

MIGRATION MONITORING AT CABOT HEAD

SPRING 2021

by

Stéphane Menu, Ph.D.

*prepared
for*

BRUCE PENINSULA BIRD OBSERVATORY

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Citation:

Menu, S. August 2021. Migration Monitoring at Cabot Head, Spring 2021. Unpublished report for Bruce Peninsula Bird Observatory

Preface

Cabot Head is a promontory of the northeast headland of the upper Bruce Peninsula in south-central Ontario. Cabot Head Research Station (CHRS) is situated on the western side of Wingfield Basin (at 45°15'N, 81°18'W) near the community of Dyer's Bay. In 2001, Cabot Head was designated as an Important Bird Area (IBA) by Birdlife International for its significant concentrations of migratory bird species. Both Ontario Parks and Bruce Peninsula Bird Observatory (BPBO) manage the Cabot Head Research Station.

The Breeding Bird Survey (BBS) is the principle method for monitoring bird populations in the United States and southern Canada. However, breeding ranges of many species in northern Canada are inaccessible to roadside surveys and are therefore poorly monitored by the BBS method. The Canadian Migration Monitoring Network (CMMN) is a nation-wide, Bird Studies Canada-led initiative, intended to assess changes in bird populations during migration. There are 25 stations across Canada where data are being collected for each bird species during the spring and fall migrations, typically through a standardized capture and observation protocol. Through continuous data collection since 2001, BPBO has demonstrated that Cabot Head is a significant site for monitoring migratory landbirds. In recognition of its importance and established migration monitoring effort, BPBO became a member of the CMMN in fall 2003. Bird migration monitoring at Cabot Head by BPBO has been ongoing without interruption since spring 2002.

BPBO was incorporated as a non-profit charitable organization in 2001 to initiate and direct ornithological assessments and monitoring at Cabot Head and the surrounding areas. Migration monitoring has been the primary focus of bird research at Cabot Head since 1998. This document reports on results of the spring 2021 migration monitoring season at the CHRS.

Executive Summary

In this document are summarized the results of migration monitoring at Cabot Head in spring 2021. Spring fieldwork began on April 15 and ended on June 10 for a total of 57 consecutive days of coverage. A total of 157 species were detected during the monitoring period, with two more species only seen in the afternoon (outside the monitoring period). A total of 1869 birds of 64 species were banded and 155 birds of 18 species were recaptured. Recapture data suggest that overall stopover rates at Cabot Head

are low.

In spring 2021, good weather conditions were interspaced with short and infrequent periods of high wind and/or rain. As it is often the case, poor weather was more common early in the season, with strong winds, often accompanied by rain, completely precluding banding for six days during the first 19 days of monitoring. In contrast, during the next 38 days, only six days of banding were lost due to rain and/or high wind. Very good coverage for banding (defined as at least 80 mist net hours, or more, out of a potential of 90 for any given day) happened in 53% of the days during the season. In spring 2021, the banding total of 1869 birds, although quite above average, is the sixth-highest spring total (average of 1556 ± 460 banded birds, low of 876 in 2014 and high of 2431 in 2002). Three species, Ruby-crowned Kinglet, Golden-crowned Kinglet, and Dark-eyed Junco (in decreasing order), account for 53% of the banding total. There were 11 days with banding totals over 50 birds (including six over 100 birds). Two days stand out for their record number of captures: 278 birds banded on April 29 (second highest daily total ever) and 205 on May 5. On May 18, 84 species were detected, the highest diversity of the spring. A new species, Laughing Gull, was observed for the first time ever at Cabot Head on June 9.

Migration monitoring at Cabot Head has been ongoing since 2002 and allows comparisons between years. However, monitoring in spring 2020 was altered and reduced due to the Covid19 pandemics. Hence, data from spring 2020 has been excluded from the analysis.

The entire list of all species observed is given in Appendix I. For a more casual take on the spring 2021 season, an edited version of the blog is reproduced in Appendix II.

The 2021 spring migration monitoring season was a success thanks to the efforts of the four volunteer field biologists who contributed their time to this project.

1. Methods

The migration monitoring program at Cabot Head like all CMMN stations follows a field protocol as it is essential for the production of population indices that data collection be consistent over the long term. At CHRS, fifteen mist nets are operated for six hours starting 30 minutes before sunrise, weather permitting. Personnel also complete a census done for one hour along a fixed route starting an hour after sunrise, where all birds seen or heard are recorded. Supplemental surveys such as visible migration counts and bay watches are completed when circumstances permit, but casual observation occurs all throughout the count period of seven hours.

2. Season Summary

Coverage

Fieldwork for spring migration monitoring began at CHRS on April 15 and ended on June 10, for a total of 57 consecutive days. Census and casual observation were performed every day (except during intense rain). Banding is more affected by weather and there was an above-average total of 11 days without any banding. Across the season,

32% of mist netting coverage (in hours) was lost. The number of days with complete coverage (i.e. 15 nets open for six hours) was around average (25 out of 57, i.e. 44%, compared to an average of $46\% \pm 12$; Fig.1).

Figure 1. Coverage (in mist net hour) at CHRS in spring 2021.

Weather

Weather in spring 2021 followed a typical pattern of relatively unsettled conditions in the first few weeks (mid-April to early May) followed by more benign ones, except during time of windstorm and the occasional rain. There were seven days with precipitation, often heavy and lasting all day, other times in the form of short showers, distributed mostly early in the season. Rain tremendously affects migration, grounding birds and impacting their foraging abilities. It also precludes any banding, for birds' safety. Periods of high wind occurred quite often this spring all throughout the season: 37% of days experienced winds of at least 5 on the Beaufort scale. These strong winds did not always last the entire morning but they nonetheless affected banding operations, as nets in their paths had to be closed.

Periods of inclement weather were not evenly distributed throughout the season. As usual, the first two weeks or so experienced unsettled weather, with wind and/or rain (and occasionally snow) hindering banding and monitoring during nine days from April 15 to May 5 (i.e. 43% of the total of 21 days), with rain happening in six of them. For the rest of the season, weather greatly impacted banding during another nine days, which, however, accounted for only 25% of the 36 days from May 6 to June 10. These bad weather episodes consisted of strong south winds during three discrete periods of two to three consecutive days (May 19-21, May 25-26, and June 5-7) and one day of rain (May 22).

With rain, wind is a major factor that influences migration. It is difficult to accurately quantify such a dynamic component of the weather, especially because wind strength and direction are recorded only at the start and end of the count period. To characterize wind strength (on the Beaufort scale) and direction, we considered only the strongest wind during the count period of seven hours. Undoubtedly, this method would tend to over-represent strong winds. However, strong winds affect migration tremendously and their effect could probably be felt before they develop into a full windstorm. This spring, strong winds (at least five on the Beaufort scale) were predominantly from the South, and to a lesser extent, from the West and occurred on 21 days (37% of the season). Another 17 days (about a third of the season) experienced moderate wind (three to four on the Beaufort scale). Therefore, most of the monitoring period experienced strong to moderate winds (Fig.2). North wind occurred much less frequently than winds from other directions this spring and were mostly concentrated in April and early May. There were very few occasions of strong North wind, which are conditions detrimental to migration. On the other hand, South and West winds were predominant throughout the season, often very strong. Both during nocturnal migration and diurnal foraging flights, winds can induce migration drifts in birds: Cabot Head being the northeast promontory of the Bruce

Peninsula, a West wind has thus the potential to “push” birds towards it. Periods of predominantly West winds (especially being moderate to strong) in April and May may have been a factor in the high levels of capture during that period.

Figure 2. Wind pattern (strength on the Beaufort scale, direction and proportion of time) at CHRS, spring 2021.

Migration Monitoring

Waterfowl

Waterfowl migration through the Great Lakes region typically peaks in March and April. A total of 15 species of ducks and geese were observed, with Canada Goose, Mallard, Bufflehead, and the three species of Mergansers being the most common ones. All the other species were detected on one to six days only. All three species of Scoters were observed this spring, with the only Black Scoter on May 8, when a season high of 73 White-winged Scoters were counted. Two Surf Scoters were seen on April 25. White-winged Scoter is always the most common scoter species, with observations on six days, stretching from April 15 to May 10. Long-tailed Ducks were detected only on two days, April 25 with 86 birds and May 8 with 13 birds. The total of 86 Long-tailed Ducks in one day is the highest daily total since spring 2005. Common Goldeneyes were seen in the first few days of monitoring, on April 16, 18, and 19, with two to three birds, and never in Wingfield Basin. On the other hand, Buffleheads were detected regularly from April 18 to May 14, with up to 26 birds (on May 8), and often in Wingfield Basin. Red-necked Grebes were seen off Cabot Head only twice, on May April 15 and 25, with three and 13 birds, respectively. On the other hand, Horned Grebes were detected on eight days from April 15 to May 4, with highs of 17 and 15 birds on April 15 and 25, respectively. The three species of Mergansers (a mix of migrants and residents) were observed throughout the entire spring, although Hooded Mergansers are always observed in very small numbers on Wingfield Basin. Observations of that species occurred on 15 days with one to three bird. Numbers of Red-breasted Mergansers were usually low this spring, except during three days of strong passage over Georgian Bay: 34 birds on April 25, 73 on May 8, and 34 on May 18. Common Mergansers were seen almost daily from April 15 to June 10, with the season high of 26 birds on May 20.

Some large flocks of Canada Geese were detected at the beginning of the season: daily totals of 177 and 143 birds on April 18 and 19, respectively. More typical is the strong passage seen in late May - June, associated with a moult migration. Major movements of Canada Geese (daily total over 100 birds) in late spring this year were somewhat limited and occurred only on May 24, with 210 birds, and on June 1, with 180 birds.

The water level in Georgian Bay and Wingfield Basin has finally started to recede, with a major drop of about 50cm occurring over the winter. Nonetheless, most of the rocks on

the eastern side of the Basin are still underwater and cannot be used as roosting sites for gulls and cormorants as they have historically been. Thus, much smaller numbers of these species are seen now compared to previous years.

Raptors

A substantial migration of soaring raptors occurs only in spring over the Bruce Peninsula, as the landform acts as a gigantic funnel for these species reluctant to fly over big bodies of water. Sharp-shinned Hawk and Broad-winged Hawk are the species of raptors detected in the highest numbers at Cabot Head. However, this year, numbers were quite low compared to some other springs. Sharp-shinned Hawks were observed almost daily from April 16 to May 20, with highs of 27 and 23 birds on May 1 and 10, respectively, for a season total of 259 birds (well below the average of 408 ± 104). Daily totals of over 50 birds have occurred almost every spring for this species, occasionally multiple times in a single season, with five days exceeding a hundred individuals (highest count of 216 Sharp-shinned hawks on May 1, 2011).

Broad-winged Hawks were also seen sparingly this spring, with a high of 34 birds on May 20, and the lowest season total of 75 birds, well below the average of 495 ± 331 birds. Large variations exist in season total, though, for this species, with a (previous) low of 132 in spring 2019 and a high of 1283 in spring 2013.

A total of 14 species of raptors were detected in the spring, including Rough-legged Hawk, with observations from May 1 to 24, and Cooper's Hawk, detected four times throughout the season. American Kestrels were seen from April 20 to May 15, with a daily high of four birds on April 27 and 30. The absence of observation after mid-May could indicate that this species does not breed around Cabot Head. On the other hand, Merlins were observed from April 18 to June 10, with the occasional display of territorial defense against other birds. The pair of Bald Eagle is still present at Cabot Head. As a consequence, this species is seen almost every day of the season, with the occasional passing immature or adult birds. A season high total of six Bald Eagles were counted on April 22. On the opposite, Ospreys are rarely seen, and, when detected, they rarely linger around Cabot Head. This spring, one Osprey was detected in four occasions during the monitoring period (from May 4 to 22).

Passerines and near-passerines

Short-distance migrants

Among passerines, the short-distance migrants are the earliest to arrive and pass through Cabot Head, with some species even barely detected in years of early spring. For example, the American Tree Sparrow is a very early migrant, with most of its migration missed at Cabot Head, especially if good weather comes early. However, this species has been detected and captured every spring, albeit very often in single digit numbers. In 2021, detections occurred almost daily from April 15 to May 9, and 14 birds were banded.

Brown Creepers are also early migrants but their migration extends well into early May. This spring, they were detected in small numbers almost every day from April 15 to May 15, with daily totals from one to 18 birds. A little less than half the detection was through banding, with 58 birds banded. Spring banding totals vary greatly from a low of eight

birds (in 2002 and 2008) and a high of 200 birds in 2016, for an average of 48 birds (\pm 45). Sharing a similar migration pattern, Golden-crowned Kinglets are however much more numerous, often one of the most numerous birds banded, especially in early season. That was the case in April 2021 when a total of 250 Golden-crowned Kinglets were banded. This spring, the sex-ratio of captured kinglets was skewed towards female, with 42 males banded for 208 females. Some years, barely any male Golden-crowned Kinglets are captured, having moved through before the monitoring starts: the sex-ratio (numbers of males divided by numbers of females) ranges from 0 (in 2008 and 2012) to 1.24 (in 2009) for an overall value of 0.64. Sometimes, it is the entire migration of this species that is missed: seasonal numbers banded have fluctuated from three and nine birds in 2008 and 2012 (respectively) to 666 in 2016.

Blackbirds, notably Red-winged Blackbirds and Common Grackles, move through in early season as well, often in highly visible diurnal flights. In spring 2021, large movements occurred between mid-April and early May, with season highs of 300 of 112 Common Grackles on May 5 and 7, respectively, while the season high of 70 Red-winged Blackbirds was on May 10. Rusty Blackbirds, not always easily separated from other Icterids, were seen in small numbers from April 27 to May 17, except on May 13 when a record 115 individuals were tallied.

American Robins were seen almost daily during the entire spring season, although in single-digit numbers, except on April 29 with 11 birds and on April 27 with an impressive 685 birds! The Northern (Yellow-shafted) Flicker is also a very visible early migrant. Its migration at Cabot Head is concentrated from mid-April to early May, with peak numbers this year of 16 birds on April 19, 18 on April 24, and 29 on May 2.

Eastern Phoebes are the hardiest of the Tyrant Flycatchers, wintering in the southern USA and arriving early on the breeding grounds. One bird was already present on April 15 this year. This species is very vocal and visible, so it is easily detected. It also breeds - or attempts to - at Cabot Head, so it is no surprise that it was observed almost every day of the entire spring season, even though daily totals were never more than three birds.

Despite its almost daily presence, no birds were banded this spring, the second year only with no captures, after spring 2008. This species likely migrates through Cabot Head before mid-April, as it is observed and banded in good numbers only during late springs. Tree Swallows were first detected on April 17, with observations on almost every day afterwards in April and throughout the rest of the season. The highest number of Tree Swallow detected was on May 7 with 28 birds, which increased to about 60 birds in the afternoon (outside the official monitoring period). The almost daily observations are mostly due to the pair of Tree Swallow breeding in the nest box near the station. Northern Rough-winged and Barn Swallows were observed relatively frequently this spring, with detections in 14 and 13 days, respectively. First detections were in early May: May 3 for Barn and May 7 for N. Rough-winged. Both species used to be observed in April, albeit in relatively small numbers. Recently, in the last few years, first sightings are now in early May, another indication of declining populations for these species. Bank and Cliff Swallows have always been more infrequent at Cabot Head. This spring, they were seen only once each during the monitoring period: one Cliff Swallow on May 7 and one Bank Swallow on May 18 (with another one in the afternoon of May 7 with the large flock of Tree Swallow).

Myrtle (Yellow-rumped) and Pine Warblers, the earliest of the warblers, were the first

warbler species to be detected this spring, on April 15 and 19, respectively. Both species were detected regularly in April, with observations almost every day, in small numbers, except during three days in late April. A large movement of birds, and notably warblers, was indeed noted from April 27 to 29, with record numbers of Myrtle and Pine Warblers and the arrival of five other species of warblers. On April 27, a record 947 Myrtle Warblers were counted: On that day, Yellow-rumps were everywhere, feeding voraciously on the ground (where a dozen could be seen in a tiny patch, for example) or in the shrubs and trees, or suddenly aloft in loose flocks streaming through the air against the wind. Daily totals of several hundred Myrtle Warblers have happened a few times in past spring seasons, notably 697 birds on April 30, 2010 and 790 birds on May 1, 2006. On May 11, 2008, a seemingly endless stream of flying Myrtle Warblers passed overhead: through timed counts, it was estimated that 15,000 Myrtle Warblers may have moved through Cabot Head that day. Pine Warblers were also counted in record numbers in spring 2021: 50 and 96 birds on April 27 and 28, respectively, both totals record breaking. The previous highest daily total was on April 30, 2010, with 46 birds but days with more than ten Pine Warblers are very rare. In fact, between spring 2002 and 2020, there were only ten days with double-digit observations, less than 2% of the 559 days with sightings of Pine Warbler. In spring 2021, five more days had double-digit numbers of Pine Warblers, including 30 birds on May 4.

As mentioned, five more species of warblers arrived between April 27 and 28, with, notably, the first ever Northern Parula and the second ever Cape May Warbler detected in April. It is the first time that eight species of warblers have been detected in April: the previous record was seven species, all seen on April 30, 2010. From 2002 and 2019 (no monitoring was done in April 2020), two to seven species of warblers were detected in April (Fig.3), for a total of 14 species. Half of them were detected only once, whereas only Myrtle and Pine Warblers were seen in every April (Fig.4).

Most sparrow species are short-distance migrants, with wintering ranges usually confined in North America. At Cabot Head in spring 2021, Dark-eyed Junco and American Tree, Chipping, and Song Sparrows were the first species of sparrows detected, on the first day of monitoring. Because of a local population, migration of Song Sparrow is not easily monitored and it is likely that the bulk of this species' migration is missed at Cabot Head, occurring before mid-April. Single-digit daily totals and a season banding total of 15 birds seem to indicate that most detected Song Sparrows were local birds this spring. Dark-eyed Juncos, on the other hand, migrate mostly in the second half of April and into early May. This spring, they were detected daily from April 15 to May 19 (except for one day) and the total of 129 Juncos banded is the second highest ever. The peak of passage was April 27-29, with a season high of 75 Juncos on April 29: as mentioned, this short period was conducive to migration, with high numbers of American Robins and warblers, for example. On April 27, a season high of 13 Chipping Sparrows was counted, as well as the first White-throated Sparrows (with a total of 23 birds). The former species, like Song Sparrow, has a

Figure 3. Number of species of warblers detected in April at CHRS, 2002-2019.

Figure 4. Frequency of observation in April for species of warblers at CHRS, 2002-2019.

local breeding population at Cabot head, making its migration difficult to monitor. The latter, on the other hand, shows a distinct migration with a peak in late April - early May: this spring, 62% of the season total was counted between April 27 and May 6. White-crowned Sparrows arrive later than White-throated Sparrows, with the first detection of a single bird in spring 2021 on May 6. Peak was May 14 and 15 with daily totals of 11 birds for both days. The last sightings were in afternoons of May 25 and 29: although quite late for this species, White-crowned Sparrows have been observed even later at Cabot Head, with observations in June in six spring seasons, June 14, 2002, being the latest on record. Following the same pattern of the last few spring seasons, totals in spring 2021 were relatively low, with 46 birds counted. Detected Totals in spring for this species is quite variable, ranging from a low of 28 birds in 2019 to a high of 344 in 2013 (average: 153 ± 78). Totals of less than 60 birds have occurred every spring since 2017, but only once from 2002 to 2016, in spring 2011.

Hermit Thrush is the lone short-distance migrant among the *Catharus* thrushes, with the eastern population wintering mostly in the United-States from Florida to the mid-Atlantic States. It is thus the first thrush to arrive at Cabot Head, up to a month earlier than the other species. The first Hermit Thrush this year was on April 15 and observations were regular until the last one on May 15.

On April 27, 91 Purple Finches were observed, a remarkable total: it is only the fourth day across all spring seasons with a double-digit total, breaking the previous high of 83 birds on April 24, 2016. Usually, only a few Purple Finches are heard or seen on a daily basis but on that morning, often one would see three or four males perched in the same tree or little flocks flying over the canopy.

Long-distance migrants

Long-distance migrants include a wide variety of birds, from hummingbirds to flycatchers to vireos to warblers. The main characteristics are the long distances flown between their breeding and wintering grounds, which are usually separated by hundreds, if not thousands, of kilometers. At Cabot Head, this diverse group tends to arrive from early May to early June, depending on species and conditions, making the month of May, especially mid-May, the busiest and - some would say - the most exciting time of year for birdwatching.

Overall species diversity increased rapidly in the first half of May as many species arrived at the upper Bruce Peninsula: numbers of species detected grew from 85 on April 30 (i.e., 54% of the season total) to 125 on May 15 (79% of the spring total). From May 16 to May 21, another 25 new arrivals were detected, bringing the total number of species detected to 95% of the spring total. The remaining 22 days of monitoring only brought eight additional species, the so-called late migrants. There were a certain number of days with no new species throughout the monitoring period, not restricted to the end of the season, reflecting a slow or stalled migration at various stages of the spring.

After the record detection of eight species of warblers on April 28, there was no new species of warblers until May 5 when the first Northern Waterthrush and Blackburnian Warbler were observed, for a total of nine species of warblers that day. The rate of new species arrivals was relatively slow until May 13, when diversity reached 16 species of

warblers. The week of May 13-20 saw constant, but staggered, new daily arrivals of warbler species, with cumulative diversity reaching 23 species on May 20 (Fig.5). Both on May 18 and 19, 21 species of warblers were detected, the highest number of the season. A daily total of more than 15 species were detected between May 13 and 20, the peak of diversity for warblers this spring (Fig.5). The last warblers to arrive were detected after mid-May, with Canada Warbler on May 18 and Wilson's Warbler and Blackpoll Warblers both on May 19 (Fig.5). The last species to arrive was Mourning Warbler, on May 22. This secretive warbler was detected four more times afterward, mostly through singing, with last date June 8. The sequence of warbler arrivals is relatively consistent between years, from early- to late-migrant species, although dates of first arrivals do vary for individual species.

Except for Blue-headed Vireo, a short-distance migrant which returns in April (first detection this year on April 27), Vireos arrive at Cabot Head in mid-May, with the occasional very early birds in early May. This spring, first detections were on May 18 for Red-eyed Vireo and May 19 for Warbling Vireo, the only detection for the latter. No Philadelphia Vireos were observed, the first spring season without any observation. It is a species never seen in large numbers or on many days at Cabot Head: detected only on one or two days in ten of the previous 19 spring seasons, it could easily be missed. Of the three species, the Red-eyed Vireo is the more common at Cabot Head, being notably a relatively abundant breeder on the Bruce Peninsula. Red-eyed Vireo is a late migrant, with most sightings from mid-May onwards, although the earliest detection was April 30, in 2005. Being a persistent singer, it is easily detected: after its arrival on May 18 this spring, it was heard every day but for May 19 during the rest of the season. Despite its general and local abundance, it is not often captured in the nets, as it tends to stay high in the canopy. The banding total of 6 birds this spring is tied with the previous record low established in 2016 (spring average of 14 birds \pm 8, with a high of 39 in 2013).

Tyrant Flycatchers are also late migrants (with the exception of Eastern Phoebe), arriving at Cabot Head usually around mid-May. Least Flycatcher is the earliest in the group, with its first detection this year on May 14, followed by a few more detections until May 21 and a high of eight birds on May 20. The last detection was on June 3. Yellow-bellied Flycatchers were detected from May 30 to June 8, with a low season total of 9 birds on five days. Traill's Flycatchers (Willow and Alder combined) were detected only through banding, with four birds captured from May 19 to June 8. However, two Alder Flycatchers were heard on June 3. The first Great Crested Flycatcher was on May 18, with the second observation on May 22. Following a gap of one week, this vocal species was then detected almost daily from May 30 to June 10, with a high of three birds on June 9. Eastern Kingbirds were seen from May 13 to June 4 with one to five individuals at a time. Eastern Wood-Pewees were recorded on eight days between May 20 to June 10, mainly detected through their characteristic song. Finally, one Olive-sided Flycatcher was seen on June 1, a species usually more likely to be heard than seen.

Of the four species of *Catharus* thrushes seen at Cabot Head, three - Veery, Swainson's and Gray-cheeked Thrushes - are long-distance migrants with wintering ranges mostly in South America. The first Veery and Swainson's Thrush arrived a few days apart, May 14 and 17, respectively. They were then detected sporadically throughout the rest of the season. First arrivals of these two species are quite variable, ranging from early May -

even late April in one occasion for each species - to May 20, in 2009 for both species, and May 21, 2017 for Swainson's Thrush. The Gray-cheeked Thrush is the rarest and latest, with, this year, one bird banded each on May 30 and 31.

As with the warblers discussed above, there can be variations in dates of first detection within a general time window for a specific species. For example, two species easily detected when present, Ruby-throated Hummingbird and Common Yellowthroat provide some perspective in fluctuations in arrival dates. This spring, the first hummingbird was on May 7 while the first Common Yellowthroat was heard on May 14. These dates represent a median arrival time for these two species. First detections of Common Yellowthroats on or after May 14 have occurred on six spring seasons of the previous 18 (excluding spring 2020), while first detections on or before May 9 have occurred on seven spring seasons. Hummingbirds have been first observed between May 5 and 10 on 11 of the previous 18 spring seasons, with the earliest date on May 3, 2012 and the latest one on May 18, 2011. Among the most common species of warblers at Cabot Head, it appears that Common Yellowthroat has the widest range of first arrival. Arrival dates for American Redstart, for example, have been very consistent throughout the years: The first detection has been between May 8 and 10 for 13 years out of 18, with two earlier years (May 1 in 2013 and May 4 in 2010) and three later years (May 12 in 2004 and 2017 and May 13 in 2002). This spring, though, the first American Redstarts arrived late, on May 13: nine birds were observed that day, a possible indication of a built-up of numbers south of Cabot Head.

The highest diversity of species observed in the spring season was achieved on May 18, with a total of 84 species. On that day, among others, there were five species of sparrows and 21 species of warblers detected. The first Scarlet Tanagers were also observed, among the nine new species for the season were detected on that day.

At the end of May, birds were starting to establish territories, sing and chase potential competitors and mates. Migration always slows down at this time of year, with only the late migrants continuing to move through Cabot Head. Cedar Waxwings, for example, were first observed on May 23, with 35 birds, but became a daily sight only in June, with a season high of 104 birds on June 5. The first Blue Jays were on May 6 with numbers quickly building up in mid-May (251 birds on May 14, for example). After a lull of a few days, numbers picked up again in late May and in June, with several days of a hundred to a couple hundreds of birds. It is possible that the earliest passage is composed mostly of adult birds, whereas the latter one is made up of young birds. This spring, only 21 Blue Jays were banded as opposed to 3080 birds observed: it would be difficult to test this hypothesis with such a low sample size. However, from 2002 to 2020, 1082 Blue Jays were banded, 73% of them being Second-Year (that is, birds hatched the previous year). If captured Blue Jays are representative of the general migration, it appears that most of them are young birds. There is a strong temporal difference as well: only 5% of the banded adults were captured in late season, from May 25 to June 10, as opposed to 31% of young birds. It appears that the first wave of Blue Jays in mid-May is usually made up of a mix of adult and young birds, whereas the later passage is mostly young birds.

Figure 5. Daily and cumulative numbers of species of warblers detected at CHRS in spring 2021. Alpha codes and arrows indicate date of first detection. (MYWA: Myrtle Warbler; PIWA: Pine Warbler; WPWA: Western Palm Warbler; BAWW: Black-and-White Warbler; BTNW: Black-throated Green Warbler; NAWA: Nashville Warbler; NOPA: Northern Parula; CMWA: Cape May Warbler; NOWA: Northern Waterthrush; BLBW: Blackburnian Warbler; YEWA: Yellow Warbler; OCWA: Orange-crowned Warbler; OVEN: Ovenbird; BTBW: Black-throated Blue Warbler; MAWA: Magnolia Warbler; AMRE: American Redstart; COYE: Common Yellowthroat; BBWA: Bay-breasted Warbler; CSWA: Chestnut-sided Warbler; TEWA: Tennessee Warbler; CAWA: Canada Warbler; WIWA: Wilson's Warbler; BLPW: Blackpoll Warbler; MOWA: Mourning Warbler)

3. Unusual Records

There are many ways an observation can be considered an unusual record at Cabot Head: a bird out of range; a bird with an overall low population on the Northern Bruce; a bird which preferred habitats are not present at Cabot Head; a bird which is rare overall, either at provincial or continental levels; and, finally, a bird detected far outside its normal temporal or numerical range. Below is the list of the spring 2021 unusual records, in chronological order.

A Great Horned Owl was heard on April 15. On May 28 and June 3, a Great Horned Owl was flushed from a roosting tree near the Pine Barrens. A Fox Sparrow was seen on April 15 and 28. A White-breasted Nuthatch was seen on April 19 and May 14: this common bird is not frequent at Cabot Head, although detected in 15 of the previous 19 spring seasons. A Snowy Owl was shortly mobbed by gulls at the tip on April 23, where it stayed all day (see photo): it is only the third spring with observation of this winter visitor to the Bruce Peninsula. Blue-winged Teals and American Widgeons were seen over Georgian bay in small numbers on April 25 and once again on May 8 for the latter. There were three days with observation of one Peregrine Falcon from April 26 to May 14. A few Bobolinks were seen from May 8 to June 9. Two immature Golden Eagles were seen in the evening of May 5. One Red-throated Loon was observed over Georgian Bay on May 8. One Evening Grosbeak were heard, then seen briefly in flight, on May 14. A Green heron was heard and seen in the afternoon of May 15. White-winged Crossbills were heard on May 17. A House Sparrow, very rare at Cabot Head, was seen occasionally from May 20 to June 10. A Lesser Yellowlegs was heard on May 18 and 19. One Red Crossbill was heard and seen three days in a row, May 29 to 31. One Laughing Gull was seen (and digiscoped) on June 9, resting most of the day at the tip in company of other gulls. It is the first sighting at Cabot Head - and the Bruce Peninsula - for this species (see photo).

There were a few notable missed species this spring: for example, no Blue-gray Gnatcatcher was observed in 2021, while this species is almost always detected in spring (previously not seen only in springs 2011 and 2018). This is the first time with no spring observation of Clay-coloured Sparrow since 2013, a species detected 15 spring seasons previously. Likewise, Chimney Swifts were missed this spring, whereas it had been observed every spring since 2014. In spring 2021, we also missed Northern Mockingbird

(12 spring seasons with detection), Red-headed Woodpecker (13 spring seasons), and Northern Goshawk (15 spring seasons). These examples show that, sometime, a certain amount of luck is required to see a rare species, no matter how alert and vigilant one can be.

Photo: Snowy Owl (top) and Laughing Gull (bottom)

4. Banding Data Analysis

Spring 2021 has the sixth highest banding total since migration monitoring started in its present form in 2002, with 1869 birds of 64 species banded in total (Table 2). It is about 300 birds more than the spring banding average of 2002 - 2019 (1589 ± 498 birds). As noted previously, there were 11 days fully lost due to bad weather (or, about 19% of the period). Six days out of 46 days with banding account for 52.5% of the banding total. A total of eight species were banded in record low numbers (Table 2), notably Least Flycatcher with only one bird banded compared to an average of 13 ± 5 , with a previous low of 6 birds in 2018. Even with reduced hours and mist nets, ten Least Flycatchers were banded in spring 2020. Likewise, only two White-crowned Sparrows were banded this spring, far below the average of 24 ± 17 birds. Large variations occur for this species, from four birds banded in spring 2011 to 69 in 2002, but banding totals in single-digit are quite rare. On the other hand, five species were banded in record high numbers, especially Ruby-crowned Kinglet (see below). Most remarkable is also the 24 Pine Warblers banded: the previous record was of ten birds banded in spring 2017, while usually only one to five Pine Warblers are banded in a spring season (with none at all in four seasons). The banding total of this spring reflects the high numbers of Pine Warbler observed.

Ruby-crowned Kinglet, with a record-shattering 610 birds banded, represents 33% of the seasonal total, and the species most banded this spring. There are great variations in numbers banded of this species, from a low of 55 birds in spring 2012 to a previous high of 292 birds in spring 2014. Most of the captures of Ruby-crowned Kinglet this spring were concentrated in a few days between April 29 and May 6 (Fig.8). 78% of Ruby-crowned Kinglets captured this spring were male. As with seasonal totals, there are large variations in sex-ratio for this species, with proportions of male ranging from 29 to 80%. Golden-crowned Kinglet is the second most banded species this spring, accounting for 13% of the total. With 250 birds banded, it is the third highest total, although far below the record 666 Golden-crowned Kinglets banded in spring 2016. Both Myrtle Warbler and Slate-coloured Junco account for 6% of the season banding total. Their banding totals are the second highest ever for both species. With the addition of Palm Warbler, the top five banded species amount to 64% of the season total.

Typically, only a few species are captured in numbers over 50 individuals while most species are banded in low to very low numbers (Table 1): 35 species have banding totals of five birds or less, representing 4% of the season total. The third ever banded

Eastern Bluebird was among them, an adult female.

American Redstart, with 88 birds banded, has the sixth highest total among all species in 2021. However, this total is also the second lowest for this species across the spring seasons, barely more than the 74 American Redstarts banded in spring 2017: 2017 and 2021 are the only two spring seasons with totals of American Redstarts below 100 birds. Many mist net hours were lost at the end of the season this year (see below), during prime migration time for American Redstart.

Numerous variables affect the capture rates including population dynamics, weather conditions during migration, vegetation changes at the site, food availability, etc. Capture rates varied greatly on a weekly basis (Fig.6). The capture rate is determined by dividing the number of birds caught by the number of hours for which the nets were operated. Thus, variation in capture rate reflects variation in those two parameters, which are themselves dependent upon various conditions (weather being the major one). Mist net hours are primarily lost when weather conditions (i.e. rain or strong wind) render it unsafe to capture birds thus forcing net closure. In spring 2021, weekly capture rates varied greatly from below average to around average to record high. For two weeks, April 24 to May 7, weekly capture rate reached a record high this spring, due to a combination of near record numbers of birds banded and low mist net hours. It is the same combination, but in opposite direction, that produced the record low capture rates of the last three weeks of monitoring.

Weekly numbers of banded birds partially reflect variation in capture rates (Fig.6). The first three weeks of monitoring show above average number of banded birds, the next two have numbers around average, while the last three weeks experienced below average numbers. Banding numbers during the week of May 22 - 28 were a record low of 38 birds, much lower than the previous low of 108 banded birds in 2017. This is likely partly due to banding being disrupted during four days of that particular week, with rain and strong wind precluding all banding for three of them. There were also three days without banding due to wind in the last week of monitoring (June 5 - 10), possibly the reason for such a low banding total of 19 birds, just two birds more than the record low in 2017. In spring 2021, 68% of the potential mist net hours were realized, compared to a range of 58% in spring 2004 to 92% in spring 2010, with an average of $73\% \pm 1$. Poor weather conditions either precluded opening any mist nets for a total of 11 days (21% of the season, evenly distributed early and late in the season), or only a portion of the 15 nets or a portion of the day (Fig.7). Conditions allowed for a complete banding operation (all 15 mist nets opened for six hours, i.e. 90 mist-net hours a day) during 44% of the monitoring period.

Table 1. Number of species banded in spring 2021 at CHRS according to their banding total.

Banding total	1 - 10	11 – 50	51 – 100	>101
Number of species	39	17	4	4

Table 2. Banding total of species in spring 2021 at CHRS, 2002 - 2018 average (and standard deviation), maximum and minimum totals for 2002 - 2018, and number of springs with captures.

Family	Species	2021	Av.	StDev	Max.	Min.	Nb. of springs with capture
Cuckoos	Black-billed Cuckoo	1	2	1	4	1	5
Hawks	Sharp-shinned Hawk	21	19	7	34	10	18
Woodpeckers	Yellow-bellied Sapsucker	1	2	1	5	1	12
	Hairy Woodpecker	2	2	1	3	1	6
	Yellow-Shafted Flicker	1	5	3	12	1	17
Tyrant Flycatchers	Eastern Woodpeewee	1	2	1	3	1	13
	Yellow-bellied Flycatcher	4	13	6	24	3	18
	Traill's Flycatcher	4	14	9	32	4	18
	Least Flycatcher	1	13	5	23	6	18
Vireos	Blue-headed Vireo	2	4	2	8	1	15
	Red-eyed Vireo	6	15	8	39	6	18

Crows & Jays	Blue Jay	21	61	85	264	10	18
Chickadees	Black-capped Chickadee	23	49	89	365	2	18
Nuthatches	Red-breasted Nuthatch	22	11	15	57	1	17
	White-breasted Nuthatch	1	1	0	1	1	2
Creepers	Brown Creeper	58	48	47	200	8	18
Wrens	Winter Wren	5	2	1	4	1	15
Kinglets	Golden-crowned Kinglet	250	146	168	666	3	18
	Ruby-crowned Kinglet	610	137	76	292	55	18
Thrushes	Eastern Bluebird	1	2		2	2	1
	Veery	3	10	6	22	1	18
	Gray-cheeked Thrush	2	3	2	8	1	16
	Swainson's Thrush	14	25	10	43	9	18
	Hermit Thrush	11	15	7	32	6	18
	Wood Thrush	1	2	2	6	1	17
	American Robin	3	7	4	16	1	18
Mockingbirds & Thrashers	Gray Catbird	2	11	5	19	1	18
	Brown Thrasher	2	6	3	12	1	18

Finches	American Goldfinch	1	6	11	41	1	15
New World Warblers	Orange-crowned Warbler	3	10	8	31	2	18
	Nashville Warbler	28	51	57	237	11	18
	Northern Parula	1	4	4	15	1	11
	Yellow Warbler	3	10	7	25	1	16
	Chestnut-sided Warbler	3	14	7	30	4	18
Family	Species	2021	Av.	StDev	Max.	Min.	Nb. of springs with capture
New World Warblers	Magnolia Warbler	23	89	41	198	29	18
	Cape May Warbler	2	5	7	28	1	15
	Black-throated Blue Warbler	7	27	11	64	18	18
	Myrtle Warbler	123	63	56	246	16	18
	Black-throated Green Warbler	17	25	8	41	13	18
	Blackburnian Warbler	4	6	5	18	1	16
	Pine Warbler	24	2	2	10	1	15
	Palm Warbler	96	79	57	219	34	18

	Bay-breasted Warbler	2	4	4	14	1	14
	Black and White Warbler	41	54	17	91	25	18
	American Redstart	88	179	53	273	74	18
	Ovenbird	17	28	10	53	12	18
	Northern Waterthrush	7	4	3	13	1	18
	Mourning Warbler	1	8	4	17	1	18
	Common Yellowthroat	21	38	12	66	23	18
	Wilson's Warbler	2	14	8	34	4	18
	Canada Warbler	5	16	5	26	8	18
New World Sparrows	American Tree Sparrow	14	10	12	52	1	18
	Chipping Sparrow	19	24	26	101	5	18
	Field Sparrow	3	4	7	26	1	11
	Savannah Sparrow	2	2	2	10	1	15
	Fox Sparrow	1	2	1	4	1	14
	Song Sparrow	15	16	10	34	4	18
	Lincoln's Sparrow	3	12	7	25	3	18

	Swamp Sparrow	14	6	3	13	3	18
	White-throated Sparrow	70	56	24	104	13	18
	White-crowned Sparrow	2	24	17	69	4	18
	Slate-coloured Junco	126	54	39	150	15	18
Cardinals	Indigo Bunting	7	3	2	6	1	15
New World Blackbirds	Baltimore Oriole	1	4	3	9	1	6

For 2021, record high captures in red, near record high in orange, record low in blue.
 Av.: average; stdev: standard deviation; Max: Maximum; Min: Minimum; Nb.: Number

Figure 6. Weekly capture rates (top) and number of banded birds (bottom) at CHRS during the spring season (average 2003-2019, minimum and maximum with corresponding year and 2021). Error bars show Standard Deviation.

Figure 7. Weekly proportion of realized mist net hours at CHRS during the spring season (average 2002-20018 and 2021). Error bars show Standard Deviation.

Figure 8. Daily number of captured and recaptured birds at CHRS, spring 2021.

5. Recaptures

The rate of recapture (recaptures include birds banded during the spring season and birds from previous years or other locations) at Cabot Head was quite high in spring 2021. There was a total of 212 recaptures for 155 individuals of 18 species from April 17 to June 10 (Table 3). Among the recaptured birds this spring, 24 birds of four species were banded in previous seasons at Cabot Head (Table 4). The recaptured Sharp-shinned Hawk was banded in October 2018 near Long Point (Ontario). One recaptured White-throated Sparrow was also banded elsewhere. In total, 79% of the recaptured birds were

	Black - throat ed Gr. Warb ler					1		1	6%	
	Pine Warb ler							1	4%	
	Palm Warb ler							1	1%	
	Black -and- Whit e Warb ler				1			1	2%	
	Amer ican Redst art	1	1	4	3	7	3	7	8%	
	Com mon Yello wthro at							1	5%	
Ne w Wo rld Sp arr ow s	Amer ican Tree Sparr ow							1	7%	
	Song Sparr ow							4	27%	
	Whit e- throat ed Sparr ow							1	1%	1

	Slate-coloured Junco							4	3%	
	Total	1	2	4	4	10	3	129		2

sp.: spring; su.: summer; %: percentage of banded birds in spring 2021 recaptured that season; Gr.: Green

Table 4. History of recaptures by species and time of banding for birds banded prior to and recaptured in spring 2021. (All recaptures per individual are included, including within-season recaptures).

B_yr	B_season	species	2018		2019		2020		2021	
			spring	fall	spring	fall	spring	summer	fall	spring
2018	spring	American Redstart	3	1	1	1		1		2
	fall	American Redstart				2		1		3
		Red-eyed Vireo				1				2
2019	spring	American Redstart				1			1	2
		American Redstart			1	1		1		2
		American Redstart			1	1	1			2
		American Redstart			1			1		2

20 20	spring	American Redstart						1	2	2
		American Redstart							1	2
		American Redstart								2
		Black -and- white Warbler					1	2		2
	summer	American Redstart						1		3
		American Redstart								3
		American Redstart						1		2
		American Redstart								3
		American Redstart								3
		American Redstart								3
		American Redstart							3	3

		Black - throat ed Gr. Warb ler						3		3
		Red- eyed Vireo						1		2
		Red- eyed Vireo								2
	fall	Amer ican Redst art								2
		Amer ican Redst art							1	2
		Amer ican Redst art								2

B_yr: Banding year; B_season: banding season Gr.: Green

6. Personnel

For a second year, the pandemics of Covid19 limited the number of volunteers helping with monitoring. However, quality easily overtook quantity, with three returning volunteers and the fourth one staying for almost the entire season. Jackie Lamport has been coming to the station since 2007. For her third visit, Danielle Bootsma-Ungar spent 22 days at Cabot Head this spring. RuiLin Guo took some precious vacation days to volunteer, as she did last fall. And, last but not least, Élise Rigali, for her first-time volunteering, spent 43 days at Cabot Head, from April 29 to the end, June 10. In total, the four volunteers contributed 78 person-days to the spring migration monitoring season. A special thanks to them all!

7.0 Conclusion

Spring 2021 marks an important milestone for the Bruce Peninsula Bird Observatory: it is the 20th consecutive spring of bird migration monitoring at Cabot Head Research Station.

It was good to return to the full protocol after the reduced monitoring of last spring, because of the Covid19 pandemics: bird migration monitoring was done daily from April 15 to June 10, thanks notably to a dedicated team of volunteers. The continuing monitoring effort throughout the years continually adds details and refines the natural history of bird migration on the Bruce Peninsula.

Weather is the proximate factor in driving migration, as well as monitoring: for example, strong South winds brought many migrants this spring but also precluded banding many times. A record number of Ruby-crowned Kinglets were banded this spring, maybe due to unsettled weather concentrating and keeping birds grounded during their peak migration time. Migration is notoriously a very dynamic phenomenon, so being able to operate a long-term, daily monitoring during spring and fall is crucial to truly capture its intricacies. A striking example of the vagaries of migration is reflected in the six days of banding which captured over 50% of the season total. Likewise, 69% of the 1944 Myrtle Warblers counted this spring occurred in only three days.

This spring, there were a good number of unusual records, indicating a sustained observation effort. Among the most notable were the Snowy Owl on April 23 and the first ever Laughing Gull on June 9. Both species of Crossbill were heard and seen a few times throughout the season. However, it would be rather misleading to rank sightings, as every observation brings its own reward, and increases our knowledge, understanding, and appreciation of the natural world. For example, the record number of Pine Warblers observed and captured this spring is really surprising and a clear indication of the need for long-term monitoring to measure population trends over the years.

Cabot Head is truly an amazing place to experience and share the beauty of nature. Continuing migration monitoring at CHRS contributes to the efforts of the CMMN and ultimately to the understanding and monitoring of bird populations.

Acknowledgements

As a non-profit, volunteer-based initiative, the Bruce Peninsula Bird Observatory would not be operable without the overwhelming support of its membership, financial supporters and volunteers. BPBO wishes to thank Ontario Park and Parks Canada (Bruce Peninsula National Park), for their continued support.

The author wishes to thank all the members of the Bruce Peninsula Bird Observatory, for their support during the field season. I would also like to commend the volunteers who helped make the field season efficient and enjoyable. It is an honour and a privilege to work again for BPBO.

Appendix I

Table 5. Season Total of species observed in spring 2021 at Cabot Head Research Station, with maximum and minimum daily totals, number of days with observation, and dates of first and last observation.

Group	Species	Season Total	Daily max.	Daily min.	Days with obs.	First day	Last date
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Ducks , Geese & Swans	Canada Goose	1039	210	1	45	15 April	10 June
	Wood Duck	9	4	1	5	18 April	10 June
	America n Wigeon	14	8	6	2	25 April	8 May
	Mallard	110	6	1	37	15 April	7 June
	Blue- winged Teal	2	2		1	25 April	
	Greater Scaup	17	14	3	2	25 April	8 May
	Surf Scoter	2	2		1	25 April	
	White- winged Scoter	118	73	1	6	15 April	10 May
	Black Scoter	1	1		1	8 May	
	Long- tailed Duck	99	86	13	2	25 April	8 May
	Bufflehe ad	143	26	1	18	18 April	14 May
	Commo n Goldene ye	8	3	2	3	16 April	19 April
	Hooded Mergans er	20	3	1	15	15 April	10 June
Commo n Mergans er	366	26	1	49	15 April	10 June	
Red- breasted Mergans er	225	73	1	31	15 April	10 June	
Grouse & Turkeys	Ruffed Grouse	64	5	1	34	15 April	8 June

	Wild Turkey	29	5	1	12	17 April	12 May
Grebes	Pied-billed Grebe	20	1	1	3	15 April	7 June
	Horned Grebe	39	17	1	8	17 April	4 May
	Red-necked Grebe	16	13	3	2	15 April	25 April
Pigeons and Doves	Mourning Dove	5	1	1	5	19 April	30 May
Cuckoos	Black-billed Cuckoo	43	5	1	18	18 May	10 June
Goatsuckers	Eastern Whip-poor-will	13	2	1	11	18 May	10 June
Hummingbirds	Ruby-throated Hummingbird	84	6	1	29	7 May	10 June
Cranes	Sandhill Crane	117	5	1	43	15 April	9 June
Sandpipers & Phalaropes	Killdeer	22	3	1	16	19 April	24 May
	Greater Yellowlegs	18	5	1	12	19 April	22 May
	Lesser Yellowlegs	2	1	1	2	18 May	19 May
	Spotted Sandpiper	60	4	1	29	4 May	10 June
	Wilson's Snipe	8	2	1	7	15 April	8 June
	American Woodcock	2	1	1	2	15 April	9 May

Group	Species	Season Total	Daily max.	Daily min.	Days with obs.	First day	Last date
Gulls & Terns	Laughing Gull	1	1		0	9 June	
	Ring-billed Gull	551	110	1	45	15 April	10 June
	Herring Gull	203	13	1	50	15 April	10 June
	Caspian Tern	2	1	1	2	18 May	31 May
	Common Tern	34	4	1	20	8 May	10 June
Loons	Red-throated Loon	1	1		1	8 May	
	Common Loon	308	74	1	49	15 April	10 June
Cormorants	Double-crested Cormorant	187	59	1	31	18 April	10 June
Herons & Bitterns	American Bittern	1	1		1	18 May	
	Great Blue Heron	16	4	1	9	28 April	9 June
	Green Heron	0	0		1	15 May	
Vultures	Turkey Vulture	268	21	1	41	16 April	10 June
Osprey	Osprey	4	1	0	6	28 April	10 June
Hawks, Kites & Eagles	Bald Eagle	94	6	1	50	15 April	10 June
	Northern Harrier	17	3	1	13	15 April	25 May
	Sharp-shinned Hawk	259	27	1	32	16 April	4 June

	Cooper's Hawk	5	2	1	4	4 May	2 June
	Red-shouldered Hawk	7	2	1	6	17 April	10 June
	Broad-winged Hawk	75	34	1	13	19 April	2 June
	Red-tailed Hawk	34	6	1	16	17 April	10 June
	Rough-legged Hawk	10	3	1	6	1 May	24 May
	Golden Eagle	0	0		1	5 May	
Typical Owls	Snowy Owl	1	1		1	23 April	
	Great Horned Owl	3	1	1	3	15 April	3 June
Kingfishers	Belted Kingfisher	26	2	1	23	17 April	17 May
Woodpeckers	Red-headed Woodpecker	2	1	1	2	16 May	30 May
	Red-bellied Woodpecker	1	1		1	21 May	
	Yellow-bellied Sapsucker	20	10	1	9	15 April	16 May
	Downy Woodpecker	9	2	1	8	15 April	8 May
	Hairy Woodpecker	13	3	1	11	19 April	5 June
	Northern Flicker	223	29	1	41	15 April	10 June

	Pileated Woodpecker	48	3	1	37	15 April	9 June
Falcons	American Kestrel	22	4	0	13	20 April	16 May
	Merlin	39	3	0	31	18 April	10 June
	Peregrine Falcon	3	1	1	3	26 April	14 May
Tyrant Flycatchers	Olive-sided Flycatcher	1	1		1	1 June	
	Eastern Wood-Pewee	11	3	1	8	20 May	10 June
	Yellow-bellied Flycatcher	9	3	1	5	30 May	8 June
Group	Species	Season Total	Daily max.	Daily min.	Days with obs.	First day	Last date
Tyrant Flycatchers	Alder Flycatcher	2	2		1	3 June	
	Least Flycatcher	19	8	1	6	14 May	2 June
	Eastern Phoebe	73	3	1	50	15 April	10 June
	Great Crested Flycatcher	16	3	1	12	18 May	10 June
	Eastern Kingbird	21	5	1	11	14 May	4 June
	Trail's Flycatcher	4	1	1	4	19 May	8 June
Vireos	Blue-headed Vireo	7	2	1	5	27 April	21 May
	Warbling Vireo	2	2		1	19 May	

	Red-eyed Vireo	124	11	1	23	18 May	10 June
Crows & Jays	Blue Jay	3080	251	1	35	6 May	10 June
	American Crow	380	30	1	52	15 April	10 June
	Common Raven	121	29	1	39	15 April	9 June
Larks	Horned Lark	3	3		1	23 May	
Swallows	Tree Swallow	241	28	1	42	17 April	10 June
	N. Rough-winged Swallow	24	5	1	14	7 May	9 June
	Bank Swallow	1	1	0	2	7 May	18 May
	Cliff Swallow	1	1		1	3 May	
	Barn Swallow	21	6	0	13	3 May	2 June
Chickadees	Black-capped Chickadee	690	49	1	52	15 April	10 June
Nuthatches	Red-breasted Nuthatch	379	48	1	43	19 April	10 June
	White-breasted Nuthatch	2	1	1	2	19 April	14 May
Creepers	Brown Creeper	130	18	1	25	15 April	15 May
Wrens	House Wren	6	1	1	6	20 May	9 June
	Winter Wren	26	4	1	16	15 April	5 June
Kinglets	Golden-crowned Kinglet	899	183	1	29	15 April	14 May

	Ruby-crowned Kinglet	2157	361	2	34	15 April	20 May
Thrushe s	Eastern Bluebird	79	12	1	23	18 April	10 June
	Veery	4	1	1	4	14 May	2 June
	Gray-cheeked Thrush	2	1	1	2	30 May	31 May
	Swainson's Thrush	15	4	1	8	17 May	31 May
	Hermit Thrush	17	3	0	12	15 April	15 May
	Wood Thrush	3	2	1	2	9 May	16 May
	American Robin	873	685	1	48	15 April	10 June
Mockin gbirds & Thrasher s	Gray Catbird	12	2	1	9	15 May	9 June
	Brown Thrasher	45	6	1	25	2 May	9 June
Starlings	European Starling	51	15	1	8	27 April	20 May
Waxwin gs	Cedar Waxwin g	319	104	1	14	20 May	10 June
Group	Species	Season Total	Daily max.	Daily min.	Days with obs.	First day	Last date
Old World Sparrow s	House Sparrow	8	1	1	8	20 May	10 June
Pipits	American Pipit	30	15	1	8	9 May	22 May
Finches	Purple Finch	181	91	1	21	27 April	5 June
	White-winged Crossbill	1	1		1	17 May	

	Red Crossbill	3	1	1	3	29 May	31 May
	Pine Siskin	55	27	1	5	2 May	21 May
	American Goldfinch	383	36	1	34	18 April	10 June
	Evening Grosbeak	1	1		1	13 May	
New World Warblers	Tennessee Warbler	29	21	1	6	16 May	21 May
	Orange-crowned Warbler	7	2	1	6	7 May	18 May
	Nashville Warbler	129	26	0	36	28 April	10 June
	Northern Parula	36	8	1	13	28 April	9 June
	Yellow Warbler	53	7	1	21	7 May	8 June
	Chestnut-sided Warbler	51	7	1	24	15 May	10 June
	Magnolia Warbler	70	14	1	18	13 May	4 June
	Cape May Warbler	40	9	1	11	28 April	20 May
	Black-throated Blue Warbler	21	4	1	11	9 May	31 May
	Myrtle Warbler	1944	942	1	34	15 April	23 May
	Black-throated Green Warbler	205	18	1	44	27 April	10 June

	Blackburnian Warbler	49	13	1	14	5 May	1 June
	Pine Warbler	282	96	1	24	19 April	25 May
	Western Palm Warbler	643	102	1	26	27 April	24 May
	Bay-breasted Warbler	16	4	1	6	15 May	23 May
	Blackpoll Warbler	7	3	1	5	19 May	10 June
	Black-and-white Warbler	175	32	1	37	27 April	10 June
	American Redstart	661	39	9	29	13 May	10 June
	Ovenbird	76	11	1	25	7 May	10 June
	Northern Waterthrush	12	2	1	10	5 May	4 June
	Mourning Warbler	5	1	1	5	22 May	8 June
	Common Yellowthroat	155	15	1	26	14 May	10 June
	Wilson's Warbler	7	2	1	4	19 May	1 June
	Canada Warbler	8	2	1	6	18 May	7 June
New World Sparrows	Eastern Towhee	7	2	1	5	15 May	10 June
	American Tree Sparrow	42	5	1	19	15 April	9 May

	Chipping Sparrow	103	13	1	30	15 April	10 June
	Field Sparrow	7	2	1	6	2 May	25 May
	Savannah Sparrow	8	3	1	6	5 May	19 May
Group	Species	Season Total	Daily max.	Daily min.	Days with obs.	First day	Last date
New World Sparrows	Fox Sparrow	2	1	1	2	18 April	28 April
	Song Sparrow	120	8	1	47	15 April	10 June
	Swamp Sparrow	19	6	1	9	28 April	17 May
	White-throated Sparrow	282	35	1	35	27 April	10 June
	Lincoln's Sparrow	5	1	1	5	14 May	19 May
	White-crowned Sparrow	43	11	0	12	6 May	20 May
	Dark-eyed Junco	489	75	1	34	15 April	19 May
Cardinals & allies	Scarlet Tanager	11	2	1	8	18 May	5 June
	Northern Cardinal	1	1		1	19 May	
	Rose-breasted Grosbeak	8	4	1	5	16 May	8 June
	Indigo Bunting	35	7	1	14	14 May	10 June

New World Blackbirds	Bobolink	6	2	1	4	1 May	9 June
	Red-winged Blackbird	382	70	1	35	15 April	9 June
	Eastern Meadowlark	5	1	1	5	15 April	25 May
	Rusty Blackbird	164	115	1	8	27 April	17 May
	Common Grackle	1136	300	2	40	18 April	10 June
	Baltimore Oriole	35	9	1	10	14 May	3 June

Appendix II

An edited version of the blog published during the spring 2021 monitoring season.

It is on! Spring 2021 migration monitoring has begun. April 21

As I type these words, a windstorm is raging outside with the frequent snow squalls, as befits a typical late April day. It is as good a time as any to write the first blog of the season, that is, if my cold-stiffened fingers let me!

Monitoring began as it should on April 15, with all 15 nets open [...]. That first day was cold and overcast but windless, with nets opened at 6:00am, 30 minutes before sunrise. Compared to early April, when temperatures soared to 20C and birds were actively migrating in droves, it appeared very quiet. At least in the early hours as only 4 birds were captured from opening to the 9:30 net check. Perfect! I thought. It is good to ease gently back into the job. I spoke too soon though as there was an avalanche of captures in the last 2 hours, with a total of 116 birds being banded during this short time! Both species of kinglets were the guests of honour, of course, but the 21 Dark-eyed Juncos made a strong showing too. The first Hermit Thrush and Yellow-rumped (Myrtle) Warblers of the season were also among the banded birds. [...]

The following days were not as busy, banding-wise, with daily totals ranging from 6 to 20 birds when nets could be opened. The return of birds in spring is always an exciting time, bringing FOY joy (first-of-year): 39 species were detected on the first day, April 15. Noteworthy FOY sightings afterwards were (in taxonomic order): two adult Broad-winged Hawks on April 19 over West Bluff; Killdeer and Greater Yellowlegs both on April 19; Eastern Bluebird on April 18 (though it was first detected on April 10); a Fox Sparrow banded on April 18; and one lonesome but joyfully singing little yellow jazzbird, an American Goldfinch, on April 17.
[...]

Riding the tailwinds in droves! April 28

It is another morning of inclement weather at Cabot Head: pouring rain and strong East wind preclude us from opening the nets but not from observing in the dry confines of the porch (more on that later). It has been a good week, with the typical boom and bust of bird migration.

On April 22, we banded 101 birds of 10 species (about 75% kinglets), the second-highest total so far of the season: a busy day indeed. And a rare one! Banding more than 100 birds in one day happens between two to eight time in any spring season. [...] The following days were much quieter for banding (with totals of 19 and 7 birds banded, for example), a usual pattern in spring migration. We had fun though, watching our local Wild Turkeys prancing around. Although not a migratory bird, I enjoy watching them nonetheless: the iridescence of their feathers is simply magnificent, bringing glitters of copper and bronze in the black and brown plumage.

On April 23, yelling gulls at the rocky point attracted our attention. A Snowy Owl was being dived bomb by the gulls! The heavily barred owl was sitting on the tip, annoyed at the harassing gulls, but otherwise not moving. The gulls finally went away but not the Snowy Owl: it stayed all day long at the tip, offering us great views. It is only the third spring with observations of that species.

A fierce West wind and snow squalls in the morning of April 25 prevented banding but not observations, especially over Georgian Bay where a strong movement of waterfowl was underway. Many flocks of Long-tailed Ducks were seen, for a total of 86 birds. A few White-winged Scoters flew by as well, an all-black duck except for striking white secondaries. Two Surf Scoters, a few Greater Scaups and a fun mix of American Widgeon and Blue-winged Teals were also observed. The three species of Mergansers were detected, with Red-breasted the most abundant. Horned and Red-necked Grebes were seen flying low over the water. It was much quieter on land except for one large flock of kinglets.

Nicer weather returned the following day, clear and calm but cold. That day, April 26, was mostly uneventful but for a large group of 24 Common Ravens playing in the sky. Things were about to change abruptly as strong south winds blowing without a pause from Texas were forecast.

And sure enough they blew like only winds coming from Texas can! On April 27, the windstorm made us close nets quickly in the most exposed locations, and after a few more hours, all of them eventually as the wind intensified in mid-morning. Free from

banding we focused our eyes and binoculars on the immense stream of birds flowing through Cabot Head like a feathered river in spring flood. A total of 53 species, the highest of the season so far, were detected including five species of warblers (the forest gems), with many species in incredible numbers. American Robins for example, were seen milling in flocks of up to 150 birds, with a morning estimate of over 700 birds. The most abundant bird though was the Yellow-rumped Warbler: we estimated over 900 birds moved through Cabot Head. It was impossible to have a precise count of course, but I am confident that this number gives an accurate “picture” of the migration. Yellow-rumps were everywhere, feeding voraciously on the ground (where a dozen could be seen in a tiny patch, for example) or in the shrubs and trees, or suddenly aloft in loose flocks streaming through the air against the wind.

Pine Warblers were also quite frequent with a record high of 50 birds counted. Even if it is only a fraction of the Yellow-rump number, it is the highest daily total ever for Pine Warblers in 20 years of spring monitoring. On April 30, 2010 46 were counted but days with more than ten Pine Warblers are very rare. In fact, between spring 2002 and 2020, there were only ten days with double-digit observations, less than 2% of the 559 days with sightings of Pine Warbler.

Besides Pine Warblers, there were a few Palm (15 birds), the first Black-throated Green (9 total with one banded bird) and the first Black-and-white Warblers (5 birds) of the season. The White-throated Sparrows have also arrived on that day. Another FOY joy was one Blue-headed Vireo. Purple Finches put on a show too, adorning the bare branches of trees with their rich red, singing as if spring was here, and all in all being in record high numbers! Just like Pine Warblers, they broke the previous one-day record of 83 birds on April 24, 2016: 91 Purple Finches were counted on April 27 this spring, a remarkable number. It is actually the fourth day across the springs with double-digit total! Quite often during the morning, one would see 3 or 4 male Purple Finches perched in the same tree, or little flocks flying over the canopy.

Even after 16 seasons at Cabot Head, I am still in awe and delighted by these mornings of intense migration, when the Earth herself seems to pulse with birds. The magic kept happening, as I discovered a Cape May Warbler feeding in a tall spruce in late afternoon of that fantastic April 27. An early bird, it beats the previous early date by two days.

The morning of April 28, as I wrote in the introduction, was wet and windy. Nonetheless, observations from the porch in early morning were good, with - once again - big numbers of Yellow-rumped Warblers (130 birds), Pine Warblers (35 birds), one Cape May Warbler, and the First of Year Northern Parula. This exquisite and delicate warbler showed itself in clear view for a little while, unaware of making history by being the first Northern Parula seen in the month of April at Cabot Head! (Earliest date: May 2, 2013). A FOY Swamp Sparrow was also observed feeding on the ground, looking quite wet. After some activity, birds seem to have dispersed and disappeared: with quiet woods, we can catch our breaths and happily wait for another boom!

A green tsunami of little fluffballs! May 5

If you recall, I left my story in mid-morning of April 28. Well, that day was not over yet and we did see many more birds moving and feeding under a grey sky at Cabot Head. In

the afternoon, there was even the FOY Nashville Warbler, the eighth species of warblers for the day. Now if it were mid-May, seeing eight species of warblers would not be that difficult, however April is a different story [...].

So, it is only fair to list again these eight species seen on April 28, 2021 [...]: Nashville Warbler, Northern Parula, Cape May, Yellow-rumped, Black-throated Green, Pine, Palm, and Black&White Warblers. It will not be until May 5 that we will detect more warblers. But let's not get ahead of ourselves.

During the past week we experienced a see-saw of extremely busy banding days and stormy and rainy days when nets stayed closed. It is more than likely that the unsettled weather concentrated and kept birds around. What took us by surprise though, were the waves upon waves of Ruby-crowned Kinglets, which were everywhere in the cedars and the birches, chattering away and hungrily devouring midges. They also hit our nets like a gentle green tsunami of little fluffballs. Between April 29 and May 5, we banded an amazing total of 419 Ruby-crowned Kinglets! (With a season total, so far, of a cool round 500 birds) Now for some perspective on that number, the highest *season* total is 268 RCKI in 2014. The three main waves this week were on April 29, with 132 banded kinglets, May 2 with 77 and May 5 with 149 RCKI! (The previous highest daily total was 83 birds on April 24, 2006).

Needless to say, these high kinglet numbers pushed daily totals to record high: 278 birds of 14 species on April 29 (second highest daily total ever); 164 birds of 12 species on May 2; 205 birds of 18 species on May 5. [...] We also banded our FOY Northern Waterthrush, a species often detected through its loud song, which brought a total of 9 species of warblers on May 5.

Other new arrivals include one Barn and one Cliff Swallows among a dozen Tree Swallows on May 3, two White-crowned Sparrows in a sea of White-throated Sparrows in the afternoon of May 4, as well as an eastern Towhee first detected by its call and then seen kicking the leaf litter with both feet looking for food.

[...] After so many little ones, it was wonderful to have a majestic king to admire tonight: two immature Golden Eagles were playing in the wind in the perfect evening light.

The ebb and flow of spring migration. May 11

Like a great tidal wave, bird migration in spring can wash over the land and fill every twig, bough, and branch with birds. Or it could retreat and leave you straining your eyes and ears for a sign, a song, a feather. It is the typical boom and bust linked with local, regional, and continental weather patterns.

The last week was a prime example here at Cabot Head: a few busy days were interspersed with quiet and cold days. On May 6, we banded once again more than a hundred birds [...]. There were 51 Ruby-crowned Kinglets banded among the total of 114 birds of 17 species, including the FOY Blue-headed Vireo. The following day was the ebb, with only 18 birds banded. Very few birds were around, but we had the FOY Orange-crowned Warbler in our nets, FOY Ruby-throated Hummingbird, and in the afternoon a delightful cloud of swallows raking the air above Wingfield Basin, feeding on the aerial plankton [...]. There were about 60 Tree Swallows, spiced up with one Northern Rough-winged Swallow, one Bank and two Barn Swallows.

On May 8, World Migratory Day, the cold and windy weather reminded us that early May can be bitter even in the extreme south part of Canada. Despite all nets open for the normal 6 hours, the haul was a meagre 25 birds with very little activity in the trees. The waterfowl traffic over Georgian bay was steady and constant however with a total of 74 Common Loons (in ones, twos, and threes) and one Red-throated Loon, 73 White-winged Scoters in a few flocks, 73 Red-breasted Mergansers in fast and furious little groups (this species is the fastest duck under the sky - or over the water). We also detected in smaller numbers Long-tailed Ducks, Buffleheads, American Wigeons, and Greater Scaups. One lone Common Tern was briefly spotted by Danielle in early morning.

May 9 dawned clear and cold, with nets opened at 5:45am as usual. It was quiet for the first three hours or so but with warming temperatures, it changed suddenly when several waves moved through, filling up the nets quickly. At the end of 6 hours, we did not break the 100-bird barrier but got very close, with 92 birds banded of 18 species. Once again, Ruby-crowned Kinglets got the crown (bad pun sadly intended) with 28 birds but the Palm Warbler was a close second with 24 birds banded. Despite very little time to observe, a FOY Black-throated Blue Warbler was seen, one of the 11 species of warblers detected that day, the highest total so far. [...] Not many birds were seen or heard on May 10 & 11, under a persistent cold West wind [...].

And a bear ran through it! May 19

The arrival of hummingbirds (May 7 this spring) heralds for me a new phase of spring, which could be dubbed the “warm spring”: it is when warmth indeed returns [...], when flowers bloom and trees leaf out, and when the long-distance migrants are returning in earnest! These migrants are coming back from their wintering grounds in Central or South America or the West Indies, arriving later in spring and leaving earlier in fall to take advantage of the (short) burst of life of the northern latitudes. [...]

on May 13 [...] we witnessed the first real push of long-distance migrants at Cabot Head with a total of 16 species of warblers. The most numerous among them were Palm Warblers, followed by Yellow-rumped and Black-and-white Warblers. The first American Redstarts were finally detected, May 13th being the latest date ever (tied with 2002): they were eager to arrive and must have been somehow blocked (by bad weather?) because it was not one but nine birds that we detected. Very often, the First of Year bird is singular, like the FOY Magnolia Warbler seen on that same day. Two FOY Rose-breasted Grosbeaks were also heard and seen, just to contest the theory of the single FOY. A high-flying and high-calling Evening Grosbeak was another highlight of that May 13! May 14 dawned clear and calm. There was less bird activity throughout the morning, although 17 species of warblers were counted, with the FOY COYE (Common Yellowthroat) at the very end of the count period. Indigo Bunting and Baltimore Oriole were the other FOY of the day. The following day, May 15, was also clear and calm but it got busier: a cool 77 birds of 24 species were banded. We managed to put on some good observations too, despite being occupied at the nets: 17 species of warblers were again detected with FOY Chestnut-sided and Bay-breasted Warblers. Palm Warblers were again the most numerous species of warblers.

For a third day in a row, there was no wind nor clouds on May 16: that does not happen

often along the shore of Georgian bay. It was almost a repeat of the previous day, with 62 birds banded of an impressive 28 species and 18 species of warblers (FOY Tennessee Warbler). However, numbers observed were not as high. A nice little “flock” of six Baltimore Orioles together was great fun to see.

The wind came back with a vengeance on May 17, furiously blowing from the south and precluding the opening of most nets. Numbers of birds were low overall but diversity quite high, with 74 species (FOY Gray Catbird and Swainson’s Thrush), including 19 of warblers. A lone White-winged Crossbill uttering its characteristic call attracted our delighted ears and eyes to its bouncing flight.

The strong south wind kept at it throughout the day and unto the night. It was still blowing at dawn on May 18 but died suddenly shortly after sunrise, allowing us to re-open all the nets. Banding was scarce, though, on that day, with only 16 birds captured. However, birds in trees, on water, or in the sky, kept us very busy, with many FOY (Eastern Wood Pewee, Great crested Flycatcher, Red-eyed Vireo, Blackpoll and Canada Warblers, and Scarlet Tanager). In total, we detected a spectacular 84 species during the 7 hours of monitoring, including 22 species of warblers! Among them, there was a booming American Bittern, a vociferous Eastern Whip-poor-will, a cooing Mourning Dove, a raspy Caspian Tern, an echoing Black-billed Cuckoo. Also, a little flotilla of over 30 Red-breasted Mergansers on the now smooth waters of Georgian Bay, with several Common Loons scattered about. A lingering Rough-legged Hawk was seen flying low over the Pine Barrens but no Red-tailed or Broad-winged Hawks. Odd how some species can be missed during these high diversity days: no Catbird meowed, no thrushes sang, no White-throated Sparrows, no Lincoln’s or Swamp Sparrows (both secretive species seen - seen! the previous day). [...] achieving 80 species or more in a day is already quite rare: only 19 days as such in the previous 19 spring seasons.

As if to illustrate that point, “only” 62 species were detected on May 19 (including Lincoln’s Sparrow! Why, oh, why?). A FOY Wilson’s Warbler was caught in the nets, a SOY (Second-of-the-Year) was seen later in the morning (sans ring).

All throughout the past week, Blue Jays have been building in numbers, with their noisy flocks now up to 75 or even 100 birds.

The merry month of May also brings the return of nightjars, these crepuscular large-mouthed cryptic moth hunters. At dusk on May 17, I heard the call of the Eastern Whip-poor-will, one of my favourite sounds of the woods. [...] On May 18, after a truly warm day, I lingered on the porch in the evening, waiting for a familiar “peent”: I heard it at precisely 8:45pm, the telltale call of the Common Nighthawk. After some searching, it was a pleasure to the eye to watch the dark silhouette fluttering against an orange sky. I found two of them in the western horizon and enjoyed their return.

With Common Nighthawks in our skies, the warm spring has most definitely arrived! But what about the bear? I almost forget that one morning while checking the nets we suddenly heard crashing through the trees. A big beast on which we never laid eye, it walked right through a net, tearing it apart: these nets may catch birds but obviously cannot stop a walking bear.

Fat fuels the journey! May 25

Fat is the primary fuel for bird migration. To sustain the immense energy demand of sustained flight, fat provides, weight for weight, 7-9 times more energy than alternative fuels, and thus ensures the maximum energy storage for the minimum weight gain. An added advantage is that its oxidation yields water, contributing to another need during long-distance flight. Before migrating, birds accumulate large reserves of fat by eating almost constantly, a behaviour called hyperphagia. As always in nature, there are tremendous variations between species and even between populations of the same species. Depending on their migration, birds may need to stop and “refuel” during so-called stopovers, pointing to the need of finding good foraging habitats along the entire path of their travel. During bird banding, the amount of food deposited by migratory birds can be easily evaluated from their body weights and their fat ‘scores’ based on the yellowish fat that can be seen through the skin when the feathers are blown aside. The fat score is on a scale of zero to seven: at Cabot Head, very often, birds have a fat score of 3 or 4, but birds with no fat at all are also captured. They will need to replenish their stores before embarking on the next leg of their journey. The highest score, 7, is extremely rare to encounter. Of course, it is a visual score and there could be variations in how banders interpret the scale but a “seven” bird is fondly nicknamed a butter bird: the bird is bulging with fat from the furculum (the cavity under the neck) to the wing pits and the abdomen. In the previous 19 years of banding, only seven birds have been given a score of 7, including two Swainson’s Thrushes.

This spring, on May 21, we caught another butter bird, a Swainson’s Thrush with a fat score of 7! Its weight was 40.1g, an astonishing 30% more than the other Swainson’s Thrush caught on that day (weight of 31.3g with a fat score of 4). The average weight of the 445 Swainson’s Thrushes banded in the spring between 2002 and 2020 is 30.9g (2.8g) and only three previous thrushes weighed more than 40g (with a record of 43.2g in spring 2017). [...]

This past week we experienced lots of unsettled weather, mostly with strong South wind precluding most nets from being open and one morning of much-needed rain. As a result, migration was not very active, although the FOY Cedar Waxwings were seen on May 20. This species is always detected quite late at Cabot Head. Large flocks of Blue Jays were also a daily occurrence: the northern fringe of this mostly sedentary species is migratory and Blue Jays can be seen sometime in impressive flocks of over a hundred birds milling around in the wind along the shoreline at Cabot Head.

A few Common Terns have taken residence in Wingfield Basin and the adjacent shallow lakes, thrilling us with their acrobatic flight. [...]

Red-eyed Vireos have finally returned from wintering in the Amazon Basin, with two birds first detected on May 20. A few individuals are now incessantly proclaiming their presence by their perpetual singing. [...]

Many other species have also started singing and establishing territories in the fading spring, the ubiquitous American Redstarts chief among them but also Ovenbird, Black-throated Warbler, Black-and-white Warbler and the newly arrived Black-billed Cuckoo. I also briefly heard the singing of a Mourning Warbler on May 22[...]

(I can’t live through) The slow moving of the end of migration. June 2

It is now June, when spring is rushing to an end, when days are getting longer and longer, birds are singing louder and louder, and migration is becoming thinner and thinner. It is the normal order of things, the usual turning of nature cycles, the end of the great northward rush.

Nonetheless, there are still migrant birds moving through, even though it is more a trickle than a gushing stream. Some years there are quite a few migratory birds to be seen on the Bruce Peninsula at this time, others not so much. It seems that we are in a low spring for late migrants this year. Why? This is the question!

The last week saw the return of good, mostly calm weather, with some mornings on the cold side of things. Maybe the nice weather allowed the late migrants to keep on moving towards their boreal breeding grounds without really stopping and pleasing us with their presence. As expected, the first Gray-cheeked Thrush (in a net) and Yellow-bellied Flycatcher (in our ear...calling!) were detected, both on May 30. This last species, breeding in coniferous forests and wooded peatlands in the Boreal and subarctic realms, always arrives at Cabot Head in late May or early June. Indeed, they spend barely over two months on their breeding grounds before heading back south in August.

We call them late migrants but they are right on time! It is simply that they arrive at the end of spring migration season. Another one of them is the Olive-sided Flycatcher, with one seen on June 1: they are usually more often heard than seen. [...]

Saying goodbye to Spring and Cabot Head! June 8

The end of another bird migration monitoring is now upon us: nets were furled one last time on June 10th, taken down and stored away for the summer. It is almost hard to believe but summer is now here with birds on breeding territories, busily singing and building nests, heat bearing down from the sky, insects and flowers in full bloom.

It was a very, very slow last week, not helped with three consecutive days of intense windstorms, when no banding was possible and very little bird activity was to be had. During this last week there were a few large flocks of Blue Jays milling around on their way to the northern fringe of their breeding grounds. Cedar Waxwings were also seen in bigger numbers, easily detected with their high shrill calls. But most of the birds we banded and counted were now locals on their territory. [...]

I observed Common Nighthawks on two evenings, 25 birds on June 4 and 11 birds on June 6. It is always a nice treat to see their fluttering flights and hear their nasal call, sometimes accompanied by a boom!

On June 9, the second last day of monitoring, while I was closing the net near Georgian Bay, I spied a gull on the shoreline with a black hood. I was instantly on high alert and ran to the shore: the regular gulls here, Ring-billed and Herring, have a white head. Maybe scared by the commotion, the gull took off and flew away but not before I had a good look at its black hood, red bill, wings with solid black tips and wide white band on the trailing edge. The bird flew towards the "tip", the sliver of land that marks the entrance to Wingfield Basin. Indeed, luck was with us: we found the bird again resting among much bigger Ring-billed Gull, giving us perfect views and lots of time to look at all its features. It was a Laughing Gull in perfect breeding plumage, the first record for Cabot Head and Bruce County, for that matter. It is a gull very partial to the seashore

from the Gulf of Maine all the way to the Yucatan Peninsula. [...] “Always expect the unexpected!” It is certainly a very nice way to end a season!