

11.0 BIRDS OF THE NIAGARA REGION

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The Niagara Region is particularly rich in the number and variety of birds it supports. These abundant birds include those that live here the entire year, those that stay here only during the summer or winter and those that migrate through the Region to and from their breeding grounds. In this article we first discuss the more than 365 species that have been found in Niagara over the years. We indicate how often these birds can be observed (abundance) and the time of year they can be seen (occurrence.) We then discuss birds that breed in the Niagara Region and how widespread this breeding is. Unfortunately, some breeding birds have been negatively affected by the West Nile Virus, which arrived here in 2002. We conclude with some remarks on its impact in Niagara.

We have used many sources of data in preparing the lists of Niagara birds presented here. Two early publications stand out: *Birds of the Niagara Frontier Region* by Beardslee and Mitchell (1965) and *Bird Life of Canada's Niagara Frontier* by Sheppard (1970). See also the update by Mitchell and Andrie (1970).

These books report very thoroughly on birds in Niagara prior to 1965. However, after that date information on Niagara bird life exists mostly in the form of scattered articles, nature club publications and field notes. In fact, it was this lack of a single volume containing bird data beyond 1965 that prompted us to write *Niagara Birds* (Black and Roy, forthcoming), a book that focuses on the period from 1966 to 2006.



Red-headed Woodpecker



Common Tern

SOURCES OF DATA

The many sources of data that were consulted, both in preparing the list of birds of the region described here and in the preparation of *Niagara Birds*, are as follows:

Buffalo Ornithological Society (BOS)

The society provided us with verified accounts in their published noteworthy records and with the accumulated results of their bird counts held in Niagara in April, May and October.

Audubon Christmas Bird Counts

Data from annual counts held in four different locations are available. The Buffalo Count (1966 to 2006) and the St. Catharines Count (1982 to 2006) were completed each year in the period from mid-December to Christmas day. The Niagara Falls Count (1966 to 2006) and the Port Colborne Count (1986 to 2006) were completed each year between Boxing Day and the first week of January.

Ontario Breeding Bird Atlas

During two five-year periods—the first from 1981 to 1985 and the second from 2001 to 2005—hundreds of volunteers participated in an ambitious undertaking to map the distribution and abundance of breeding birds in Ontario. These two projects have generated valuable data leading to a more comprehensive understanding of breeding birds in the province. The results are compiled in the *Atlas of Breeding Birds of Ontario* (Cadman et al. 1987) and the *Atlas of Breeding Birds of Ontario, 2001-2005* (Cadman et al. 2007).



Great Blue Heron

Other sources

The accepted records of the Ontario Bird Records Committee provided fully documented data of rare birds observed in the region. Additional publications referenced include *Ontario Birds*, *Birders Journal* as well as the National Audubon's publications *American Birds*, *Field Notes* and *North American Birds* and the American Birding Association's publication *Birding*.

The Breeding Bird Survey, the Grimsby Spring Hawk Watch, the Hamilton Naturalists Club Noteworthy Records, the Natural Heritage Information Centre, the Ontario Shorebird Survey and articles on the birds of Niagara by (Black 1997), Cheskey et al. (2003) McCracken et al. (1996), Riley et al. (1996) and Wood (2004) were consulted. Data from local birders were also used in constructing the tables, mainly from John Black 1966-2006, Harold Lancaster 1966-1978, Kayo Roy 1983-2006, Dan Salisbury 1966-1971, Alan J. Smith 1955-2006 and the contributors to the BOS Noteworthy Records, such as Robert Andrie, Harold Axtell, Gordon Bellerby and a great many others.

No discussion of the birds of Niagara would be complete without a list of locations that are particularly rich in birds. These include the Adam Beck overlook on the Niagara River in Niagara Falls, the Beamer Memorial Conservation Area in Grimsby, the Grimsby sewage lagoons, the Harold Mitchell Nature Reserve in Long Beach, Malcomson Eco-Park and the Port Weller piers at the mouth of the Welland Canal in St. Catharines, Morgan's Point in Burnaby, the mouth of the Niagara River in Niagara-on-the-Lake, Mud Lake in Port Colborne, the Smithville sewage lagoons, the Wainfleet Bog and Erie Beach and Waverley Beach in Fort Erie. This is only a short list of birding hotspots. Many more are described in our book *Niagara Birds*.



Virginia Rail

ABUNDANCE AND OCCURRENCE

Tables 1, 2 and 3 present lists of all the species of birds that have been observed in Niagara, along with estimates of their abundance and occurrence. Note that the entries here are those presently planned for *Niagara Birds*; some minor changes may occur prior to the publication of the book.

The birds are listed in the order approved by the American Ornithological Union (AOU), and the English and Latin names of the species conform to those in the AOU checklist, 7th edition (AOU 1998 and all supplements through 2006).

The data are organized by seasons.

Spring Season: March through May.

Summer Season: June to mid—August.

Fall Season: mid - August through November.

Winter Season: December through February.

The scheme used for describing abundance and occurrence is taken in part from the Annotated Checklist of the Birds of Ontario (James 1991). Where the abundance of a species has changed over the years, the abundance in the table will be based on the period from 2001 to 2006. Note that the absence of a spring or fall transient abundance in the table does not mean the bird does not migrate through our region in the spring or fall but only that its migration is difficult to recognize or has not been studied. On occasion, the presence of many birds residing in the region makes it difficult to recognize which birds are transients.



Mute Swan



American Robin

Abundance

Very Common - observed annually on most days at many locations, often in large numbers.

Common - observed annually on most days at many locations in small numbers.

Uncommon - observed annually on many days at a few locations in small numbers.

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| Rare | - observed annually or almost annually at a few locations in very small numbers, often on only a few days, and with difficulty unless at a known location. |
| Occasional | - not observed annually though always anticipated; often only a single individual observed. |
| Extremely rare | - an extraordinary observation with five or fewer Niagara records; the probability of recurrence very low. |
| Extirpated | - formerly resident in Niagara; no longer observed. |
| Extinct | - formerly observed in Niagara; no longer exists anywhere |

Occurrence

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| Resident | - regularly spends one or more seasons in Niagara. |
| Transient | - regularly migrates through Niagara, traveling to their breeding grounds in the spring or returning to their wintering grounds in the fall. |
| Straggler | - remains in Niagara after migration, usually in small numbers. |
| Visitor | - irregularly wanders into Niagara, usually in small numbers. |
| Introduced | - have had human assistance in establishing themselves on the North American continent. |
| Hypothetical | - identification uncertain; possibly an escaped captive bird. |

BREEDING BIRDS

Table 4 presents breeding bird results obtained in Atlas Region 11, which covers an area that closely conforms to that of the Niagara Region except for two small departures along the western boundary¹. Atlas Region 11 was divided into 25 squares, each 10 km X 10 km. In Table 4 the number of these squares reporting possible breeding, probable breeding or confirmed breeding of each species in the two atlases is given. In addition, data from the second Atlas for those species which are not known to breed in Region 11 or which bred infrequently are included. The breeding evidence levels are defined as follows:

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|-----------|--|
| Possible | - the atlaser saw or heard the species singing during the breeding season in suitable nesting habitat. |
| Probable | - the atlaser observed a pair of birds, territorial behavior, a courtship display, an adult visit to a probable nest site, agitated behavior, anxiety calls of an adult, a brood patch on an adult or nest building. |
| Confirmed | - the atlaser observed a distraction display, adults entering or leaving a nest cavity, an adult carrying a fecal sac or |

food for young, a nest containing eggs or a nest with young, a used nest or egg shells or recently fledged young.



Wood Duck

WEST NILE VIRUS

A dead Blue Jay turned into the Niagara Region Public Health Department on 11 September 2001 was the first Niagara bird to test positive for the West Nile Virus (West Nile Virus Summary Report (2001-2004, 2005)). Of the 78 Blue Jays turned in for testing to the Niagara Region Public Health Department between 2002 and 2006, two were found to be positive (West Nile Virus Summary Report (2001 – 2004, 2005, 2006)). During the years 2002 to 2006, a total of 130 American Crows found dead and turned into the Niagara Region Public Health Department were tested for the presence of the West Nile Virus, and 29 tested positive (West Nile Virus Summary Report (2001 – 2004, 2005, 2006))

There is some evidence that the numbers of American Crows seen on the April, May and October BOS counts have declined since the appearance of West Nile in the Niagara Region between 2002 and 2006. There is also anecdotal evidence from birders that crow numbers were down in the Niagara Region during the summer months from 2002 to 2006, although they seemed to be returning to normal numbers by 2008.

Very common on the Christmas Bird Counts, crows have been seen on all such counts since 1966. The largest number observed was 11,050 on the St. Catharines Christmas Bird Count in 1994. Large count numbers were obtained by counting the birds in a roost area in St. Catharines. The count numbers then plunged from 3,568 birds in 2001 to 697 birds in 2002 and then to 105 in 2003 and had not recovered by 2006. This large drop from 2001 to 2002 in crow numbers presumably reflected the toll of the West Nile Virus. However, it did not necessarily reflect the deaths of resident Niagara crows. The 3,568 crows of 2001, if distributed over the 25 squares studied in the second Ontario Breeding Bird Atlas, would yield 143 birds per square. Since atlasers might, at most, see a twenty to thirty crows in an atlas square, this tells us that many of the overwintering crows in 2001 were from outside the Niagara Region.

CONCLUDING REMARKS

The Niagara Region is an important breeding ground and wintering area for many birds. These birds include both those that reside here permanently and the many migrants that breed here in the summer or spend their winters here. In the summer months, as a result of construction on the Welland Canal some years ago, there is now a large area east of the canal and south of Welland that supports grassland species such as Grasshopper Sparrow and Upland Sandpiper. In the winter months, the Niagara River is a particularly important area, supporting as it does many thousands of gulls and ducks. However, the continuation of these locations and of that of other habitats for birds, cannot be taken for granted. In order for the Region to continue its sustaining role of habitat provider appropriate conservation measures must be implemented and maintained.

There is anecdotal evidence that birds migrating south in the fall move west, rather than crossing Lake Ontario, when they reach its north shore. As a consequence of this 'lake avoidance' it can be conjectured that fewer migrants pass over or through the Niagara Region in the fall than in the spring. A radar comparison of the spring and fall migration might demonstrate the truth of this conjecture.

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The colour bird photographs included in this document are courtesy of Kayo J. Roy.

FOOTNOTES

¹ The Atlas boundary lies slightly east of the Niagara Region boundary at the shore of Lake Ontario and slightly west of the Niagara Region boundary at the shore of Lake Erie. As a consequence, results from a small area in the northwest corner of the Niagara Region are excluded from Table 4, and those from a small area outside the Niagara Region in the southwest are included. The authors have found that including data from those parts of the Niagara Region located in the adjacent Hamilton atlas region did not change the picture of breeding birds reported here in any substantial way. Note: point counts were made at many locations in Niagara during the second Atlas. The reader is referred to the *Ontario Atlas of Breeding Birds, 2001-2005* (Cadman et al. 2007) for the results of the point counts.

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