
| Vermillion Flycatcher | 1 | 2.2.22 |
| Great Crested Flycatcher | 3 | 7.4.17 |
| Eastern Kingbird | 273 | 9.4.19 |
| Gray Kingbird | 2 | 9.6.20 |
| Loggerhead Shrike | 3 | 8.20 .16 |
| White-eyed Vireo | 1 | 9.29 .21 |
| Yellow-throated Vireo | 1 | 9.7.22 |
| Blue-headed Vireo | 1 | 2.12.21 |
| Red-eyed Vireo | 7 | 9.20 .22 |
| Blue Jay | 14 | 10.14 .22 |
| Florida Scrub-Jay | 1 | 6.14 .18 |
| American Crow | 8 | 9.10 .21 |
| Fish Crow | 1,607 | 3.25.18 |
| Purple Martin | 145 | 4.25 .17 |
| Tree Swallow | 10,950 | 2.25.17 |
| Northern Rough-winged Swallow | 11 | 8.13.22 |
| Bank Swallow | 52 | 5.7.17 |
| Cliff Swallow | 1,168 | 8.13.22 |
| Cave Swallow | 4 | 11.9.21 |
| Barn Swallow | 10,170 | 4.25 .17 |
| Carolina Chickadee | 2 | 7.16 .22 |
| Tufted Titmouse | 1 | 5.8.16 |
| Carolina Wren | 8 | 2.12.21 |
| House Wren | 3 | 11.29.19 |
| Sedge Wren | 1 | 10.22.16 |
| Marsh Wren | 1 | 12.6.18 |
| Ruby-crowned Kinglet | 2 | 10.25.17 |
| Blue-gray Gnatcatcher | 5 | 10.24.21 |


| Eastern Bluebird | 3 | 2.6.21 |
| :---: | :---: | :---: |
| Veery | 7 | 10.9.22 |
| Gray-cheeked Thrush | 51 | 10.15 .22 |
| Bicknell's Thrush | 1 | 10.27 .20 |
| Swainson's Thrush | 49 | 10.15.22 |
| Hermit Thrush | 11 | 11.5.21 |
| Wood Thrush | 2 | 10.9.22 |
| American Robin | 23,270 | 1.26 .21 |
| Gray Catbird | 4 | 2.11.21 |
| Northern Mockingbird | 23 | 7.10.21 |
| Brown Thrasher | 4 | 6.16 .17 |
| European Starling | 1,450 | 12.19.21 |
| Common Myna | 1 | 6.16 .17 |
| American Pipit | 6 | 1.12.18 |
| Cedar Waxwing | 1,840 | 3.14 .22 |
| Tennessee Warbler | 1 | 5.5.17 |
| Orange-crowned Warbler | 1 | 10.26 .20 |
| Nashville Warbler | 1 | 5.6.20 |
| Northern Parula | 2 | 10.4.20 |
| Yellow Warbler | 2 | 6.9.21 |
| Magnolia Warbler | 1 | 10.12.18 |
| Cape May Warbler | 4 | 5.5.21 |
| Black-throated Blue Warbler | 2 | 5.6.20 |
| Yellow-rumped Warbler | 1,140 | 11.8.17 |
| Black-throated Green Warbler | 1 | 10.24.19 |
| Blackburnian Warbler | 1 | 10.28 .21 |
| Yellow-throated Warbler | 2 | 9.4.16 |
| Pine Warbler | 1 | 9.30 .17 |
| Prairie Warbler | 3 | 7.21 .22 |
| Palm Warbler | 33 | 9.30 .22 |
| Blackpoll Warbler | 8 | 4.30 .21 |
| Cerulean Warbler | 1 | 9.20 .22 |
| Black-and-white Warbler | 1 | 8.29 .17 |
| American Redstart | 9 | 4.30 .21 |
| Prothonotary Warbler | 1 | 4.12.20 |
| Worm-eating Warbler | 1 | 4.30 .21 |
| Ovenbird | 1 | 4.26.19 |
| Northern Waterthrush | 1 | 4.15.16 |
| Louisiana Waterthrush | 1 | 8.5.16 |
| Kentucky Warbler | 1 | 10.17.21 |
| Connecticut Warbler | 1 | 5.6.19 |
| Common Yellowthroat | 7 | 5.13.17 |


| Hooded Warbler | 1 | 9.3.16 |
| :---: | :---: | :---: |
| Wilson's Warbler | 1 | 10.7.20 |
| Canada Warbler | 1 | 9.22 .21 |
| Summer Tanager | 2 | 4.23 .21 |
| Scarlet Tanager | 2 | 9.17.22 |
| Eastern Towhee | 1 | 3.30.16 |
| Chipping Sparrow | 1 | 12.13.16 |
| Clay-colored Sparrow | 1 | 11.25 .20 |
| Vesper Sparrow | 1 | 12.17.20 |
| Savannah Sparrow | 2 | 1.26 .20 |
| Grasshopper Sparrow | 1 | 12.1.22 |
| Song Sparrow | 1 | 2.13.19 |
| Swamp Sparrow | 1 | 4.10 .20 |
| White-crowned Sparrow | 1 | 11.26 .16 |
| Snow Bunting | 1 | 11.14.17 |
| Northern Cardinal | 17 | 5.10 .21 |
| Rose-breasted Grosbeak | 1 | 4.9.18 |
| Blue Grosbeak | 2 | 10.15.20 |
| Indigo Bunting | 4 | 4.24.20 |
| Painted Bunting | 1 | 10.26.17 |
| Dickcissel | 4 | 8.18.22 |
| Bobolink | 150 | 4.26 .20 |
| Red-winged Blackbird | 42 | 12.27 .19 |
| Eastern Meadowlark | 2 | 11.3.22 |
| Yellow-headed Blackbird | 1 | 1.11.21 |
| Brewer's Blackbird | 1 | 10.12.19 |
| Common Grackle | 325 | 11.22.17 |
| Boat-tailed Grackle | 93 | 7.9.21 |
| Shiny Cowbird | 4 | 11.9.21 |
| Bronzed Cowbird | 1 | 12.9.20 |
| Brown-headed Cowbird | 950 | 1.9.21 |
| Orchard Oriole | 1 | 4.9.17 |
| Baltimore Oriole | 2 | 4.10.16 |
| Purple Finch | 2 | 12.12.20 |
| House Finch | 45 | 3.28.17 |
| Pine Siskin | 1 | 11.29 .20 |
| American Goldfinch | 105 | 2.5.18 |
| House Sparrow | 53 | 8.11.22 |
|  |  |  |
| Highest daily bird count Highest daily species count | 48,888 | 12.16.18 |
|  | 72 | 4.21 .21 |

## TABLE C

## HISTORICAL BIRD COUNTS AT THE PARK

This table covers the Christmas Birds Counts that I did at the park from 2011 to 2015 together with an exploratory visit on May 6, 2015. The highest counts are not included in Table B.

| Species | 12.26.11 | 12.22.12 | 12.28.13 | 12.27.14 | 5.6.15 | 12.24.15 | 12.26.15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common Loon | 6 | 3 |  | 2 |  | 1 | 3 |
| Horned Grebe | 1 | 2 |  |  |  |  |  |
| Sooty Shearwater |  | 1 |  |  |  |  |  |
| Northern Gannet | 615 | 217 | 476 | 1,017 | 18 | 541 | 2,590 |
| Brown Pelican | 520 | 485 | 263 | 570 | 194 | 273 | 219 |
| Double-crested Cormorant | 42 | 30 | 59 | 16 | 1 | 16 | 12 |
| Magnificent Frigatebird |  |  | 1 |  |  |  |  |
| Great Egret |  |  |  |  |  |  | 1 |
| Snowy Egret |  | 1 |  | 3 | 1 | 1 |  |
| Tricolored Heron |  |  |  |  | 1 |  |  |
| Cattle Egret |  |  | 1 |  | 1 |  |  |
| Yellow-crowned N-Heron |  |  |  |  | 1 |  |  |
| Roseate Spoonbill |  |  |  | 1 |  |  |  |
| Turkey Vulture |  | 1 | 1 | 1 |  |  | 3 |
| American Wigeon | 2 | 1 |  |  |  |  | 18 |
| Northern Shoveler |  | 19 |  |  | 6 |  |  |
| Green-winged Teal |  | 1 |  |  |  |  |  |
| Redhead |  |  |  |  |  |  | 2 |
| Greater Scaup |  | 8 |  |  |  | 17 | 18 |
| Lesser Scaup | 81 |  | 36 | 8 |  | 100 | 353 |
| Surf Scoter | 1 |  | 1 |  |  | 2 |  |
| White-winged Scoter |  |  | 2 |  |  |  | 1 |
| Black Scoter | 1 | 42 | 1,363 | 216 |  | 294 | 1,520 |
| Long-tailed Duck |  |  | 1 |  |  |  |  |
| Red-breasted Merganser | 35 | 3 | 37 | 10 | 1 | 4 | 15 |
| Osprey |  |  | 1 | 2 | 1 | 1 | 2 |


| Species | 12.26.11 | 12.22.12 | 12.28.13 | 12.27.14 | 5.6.15 | 12.24.15 | 12.26.15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American Kestrel |  |  |  |  |  |  | 1 |
| Black-bellied Plover | 4 | 3 | 3 | 1 | 1 | 4 | 1 |
| Semipalmated Plover |  |  |  |  | 12 |  |  |
| Killdeer |  | 1 |  |  |  |  |  |
| Greater Yellowlegs |  |  |  |  | 1 |  |  |
| Willet | 11 | 9 | 11 | 8 | 3 | 4 | 8 |
| Ruddy Turnstone | 19 | 3 | 8 | 37 | 4 | 7 | 9 |
| Red Knot |  | 5 | 12 | 58 |  | 38 | 73 |
| Sanderling | 36 | 38 | 9 | 9 | 28 | 10 | 13 |
| Semipalmated Sandpiper |  |  |  |  | 40 |  |  |
| Least Sandpiper |  |  |  |  | 160 |  |  |
| White-rumped Sandpiper |  |  |  |  | 5 |  |  |
| Pectoral Sandpiper |  |  |  |  | 15 |  |  |
| Dunlin |  |  |  |  | 5 |  |  |
| Pomarine Jaeger | 4 | 7 | 1 |  |  | 5 | 4 |
| Parasitic Jaeger | 7 | 34 | 26 | 2 | 1 | 16 | 2 |
| Laughing Gull | 900 | 344 | 895 | 400 | 27 | 670 | 1,100 |
| Bonaparte's Gull | 4 | 49 | 4 |  |  | 46 | 1 |
| Ring-billed Gull | 135 | 40 | 780 | 147 | 1 | 350 | 295 |
| Herring Gull | 185 | 8 | 210 | 855 | 5 | 26 | 12 |
| Lesser Black-backed Gull | 3 | 2 | 1 |  |  |  |  |
| Glaucous Gull | 1 |  |  | 2 |  |  |  |
| Great Black-backed Gull | 8 | 4 | 7 | 11 |  | 2 | 2 |
| Gull-billed Tern |  |  |  |  | 2 |  |  |
| Caspian Tern | 1 | 5 | 1 | 1 |  |  |  |
| Royal Tern | 241 | 412 | 140 | 120 | 26 | 53 | 12 |
| Sandwich Tern | 8 | 356 | 6 | 3 |  | 3 | 19 |
| Roseate Tern |  |  |  |  | 2 |  |  |
| Common Tern |  |  |  |  | 1 |  |  |
| Forster's Tern | 38 | 62 | 32 | 12 |  | 53 | 12 |
| Least Tern |  |  |  |  | 1 |  |  |
| Black Skimmer | 7 | 7 | 56 | 3 |  | 15 | 100 |
| Razorbill |  | 1 |  |  |  |  |  |
| Rock Pigeon | 11 | 9 | 2 |  |  |  | 4 |
| Eurasian Collared-Dove | 2 |  | 2 | 6 |  |  | 3 |
| Mourning Dove | 4 | 1 | 7 | 5 |  |  | 8 |
| Red-bellied Woodpecker |  |  |  |  |  |  | 1 |


| Species | $\mathbf{1 2 . 2 6 . 1 1}$ | $\mathbf{1 2 . 2 2 . 1 2}$ | $\mathbf{1 2 . 2 8 . 1 3}$ | $\mathbf{1 2 . 2 7 . 1 4}$ | $\mathbf{5 . 6 . 1 5}$ | $\mathbf{1 2 . 2 4 . 1 5}$ | $\mathbf{1 2 . 2 6 . 1 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fish Crow |  |  |  |  |  |  | 2 |
| Tree Swallow |  |  |  |  |  | 8 |  |
| House Wren |  |  | 1 |  |  |  |  |
| Northern Mockingbird |  |  |  |  |  |  | 2 |
| European Starling | 220 |  | 350 | 111 |  | 1 | 26 |
| Palm Warbler | 1 | 1 | 1 | 2 |  |  |  |
| Northern Cardinal |  |  |  |  |  |  | 1 |
| Common Grackle |  |  |  |  |  |  | 25 |
| Boat-tailed Grackle | 2 | 1 | 2 | 6 |  |  | 3 |
| House Sparrow |  |  |  |  |  |  | 5 |

## AN ADDENDUM:

## BIRD ABUNDANCE AT TOM RENICK COUNTY PARK

By SAM KRAH

This table was created to show how frequently a particular species was recorded in each month between 2016 and 2022. The frequency of occurrence is divided into the seven different categories which are described below.

| - | Species was not observed during this period |
| :---: | :--- |
| $\mathbf{V R}$ | A single record |
| $\mathbf{R}$ | Species was observed between 2-5 days |
| $\mathbf{U}$ | Species was observed between 6-15 days |
| $\mathbf{C}$ | Species was observed between 16-25 days |
| $\mathbf{V C}$ | Species was observed more than 25 days |
| $\mathbf{A}$ | Multiple counts of 1000+ individuals |

Each species has been assigned to its given category based upon the average number of monthly sightings over the five-year period. Example: if a species is recorded 80 times within the five included months, it would be considered Common. The Abundant category was created to identify the species which can occur in numbers greater than 1,000 individuals. In general, it can be assumed that each of any species assigned to the Abundant category also falls into the Common or greater category. With the exception of the abundant category, this table does not indicate the number of individuals passing through. For this information see the detailed account for each species.

| Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Red-throated Loon | R | R | R | VR | VR | - | - | - | - | - | $R$ | $R$ |
| Pacific Loon | VR | VR | - | - | - | - | - | - | - | - | - | - |
| Common Loon | C | U | U | U | VR | - | - | - | - | R | C | C |
| Pied-billed Grebe | - | - | - | - | - | - | - | - | VR | R | VR | - |
| Horned Grebe | R | VR | VR | - | - | - | - | - | - | - | $R$ | $R$ |
| Red-necked Grebe | - | VR | - | - | - | - | - | - | - | - | - | VR |
| Eared Grebe | - | VR | - | - | - | - | - | - | - | - | VR | VR- |
| Yellow-nosed Albatross | - | - | - | - | VR | - | - | - | - | - | - | - |
| Northern Fulmar | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Cory's Shearwater | - | - | - | - | - | R | R | - | VR | U | R | VR |
| Scolopi's Shearwater | - | - | - | - | - | VR | R | - | VR | R | VR | VR |
| Great Shearwater | - | VR | VR | VR | VR | R | R | VR | R | R | VR | VR |
| Sooty Shearwater | - | - | - | - | VR | VR | - | - | VR | VR | - | VR |
| Manx Shearwater | - | - | VR | - | - | - | - | - | VR | R | VR | VR |
| Audubon's Shearwater | - | - | - | VR | VR | - | VR | VR | VR | - | - | - |
| Wilson's Storm-Petrel | - | - | - | VR | VR | VR | VR | - | VR | - | - | - |
| Leach's Storm-Petrel | - | - | - | VR | VR | VR | - | - | - | VR | VR | - |
| Band-rumped Storm-Petrel | - | - | - | VR | VR | VR | - | - | - | VR | VR | - |
| White-tailed Tropicbird | - | - | - | VR | - | VR | - | - | - | - | - | - |


| Masked Booby | VR | - | - | - | VR | VR | - | VR | - | - | - | VR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brown Booby | - | VR | R | R | R | R | VR | VR | VR | R | R | VR |
| Northern Gannet | VC | VC | VC | C | U | VR | VR | - | - | R | VC | VC |
| Am. White Pelican | U | R | R | R | - | VR | - | - | - | VR | R | R |
| Brown Pelican | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC |
| Double-crested Cormorant | VC | VC | VC | VC | C | U | R | R | R | U | C | VC |
| Great Cormorant | VR | VR | - | - | - | - | - | - | - | - | - | VR |
| Anhinga | U | U | U | U | U | U | U | U | U | U | U | R |
| Magnificent Frigatebird | VR | - | - | VR | R | R | VR | VR | R | R | R | R |
| American Bittern | - | - | VR | - | - | - | - | - | VR | VR | - | - |
| Least Bittern | - | - | - | - | - | VR | - | - | VR | - | - | - |
| Great Blue Heron | R | U | C | C | C | C | C | C | U | C | C | R |
| Great White Heron |  |  |  |  |  |  |  |  |  |  |  | VR |
| Great Egret | U | U | C | C | C | C | U | U | U | U | U | R |
| Snowy Egret | C | C | VC | VC | VC | C | C | C | C | C | C | U |
| Western Reef Heron | - | - | - | - | - | - | - | - | - | - | VR | - |
| Little Blue Heron | VR | R | U | U | U | U | U | U | U | R | R | R |
| Tricolored Heron | VR | R | U | U | U | U | U | U | U | U | VR | VR |
| Reddish Egret | Var | VR | VR | VR | VR | R | VR | VR | VR | VR | VR | VR |
| Cattle Egret | U | U | U | C | U | U | U | R | U | U | U | U |
| Green Heron | VR | VR | VR | R | VR | R | VR | VR | U | VR | VR | -VR |
| Black-crowned N-Heron | VR | VR | VR | VR | VR | VR | VR | VR | VR | VR | VR | VR |
| Yellow-crowned NHeron | - | - | VR | U | C | C | C | U | R | VR | - | - |
| White Ibis | U | U | C | C | C | C | C | U | C | C | C | C |
| Glossy lbis | VR | R | R | U | R | U | R | R | R | VR | R | R |
| Roseate Spoonbill | R | R | R | R | U | U | R | R | R | R | R | R |
| Wood Stork | U | U | R | R | R | U | U | R | R | R | R | U |
| Black Vulture | C | C | VC | C | C | C | C | C | C | C | C | C |
| Turkey Vulture | VC | C | VC | C | C | C | C | C | C | C | C | C |
| Black-bellied WhistlingDuck | - | - | - | - | - | VR | VR | - | - | - | - | - |
| Fulvous Whistling-Duck | - | - | - | - | - | - | VR | VR | - | - | - | - |
| Greater White-fronted Goose | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Snow Goose | - | VR | - | - | - | - | - | - | - | VR | VR | VR |
| Canada Goose | - | - | VR | VR | - | - | - | -VR | - | - | VR | VR |
| Brant | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Egyptian Goose | - | - | - | VR | VR | - | - | - | - | - | - | - |
| Tundra Swan | VR | - | - | - | - | - | - | - | - | - | - | - |
| Muscovy Duck | VR | - | - | - | - | VR | - | VR | VR | VR | - | VR |
| Wood Duck | - | - | VR | - | - | VR | - | - | - | - | VR | VR |
| Gadwall | - | - | VR | VR | - | - | - | - | - | VR | R | VR |
| American Wigeon | VR | VR | R | VR | VR | - | - | - | - | VR | U | U |
| American Black Duck | - | - | - | - | - | - | - | - | - | - | VR | - |


| Mallard | VR | VR | VR | - | - | - | VR | - | VR | VR | VR | VR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mottled Duck | VR | - | VR | VR | - | - | - | VR | VR | - | VR | VR |
| Blue-winged Teal | VR | VR | R | U | VR | - | VR | U | A | U | U | VR |
| Northern Shoveler | - | - | R | R | VR | - | - | VR | R | R | R | VR |
| Northern Pintail | VR | - | VR | VR | - | - | - | - | VR | VR | R | R |
| Green-winged Teal | VR | VR | R | R | VR | - | - | VR | R | U | U | U |
| Canvasback | VR | VR | - | - | - | - | - | - | - | - | R | R |
| Redhead | R | VR | VR | - | - | - | - | - | - |  | R | R |
| Ring-necked Duck | VR | VR | VR | VR | - | - | - | - | - | R | U | R |
| Greater Scaup | U | R | R | - | VR | - | - | - | - | VR | U | U |
| Lesser Scaup | U | U | U | R | - | - | - | - | - | U | A | A |
| Common Eider | VR | VR |  | - | - | - | - | - | - |  | VR | VR |
| Harlequin Duck | - | - | - | - | - | - | - | - | - | - | VR | VR |
| Surf Scoter | R | R | VR | VR | VR | - | VR | - | - | VR | U | U |
| White-winged Scoter | VR | VR | VR | VR | - | VR | - | - | - | VR | R | R |
| Black Scoter | C | U | U | R | VR | VR | VR | - | - | R | C | A |
| Long-tailed Duck | VR | VR | - | - | - | - | - | - | - | - | VR | VR |
| Bufflehead | VR | VR | - | - | - | - | - | - | - | - | VR | VR |
| Common Goldeneye | R | VR | VR | - | - | - | - | - | - | - | R | U |
| Hooded Merganser | VR | VR | R | VR | VR | - | - | - | - | R | VR | VR |
| Common Merganser | - | - | - | - | - | - | - | - | - | - | VR | VR |
| Red-breasted Merganser | U | U | U | U | R | - | - | - | - | VR | C | VC |
| Ruddy Duck | - | VR | - | - | - | - | - | - | - | - | R | VR |
| Osprey | C | C | VC | VC | VC | VC | VC | C | VC | VC | VC | VC |
| Swallow-tailed Kite | - | VR | R | U | U | U | C | R | - | - | - | - |
| Snail Kite | - | - | - | - | - | - | - | VR | - | - | - | - |
| Mississippi Kite | - | - | - | VR | VR | R | VR | VR | - | - | - | - |
| Bald Eagle | C | U | C | U | R | R | R | R | U | U | U | U |
| Northern Harrier | VR | R | R | R | VR | - | - | - | VR | R | R | VR |
| Sharp-shinned Hawk | R | R | R | R | VR | - | - | - | VR | R | R | VR |
| Cooper's Hawk | R | U | R | R | U | U | U | R | R | R | R | R |
| Red-shouldered Hawk | R | U | U | U | R | R | R | R | R | R | U | R |
| Broad-winged Hawk | - | - | - | - | - | - | - | - | VR | VR | VR | VR |
| Short-tailed Hawk | - | VR | VR | R | R | VR | VR | VR | VR | VR | VR | - |
| Swainson's Hawk | - | - | - | - | - | - | - | - | - | VR | VR | VR |
| Red-tailed Hawk | R | U | R | R | R | VR | VR | VR | VR | R | R | R |
| Golden Eagle | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Crested Caracara | - | - | - | - | - | - | - | VR | - | - | - | - |
| American Kestrel | C | C | U | R | VR | - | - | VR | VR | U | U | U |
| Merlin | R | VR | U | U | R | - | - | VR | R | U | R | R |
| Peregrine Falcon | R | R | R | R | VR | - | - | - | R | U | R | VR |
| American Coot | - | - |  | - | - | - | - | - | - | - | R | - |
| Sandhill Crane | VR | VR | VR | VR | VR | - | VR | - | - | VR | - | VR |
| Black-bellied Plover | C | U | C | VC | VC | R | R | U | C | C | VC | VC |
| American Golden-Plover | - | VR | VR | VR | VR | - | - | VR | VR | VR | VR | - |
| Wilson's Plover | VR | - | VR | VR | VR | - | VR | V | - | VR | - | VR |


| Semipalmated Plover | VR | VR | VR | R | U | VR | VR | R | R | VR | VR | VR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Piping Plover | - | - | VR | VR | VR | - | VR | VR | - | - | VR | - |
| Killdeer | R | R | R | U | R | R | R | R | R | R | U | U |
| American Oystercatcher | - | VR | VR | VR | VR | VR | VR | VR | VR | R | VR | VR |
| Black-necked Stilt | - | - | VR | VR | VR | U | U | U | - | VR | - | - |
| American Avocet | - | - | VR | - | - |  | VR | R | VR | VR | VR | - |
| Greater Yellowlegs | - | VR | VR | VR | VR | VR | R | R | R | VR | - | - |
| Lesser Yellowlegs | VR | VR | VR | R | VR | - | R | R | R | - | - | - |
| Solitary Sandpiper | - | - | VR | VR | VR | - | - | R | VR | - | VR | - |
| Willet | VC | C | VC | VC | C | U | C | C | C | VC | VC | VC |
| Spotted Sandpiper | - | - | - | U | U | - | R | R | VR | VR | - | - |
| Upland Sandpiper |  |  |  |  |  |  | VR |  |  |  |  |  |
| Whimbrel | - | VR | VR | U | R | VR | R | R | VR | - | - | - |
| Long-billed Curlew | - | - | - | VR | - | - | - | - | - | - | VR | - |
| Hudsonian Godwit | VR | - | - | - | - | - | - | - | - | VR | - | - |
| Marbled Godwit | - | - | VR | VR | - | - | VR | R | U | R | VR | - |
| Ruddy Turnstone | C | C | VC | C | C | U | U | C | C | C | C | C |
| Red Knot | U | U | U | R | R | - | VR | R | R | U | C | C |
| Sanderling | VC | C | VC | VC | VC | R | U | C | VC | VC | VC | VC |
| Semipalmated Sandpiper | - | - | - | R | U | VR | U | U | R | - | - | - |
| Western Sandpiper | VR | VR | VR | VR | VR | - | VR | R | R | R | R | R |
| Least Sandpiper | - | - | VR | R | U | VR | U | U | R | VR | VR | - |
| White-rumped Sandpiper | - | - | - | VR | R | - | - | VR | - | - | - | - |
| Pectoral Sandpiper | - | - | VR | VR | R | VR | VR | R | R | - | - | - |
| Purple Sandpiper | - | VR | VR | VR | - | - | - | - | - | - | VR | VR |
| Dunlin | VR | VR | VR | VR | VR | - | - | - | VR | VR | R | VR |
| Stilt Sandpiper | VR | - | - | VR | VR | - | VR | R | VR | - | - | - |
| Buff-breasted Sandpiper | - | - | - | - | - | - | - | VR | - | - | - | - |
| Ruff | - | - | - | - | - | - | - | - | VR | - | - | - |
| Short-billed Dowitcher | - | - | VR | R | VR | - | VR | R | R | - | VR | - |
| Long-billed Dowitcher | - | - | VR | VR | VR | - | VR | VR | VR | VR | VR | - |
| Wilson's Snipe | VR | - | VR | VR | - | - | - | - | - | VR | VR | - |
| Wilson's Phalarope | - | - | - | - | - | - | - | VR | VR | - | - | - |
| Red-necked Phalarope | - | - | - | VR | R | - | - | - | R | R | VR | - |
| Red Phalarope | - | - | - | VR | - | - | - | - | VR | VR | VR | - |
| South Polar Skua | - | - | - | - | - | - | - | - | - | - | - | VR |
| Pomarine Jaeger | C | U | R | - | - | - | - | - | VR | R | U | C |
| Parasitic Jaeger | C | U | U | VR | VR | VR | VR | R | U | U | U | C |
| Long-tailed Jaeger | - | VR | - | - | - | - | - | - | VR | VR | VR | VR |
| Laughing Gull | A | A | A | C | VC | C | C | C | VC | A | A | A |
| Franklin's Gull | VR | - | - | - | - | - | - | - | - | - | VR | VR |
| Little Gull |  |  |  |  |  |  |  |  |  |  |  | VR |
| Black-headed Gull | VR | VR | - | - | - | - | - | - | - | - | - | VR |
| Bonaparte's Gull | U | U | R | R | - | - | - | - | - | - | R | U |


| Ring-billed Gull | VC | VC | VC | VC | U | VR | - | VR | R | U | C | VC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Herring Gull | VC | VC | VC | C | U | - | VR | VR | U | C | VC | VC |
| Iceland Gull | VR | VR | VR | - | - | - | - | - | - | - | VR | VR |
| Lesser Black-backed Gull | U | U | U | R | VR | - | - | VR | R | U | U | U |
| Glaucous Gull | R | VR | VR | - | - | - | - | - | - | - | - | R |
| Great Black-backed Gull | C | U | U | U | VR | - | VR | R | R | U | U | U |
| Sabine's Gull | - | - | - | - | - | - | - | - | VR | VR | - | - |
| Black-legged Kittiwake | - | - | VR | - | - | - | - | - | - | VR | VR | VR |
| Gull-billed Tern | - | - | R | R | R | VR | VR | R | R | VR | - | - |
| Caspian Tern | R | R | R | R | VR | R | R | R | R | U | U | U |
| Royal Tern | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC |
| Sandwich Tern | VC | C | VC | C | C | C | C | C | VC | VC | VC | VC |
| Roseate Tern | - | - | - | R | R | VR | R | R | R | - | - | - |
| Common Tern | VR | VR | R | U | R | R | U | C | VC | U | VR | VR |
| Arctic Tern | - | - | - | - | R | VR | - | R | R | VR | - | - |
| Forster's Tern | VC | VC | C | U | VR | - | R | U | U | C | C | VC |
| Least Tern | - | - | R | C | VC | C | VC | C | U | - | - | - |
| Bridled Tern | - | - | - | VR | - | - | - | VR | R | VR | - | - |
| Sooty Tern | - | - | - | - | - | - | - | VR | R | VR | - | - |
| Black Tern | - | - | - | VR | VR | VR | VR | C | C | R | - | - |
| Brown Noddy | - | - | $\checkmark$ | - | - | - | - | VR | VR | R | - | - |
| Black Skimmer | C | C | U | U | U | R | U | R | U | R | R | C |
| Dovekie | - | - | - | - | - | - | - | - | - | - | - | VR |
| Thick-billed Murre | VR | - | - | - | - | - | - | - | - | - | VR | - |
| Razorbill | VR | VR | - | - | - | - | - | - | - | VR | VR | VR |
| Black Guillemot | VR | - | - | - | - | - | - | - | - | - | - | - |
| Rock Pigeon | C | C | C | VC | VC | VC | C | C | C | Č | C | C |
| Eurasian Collared-Dove | VC | VC | VC | VC | VC | VC | VC | VC | C | VC | VC | VC |
| Eurasian Collared-Dove | VC | VC | VC | VC | VC | VC | VC | VC | C | VC | VC | VC |
| White-winged Dove | R | R | R | R | R | R | R | R | R | VR | R | R |
| Mourning Dove | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC |
| Common Ground-Dove | U | U | U | U | U | C | U | U | U | U | U | R |
| Budgerigar | - | - | - | - | - | - | VR | - | - | - | - | - |
| Cockatiel | - | - | - | VR | - | - | - | - | - | - | - | - |
| Nanday Parakeet | - | - | VR | VR | - | VR | VR | - | - | VR | - | VR |
| Yellow-billed Cuckoo | - | - | - | VR | VR | VR | - | - | VR | VR | - | - |
| Eastern Screech-Owl | VR | VR | VR | VR | - | - | VR | VR | VR | VR | - | VR |
| Great Horned Owl | VR | VR | VR | VR | VR | VR | VR | - | - | VR | VR | VR |
| Barred Owl | VR | - | - | - | - | VR | - | VR | VR | - | - | VR |
| Common Nighthawk | - | - | - | VR | R | VR | - | VR | VR | VR | - | - |
| Chuck-will's-widow | - | - | VR | R | R | VR | R | - | VR | VR | - | - |
| Eastern Whip-poor-will | - | VR | VR | R | R | R | R | R | VR | VR | VR | VR |
| Chimney Swift | - | - | VR | U | VC | C | C | U | U | VR | VR | - |
| Ruby-throated Hummingbird | VR | - | VR | R | VR | VR | VR | VR |  | VR | - | VR |


| Black-chinned Hummingbird | - | - | - | - |  | - | - | - | - |  | VR | VR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belted Kingfisher | VR | VR | VR | R | - | VR | VR | R | R | R | VR | VR |
| Red-headed Woodpecker | - | - | VR | VR | - | - | - | - | VR | - | - | - |
| Red-bellied Woodpecker | U | U | U | U | U | U | U | U | R | R | U | R |
| Yellow-bellied Sapsucker | VR | U | R | VR | - | - | - | - | - | VR | VR | VR |
| Downy Woodpecker | VR | VR | R | VR | R | R | R | R | R | R | VR | R |
| Hairy Woodpecker | - | - | - | - |  | VR | - | - | - | - | - | - |
| Northern Flicker | VR | - | VR | - | - | - | VR | VR | - | - | VR | VR |
| Pileated Woodpecker | R | R | R | U | VR | VR | VR | VR | VR | VR | - | R |
| Olive-sided Flycatcher |  |  |  |  |  |  |  |  | VR |  |  |  |
| Eastern Wood-Pewee | - | - | - | - | - | - | - | - | VR | VR | VR | - |
| Acadian Flycatcher |  |  |  |  |  |  |  |  | VR |  |  |  |
| Eastern Phoebe | R | R | R | - | - | - | - | - | - | VR | U | U |
| Vermillion Flycatcher |  | VR |  |  |  |  |  |  |  |  |  |  |
| Great Crested Flycatcher | - | - | VR | R | R | U | R | - | - | $\checkmark$ | - | - |
| Eastern Kingbird | - | - | - | U | R | VR | - | R | U | U | R | - |
| Gray Kingbird | - | - | VR | VR | VR | VR | VR | VR | VR | - | - | - |
| Loggerhead Shrike | VR | VR | U | U | IU | R | U | R | VR | VR | VR | R |
| White-eyed Vireo | - | - | - | VR | - | - | - | - | VR | VR | VR | VR |
| Yellow-throated Vireo |  |  |  |  |  |  |  |  | VR |  |  |  |
| Blue-headed Vireo | VR | VR | VR | VR | - | - | - | - | - | - | - | VR |
| Red-eyed Vireo | - | - | VR | - | R | - | VR | VR | R | R | VR | - |
| Blue Jay | U | C | C | C | C | C | C | U | C | C | C | U |
| Florida Scrub-Jay | - | VR | VR | VR | - | VR | VR | - | VR | VR | VR | VR |
| American Crow | R | R | U | U | R | R | R | R | R | R | R | R |
| Fish Crow | C | C | VC | VC | VC | VC | C | C | C | C | C | C |
| Purple Martin | VR | R | R | U | U | R | R | R | R | - | - | - |
| Tree Swallow | R | R | A | U | R | VVR | R | R | R | R | A | U |
| Northern Rough-winged Sw. | - | VR | R | R | VR | R | R | VR | VR | VR | - | - |
| Bank Swallow | - | - | VR | U | R | VR | R | U | R | - | - | - |
| Cliff Swallow | - | - | VR | R | R | - | VR | R | R | VR | VR | -= |
| Cave Swallow | - | - | - | - | - | - | - | - | VR | VR | VR | - |
| Barn Swallow | VR | - | U | A | A | U | U | A | A | R | R | - |
| Carolina Chickadee | - | - | VR | - | - | - | VR | VR | VR | - | VR | - |
| Tufted Titmouse | VR | VR | VR | VR | VR | VR | VR | VR | VR- | R | R | VR |
| Carolina Wren | U | U | C | C | C | C | U | R | R | R | R | R |
| House Wren | U | U | U | R | - | - | VR | - | VR | VR | U | U |
| Sedge Wren | - | - | - | - | - | - | - | - | - | VR | - | - |
| Marsh Wren | - | - | - | - | - | - | - | - | - | VR | - | VR |
| Ruby-crowned Kinglet | VR | VR | - | - | - | - | - | - | - | VR | R | R |


| Blue-gray Gnatcatcher | R | R | R | VR | VR | VR | VR | VR | R | R | R | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Bluebird | - | VR | VR | VR | - | VR | - | - | - | VR | VR | - |
| Veery | - | - | - | VR | VR | - | - | - | R | R | - | - |
| Gray-cheeked Thrush | - | - | - | - | VR | - | - | - | VR | VR | VR | - |
| Bicknell's Thrush | - | - | - | - | - | - | - | - | VR | VR | VR | - |
| Swainson's Thrush | - | - | - | VR | VR | - | - | - | VR | VR | - | - |
| Hermit Thrush | - | - | VR | - | - | - | - | - | - | VR | VR | - |
| Wood Thrush | - | - | - | VR | - | - | - | - | VR | VR | - | - |
| American Robin | C | C | U | - | - | - | - | - | - | VR | U | U |
| Gray Catbird | R | R | R | VR | VR | - | VR | - | VR | R | R | VR |
| Northern Mockingbird | C | C | VC | VC | VC | VC | VC | C | C | C | C | C |
| Brown Thrasher | - | VR | R | U | U | U | R | VR | VR | VR | - | - |
| European Starling | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC | VC |
| Common Myna | - | - | - | - | - | VR | - | - | - | - | - | - |
| American Pipit | VR | VR | - | - | - | - | - | - | - | - | VR | VR |
| Cedar Waxwing | U | U | C | U | - | - | - | - | - | - | VR | R |
| Tennessee Warbler | - | - | - | VR | VR | - | - | - | VR | VR | - | - |
| Orange-crowned Warbler | VR | VR | VR | - | - | - | - | - | - | VR | VR | - |
| Nashville Warbler | - | - | - | - | VR | - | - | - | - | VR | - | - |
| Northern Parula | - | R | R | R | R | R | VR |  | R | R | VR | VR |
| Yellow Warbler | - | - | - | - | - | - | VR | R | VR | - | - | - |
| Magnolia Warbler | - | - | - | VR | VR | - | - | - | VR | VR | - | - |
| Cape May Warbler | - | - | VR | VR | R | - | - | - | VR | VR | - | - |
| Black-throated Blue Warbler | - | - | VR | VR | VR | - | - | VR | VR | - | - | - |
| Yellow-rumped Warbler | C | VC | C | VR | - | - | - | - | - | R | U | C |
| Blackburnian Warbler | - | - | - | - | - | - | - | - | - | VR | - | - |
| Black-throated Green Warbler | - | - | - | - | - | - | - | - | - | VR | $\checkmark$ | - |
| Yellow-throated Warbler | R | R | U | - | - | VR | VR | VR | VR | VR | V | VR |
| Pine Warbler | - | - | - | VR | - | - | - | - | VR | VR | - | - |
| Prairie Warbler | VR | VR | VR | R | - | VR | VR | VR | VR | VR | VR | VR |
| Palm Warbler | VC | VC | C | U | VR | - | - | - | VR | U | C | VC |
| Blackpoll Warbler | - | - | - | R | R | - | - | - | - | VR | - | - |
| Cerulean Warbler |  |  |  |  |  |  |  |  | VR |  |  |  |
| Black-and-white Warbler | - | - | VR | R | R | - | - | VR | VR | VR | - | - |
| American Redstart | - | - | - | U | R | - | R | U | U | U | VR | - |
| Prothonotary Warbler | - | - | - | VR | - | - | - | - | VR | - | - | - |
| Worm-eating Warbler | - | - | - | VR | - | - | - | - | - | - | - | - |
| Ovenbird | - | - | VR | VR | VR | - | - | - | - | - | - | - |
| Northern Waterthrush | - | - | - | - | - | - | - | - | VR | - | - | VR |
| Louisiana Waterthrush | - | VR | VR | VR | - | - | - | VR | - | - | - | - |


| Connecticut Warbler | - | - | - | - | VR | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kentucky Warbler | - | - | - | - | - | - | - | - | - | VR | - | - |
| Common Yellowthroat | R | R | R | U | U | VR | VR | VR | U | U | U | R |
| Hooded Warbler | - | - | - | - | - | - | - | - | VR | VR | - | - |
| Wilson's Warbler | - | - | - | - | - | - | - | - | - | VR | - | - |
| Canada Warbler | - | - | - | - | - | - | - | - | VR | - | - | - |
| Summer Tanager | - | - | - | VR | VR | VR | - | VR | VR | - | - | - |
| Scarlet Tanager | - | - | - | - | - | - | - | - | VR | VR | - | - |
| Eastern Towhee | - | VR | VR | - | - | - | - | - | - | - | VR | - |
| Chipping Sparrow | VR | VR | VR | - | - | - | - | - | - | VR | VR | VR |
| Clay-colored Sparrow | - | - | - | VR | - | - | - | - | - | VR | VR | - |
| Vesper Sparrow | - | - | - | - | - | - | - | - | - | - | - | VR |
| Savannah Sparrow | VR | VR | VR | VR | - | - | - | - | - | VR | R | VR |
| Grasshopper Sparrow |  |  |  |  |  |  |  |  |  |  |  | VR |
| Song Sparrow | - | VR | - | - | - | - | - | - | - | - | - | - |
| Swamp Sparrow | - | - | - | VR | - | - | - | - | - | - | VR | - |
| White-crowned Sparrow | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Snow Bunting | - | - | - | - | - | - | - | - | - | - | VR | - |
| Northern Cardinal | C | C | C | C | C | VC | C | U | U | U | U | U |
| Rose-breasted Grosbeak | - | - | - | VR | VR | - | - | - | VR | - | - | - |
| Blue Grosbeak | - | - | - | VR | - | - | VR | VR | VR | VR | - | - |
| Indigo Bunting | - | - | - | VR | VR | - | - | - | VR | R | - | - |
| Painted Bunting | - | - | - | VR | - | - | - | - | - | VR | - | - |
| Dickcissel | - | - | - | - | - | - | - | VR | VR | VR | - | - |
| Bobolink | - | - | - | U | R | - | - | - | R | VR | - | - |
| Red-winged Blackbird | R | R | R | R | R | U | R | R | R | R | R | R |
| Eastern Meadowlark | - | - | - | - | - | - | - | - | - | VR | VR | - |
| Yellow-headed Blackbird | VR | - | - | - | - | - | - | - | - | - | - | - |
| Brewer's Blackbird | VR | VR | - | - | - | - | - | - | - | VR | VR | - |
| Common Grackle | VC | VC | VC | VC | VC | C | C | R | R | C | C | C |
| Boat-tailed Grackle | C | VC | VC | VC | VC | VC | C | U | C | C | C | C |
| Shiny Cowbird | VR | - | - | - | VR | VR | VR | VR | - | VR | VR | - |
| Bronzed Cowbird | - | - | - | - | - | - | - | - | - | - | VR | VR |
| Brown-headed Cowbird | C | VC | VC | U | R | R | U | R | R | U | U | C |
| Orchard Oriole | - | - | - | VR | - | VR | - | - | - | - | - | - |
| Baltimore Oriole | VR | VR | VR | VR | VR | - | - | - | VR | VR | R | VR |
| Purple Finch | VR | - | - | - | - | - | - | - | - | - | - | VR |
| House Finch | R | U | C | C | C | C | C | U | R | R | U | U |
| Pine Siskin | - | - | - | - | - | - | - | - | - | - | VR | - |
| American Goldfinch | U | U | R | - | - | - | - | - | - | VR | R | R |
| House Sparrow | VC | VC | VC | VC | VC | VC | C | C | C | C | C | C |

