A COMPARISON OF ABUNDANCE OF COLONIAL MARSH BIRDS BETWEEN 1991 AND 2001 IN THE CANADIAN PORTIONS OF LAKES HURON, ST. CLAIR, ONTARIO AND ERIE

by

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ABSTRACT

Because of concerns about the status of populations of colonial marsh birds in the Great Lakes basin, surveys of Black Tern (*Childonias niger),* Forster's Tern *(Sterna forsteri)* and Little Gull *(Larus minutus)* were carried out in 1991 and 2001 in coastal areas of the Canadian portions of Lake Huron, Lake St. Clair, Lake Erie, Lake Ontario, St. Clair River, Detroit River and Niagara River. The 1991 survey also covered the St. Lawrence River downstream to Cornwall. The 2001 survey covered all of Lake Huron, while the 1991 survey surveyed north only to McGregor Bay near Little Current. Both surveys utilized a combination of volunteer field assistance and a paid field crew. Eighty-nine volunteers participated in the 2001 survey.

The survey area was defined by 10-km squares that were located within 5 km of any Great Lakes shoreline. Within each 10-km square, the goal was to survey all suitable marshes for the target species, with a particular 2001 emphasis on resurveying sites that supported one or more of the target species in 1991. One hundred and forty-four squares were surveyed in 1991 and 108 squares were surveyed in 2001.

A comparison of the 1991 and 2001 survey data revealed that Forster's Terns increased in 10 squares, decreased in 7 squares, and were absent in 64 squares. Forster's Tern numbers increased in Lake St. Clair, decreased in Lake Erie, and remained nearly absent in Lakes Ontario and Huron. In total, 1647 Forster's Terns were detected at 22 colonies in the 2001 survey, whereas 1176 were detected at 24 colonies during the 1991 survey. Both the 1991 and 2001 survey data showed that about 95% of Ontario's known population of Forster's Terns breed in Walpole Island wetlands of Lake St. Clair.

A comparison of the 1991 and 2001 survey results revealed that Black Terns increased in 17 squares, decreased in 27, and were not found in 37. Overall, Black Tern numbers were considerably lower in Lakes St. Clair (-56%) and Erie (-78%) in 2001 than they were in 1991.Smaller declines were also recorded for Lake Huron (-18%) and Lake Ontario (-5%). . In the 2001 survey, 717 Black Terns were observed at 40 colonies. The 1991 survey estimated a total of 1168 birds distributed among 73 colonies. This yields an apparent overall decline of about 35% over the 11-year period.

Little Gulls were not found during the 1991 survey and only two were found in one square during the 2001 survey. There is no evidence that their breeding populations are expanding in the lower Great Lakes.

Conservation strategies for Black Tern, Forster's Tern and Little Gull include protecting nesting areas from destruction and/or degradation so that adequate breeding habitat is available across all water level regimes, minimizing human disturbance at nesting colonies, controlling water levels to prevent dense stands of cattails from developing, and providing artificial nesting platforms in marshlands that lack sufficient natural nesting substrate.

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INTRODUCTION

There is increasing concern about colonial marsh birds in Ontario, particularly the provincially rare Black Tern (*Childonias niger),* Forster's Tern (*Sterna forsteri),* and Little Gull (*Larus minutus).* These birds are vulnerable to human disturbance during the nesting season because they nest in colonies (Austen et al. 1996; Martin and Zwank, 1987). These species are also susceptible to bioaccumulation of various contaminants (Austen et al. 1996; Blokpoel 1977).

Previous work on breeding bird distribution (Cadman et al. 1987) showed that the Forster's Tern nested in Ontario almost exclusively in marshes of the Walpole Island area of Lake St. Clair, and at Long Point and Rondeau marshes of Lake Erie from 1981-1986. Black Terns breed throughout the Great Lakes coastal marshes, as well as in inland marshes (Cadman et al. 1987). Recent breeding evidence for Little Gulls in Ontario is extremely limited. Only six 10-km squares in southern Ontario during 1981-1986 had breeding evidence of Little Gull, with birds present at Long Point and Rondeau (Lake Erie), one site on Lake Ontario, and two sites on Lake Huron (Cadman et al. 1987). Only one site in southern Ontario (North Limestone Island in Georgian Bay), had confirmed breeding of Little Gull during the 1981-85 breeding bird atlas period.

To gain more information about populations of colonial marsh birds, a Canadian survey of these species was conducted in 1991 in coastal marshes along the Canadian portions of Lakes Huron, St. Clair, Erie and Ontario. Marshes along the St. Clair River, Detroit River, Niagara River and St. Lawrence River east to Cornwall were also surveyed. The 1991 survey covered 145 10-km squares, using a combination of volunteer field workers and a five-person field crew. The intent was that this survey would be replicated every 10 years, as part of a joint Canadian-American effort to monitor populations of colonial waterbirds along the Great Lakes.

Fieldwork during the first survey was done in cooperation with the Ontario Rare Breeding Bird Program (ORBBP) and the Canadian Wildlife Service (CWS). Fieldwork during the second survey was carried out during Ontario's second breeding bird atlas (OBBA), a collaborative project of Bird Studies Canada (BSC), Federation of Ontario Naturalists (FON), Ontario Field Ornithologists (OFO), Ontario Ministry of Natural Resources (OMNR), and CWS. Both surveys engaged volunteers where ever possible and contracted field staff where volunteers were not available.

Results from the 1991 and 2001 surveys were compared to determine whether the populations and distributions of Black Tern, Forster's Tern and Little Gull numbers had changed over the decade interval.

METHODS

Study area

During the 2001 survey, an attempt was made to survey all suitable marsh habitats within a 5 km band along the Canadian shorelines of Lakes Huron, St. Clair, Erie and Ontario, and their connecting waterways, with a focus on surveying those marshes that previously supported one or more of the primary target species in 1991. As in the original 1991 surveys, the sampling framework was based upon 10x10 km "atlas" squares. In addition to those areas surveyed in 1991, the 2001 survey covered squares along the St. Mary's River near Sault Ste. Marie, the North Channel, and Georgian Bay. Although two areas along the St. Lawrence River were targeted for survey by volunteers, data for these were not submitted.

In total, 144 squares were surveyed in 1991 versus 108 squares in 2001. Squares surveyed during both 1991 and 2001 surveys, and those surveyed only in 1991 and only in 2001 are shown in Figure 1.

Volunteers and Staff

Volunteers, who were recruited by OBBA regional coordinators, conducted many of the surveys. Additional volunteers were recruited through the Marsh Monitoring Program (MMP) coordinated by BSC. Nicole Kopysh (Assistant Coordinator of the OBBA) oversaw the volunteer survey component of the project. In total, 89 volunteers participated in the 2001 surveys. In addition, 2 two-person field crews conducted surveys of marshes not covered by volunteers. Field team leaders were Lisa Burt and Nicole Kopysh.

Survey Protocol

Volunteers and staff were asked to conduct the brunt of their surveys from 20 May to 20 June 2001, but some surveys extended until mid July. Surveys were conducted at any time of day, but not during conditions of rain, heavy fog and strong winds. Surveys were conducted at least once in all suitable marsh habitats within each atlas square visited. Surveyors were provided with 10X10 km atlas maps and asked to survey the habitat thoroughly and focus efforts on locating target species. Surveys were done by foot, canoe, or boat depending upon which was most suitable. An aerial survey of marshes of Walpole Island, St. Clair River, and northeastern Lake St. Clair was conducted in early July to help locate colonies of Black Tern and Forster's Tern.

Survey forms

Data were recorded on Rare/Colonial forms used by the OBBA (see Appendix 1). Observation locations were recorded using a UTM Easting/Northing obtained from either the map or a Global Positioning System unit. The highest level of breeding evidence observed was recorded, as was the number of adult birds observed at each site. Number of birds was estimated by doing a visual "sweep" of the site with binoculars or a spotting scope. The greatest number of birds observed was used as the estimated total number of breeding birds at any site. Any nests observed were counted and recorded. Surveyors

were asked to describe habitat, particularly the estimated ratio of emergent vegetation to open water within the colony, estimated average water depth in the colony, and dominant species of emergent vegetation within the colony. Surveyors also recorded additional comments such as nest contents, land ownership, and visible habitat threats. Volunteers and staff plotted the area surveyed and locations of any colonies found on the atlas maps and returned these with their data forms.

An additional data form, the Square Summary Sheet (Appendix 1), was used to record effort information as well as information on the presence of secondary species of interest. Surveyors recorded percent suitable habitat surveyed, method (canoe, foot, and boat) used to survey, and dates and times spent surveying. Number and presence of secondary species observed were recorded on these forms, with an indication of whether a broadcast tape was played for that species.

1991 Data

Coverage during the 1991 survey did not adequately survey Presqu'ile Bay (Lake Ontario) and Rondeau Bay (Lake Erie). Consequently, these areas were surveyed in 1992 and these data were included in the report compiled by Austen et al. (1996). The current report uses these 1992 data from Presqu'ile Bay and Rondeau Bay for comparison to 2001 data.

Database Management

The 2001 data were computerized into an Access database structure, components of which were later manipulated in Excel. The 1991 data were originally compiled in a Dbase database structure, which was later manipulated into Paradox.

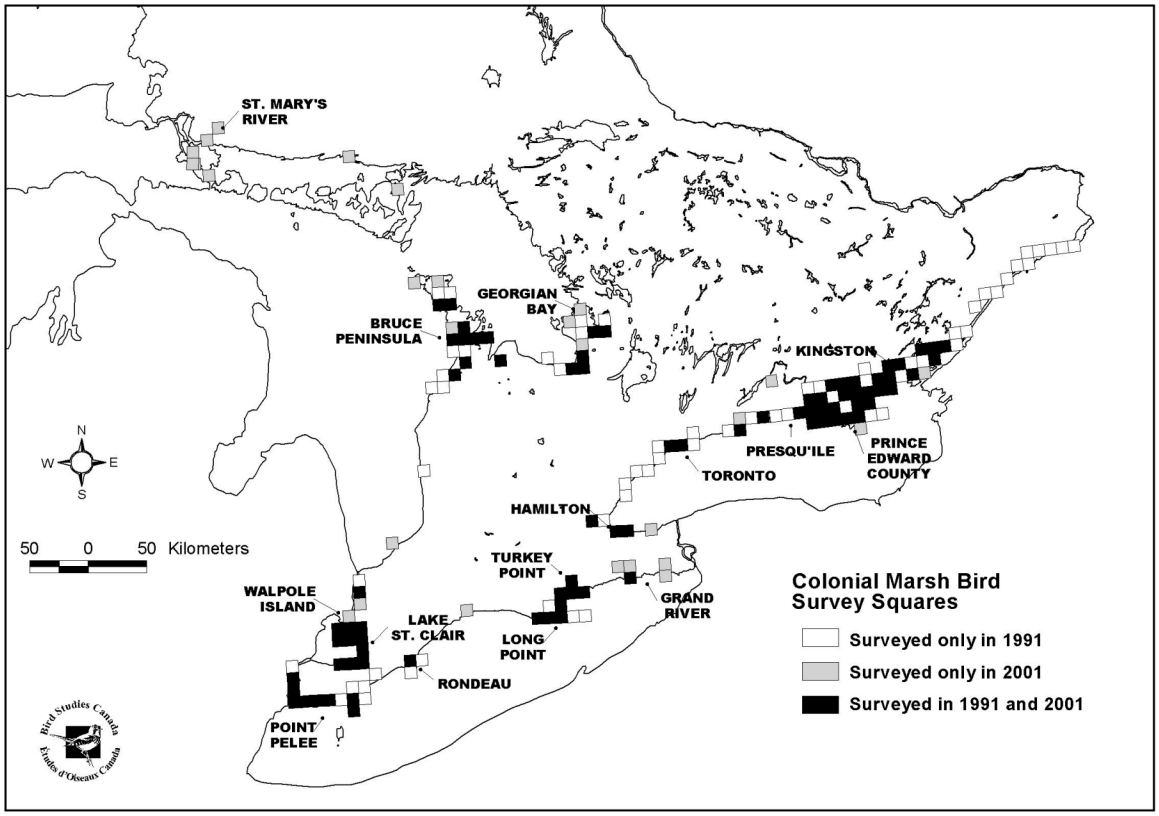

Figure 1. Squares surveyed in 1991 survey only (n=63), in 2001 survey only (n=27) and in both 1991 and 2001 (n=81).

RESULTS AND DISCUSSION

The 2001 survey collected data from 108 squares and 257 sites. In total, 81 squares were surveyed during both 1991 and 2001 surveys. Appendix 2 provides information about each record, including the square number, site name, basin name, number of birds seen, UTM coordinates, and species code name.

Forster's Tern

The Forster's Tern is on the eastern edge of its range in Ontario (Austen et al. 1994). As such, its numbers are prone to abrupt increases and decreases. Colonies are likely to be initiated and abandoned over the years. The species was first noticed nesting in Ontario in the Lake St. Clair marshes in the latter half of the 19th century. Even earlier nesting may have been overlooked due to inaccessibility of nest sites and misidentifying them as Common Terns. It was not until the 1970s that breeding evidence was documented in the marshes of Lake St. Clair, and along Lake Erie, at Long Point, Rondeau Bay and Point Pelee (Cadman et al. 1987). By the mid 1980s, Ontario's population was estimated to be 700 to 1000 pairs. Cadman et al. (1987) suggested that a possible range expansion and population increase had occurred, prompted by a period of high water levels.

Of 81 squares surveyed during both 1991 and 2001 surveys, Forster's Terns increased in 10, decreased in 7, and were absent in 64. These changes in abundance are portrayed geographically in Figure 2. At the lake basin level, Forster's Terns increased in Lake St. Clair, decreased in Lake Erie, and were largely absent in Lakes Ontario and Huron between 1991 and 2001 (Figure 3).

In total, 1647 Forster's Terns were detected at 22 colonies in the 2001 survey, versus 1176 birds at 24 colonies in1991.

The 2001 survey results demonstrated that Forster's Terns were heavily concentrated in the Lake St. Clair region. Lake St. Clair alone held 1603 of 1647 (97%) birds observed (Figure 3). Similarly, the 1991 survey found that Lake St. Clair supported 95% of the Forster's Terns observed in the entire study area. Within Lake St. Clair, the 2001 survey found the birds concentrated at Mitchell's Point, Grassy Bend Islands and the St. Clair National Wildlife Area (NWA). During 2001, there were an estimated 800, 554 and 241 breeding Forster's Terns at Mitchell's Point, Grassy Bend Islands and St. Clair NWA, respectively (Figure 4). This equates to 1595 birds (97% of the known Great Lakes population) being concentrated in just two squares.

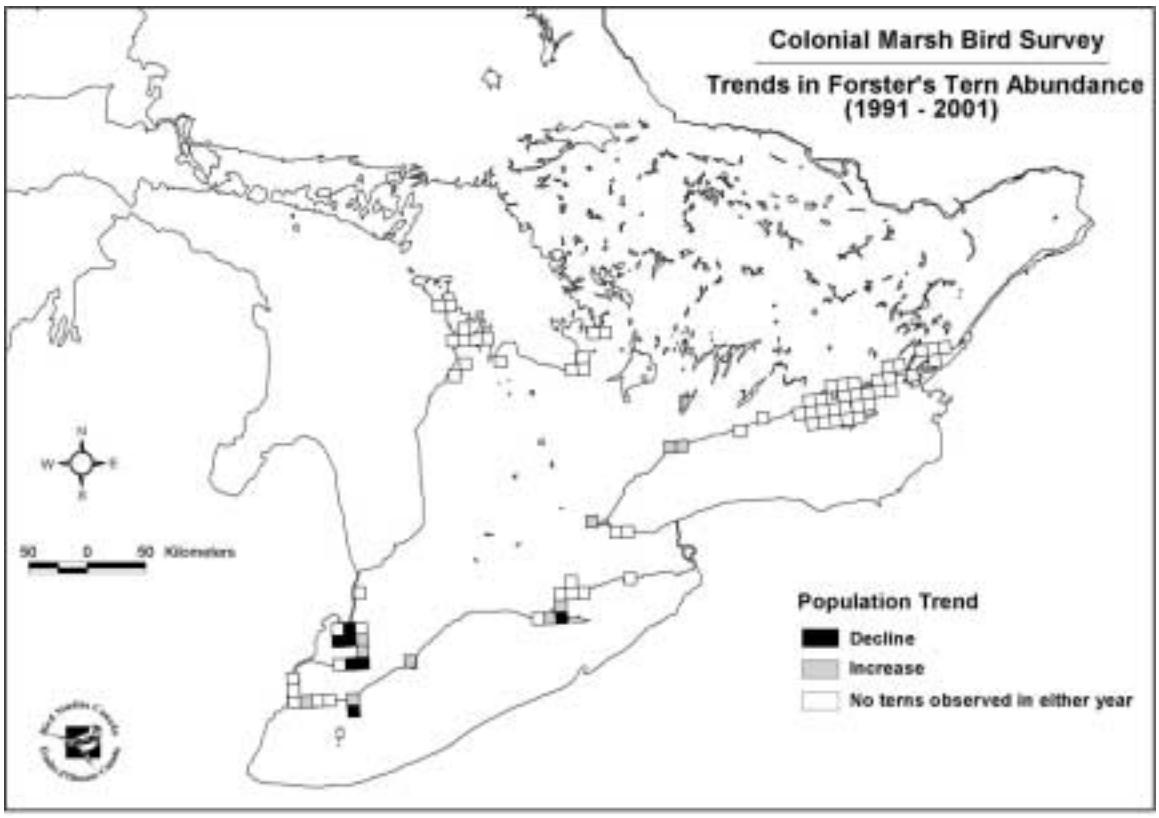

Figure 2. Forster's Tern population changes between 1991 and 2001 surveys by survey square (n=81 squares surveyed in both years). Forster's Tern numbers increased in 10 squares, decreased in 7 squares and were absent from 64 squares surveyed during both time periods.

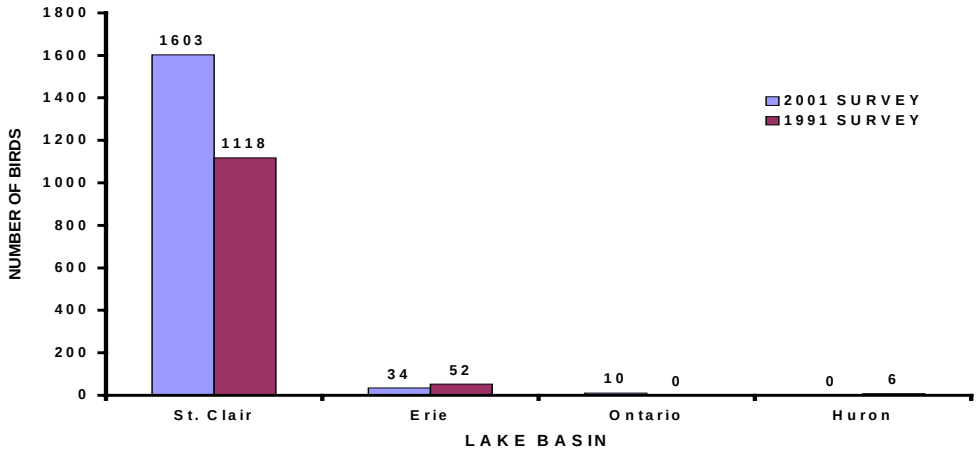

Figure 3. Number of Forster's Terns observed among Great Lake basins surveyed in 1991 and 2001. Number of breeding colonies observed in 1991 and 2001, respectively, were 18 and 12 for Lake St. Clair, 5 and 6 for Lake Erie, 0 and 4 for Lake Ontario and 1 and 0 for Lake Huron. Values include confirmed, probable and possible breeding.

A comparison between the 1991 and 2001 survey data indicated considerable changes in both colony size and location within squares (Figure 4). Two Mitchell's Point sites each held 400 birds in 2001, but were unused by Forster's Tern in 1991. St. Clair NWA sites were used in both 1991 and 2001 but had an increase from 10 birds to 241 birds between these surveys. Johnston Channel colonies that had a total of 292 birds in 1991 had only 2 birds in 2001. Only Grassy Bend Islands had relatively stable numbers, with 634 birds in 1991 and 554 birds in 2001. If Forster's Terns at Lake St. Clair moved only short distances to occupy other nearby sites, this may explain why net abundance of this species, as recorded by surveyors between 1991 and 2001, was virtually stable, yet quite different at most given sites.

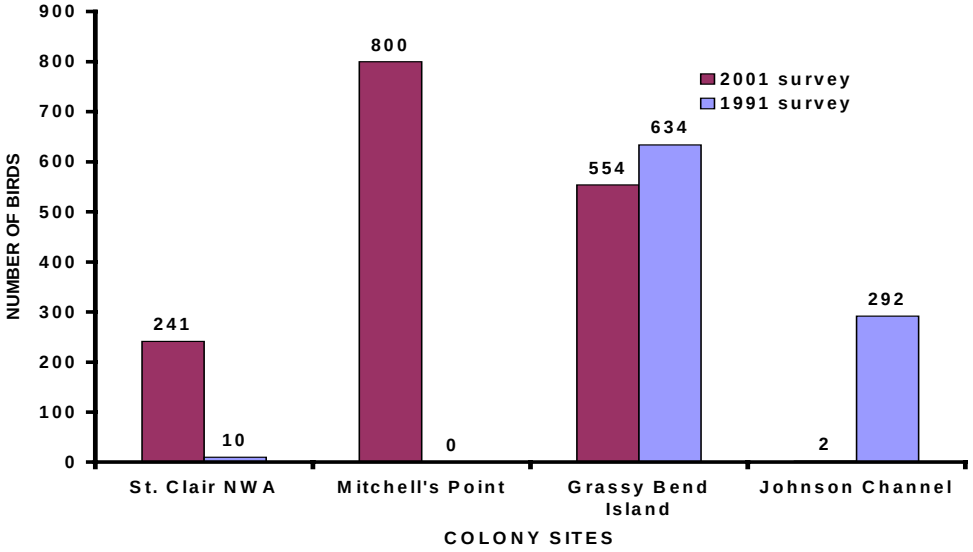

Figure 4. Number of Forster's Tern observed at St. Clair National Wildlife Area, Mitchell's Point, Grassy Bend Island and Johnson Channel during the 1991 and 2001 surveys.

McCracken (1982) also documented movement in colony sites between 1981 and 1982 in the Long Point region. McNicholl (1975) reported that change in colony sites was a common feature of Forster's Terns, and that colony instability was probably reflective of an adaptation to an environment that itself was prone to change .

The cause of colony abandonment and initiation may be presence or absence of suitable nesting habitat. McCracken (1982) found that Forster's Terns typically nested on floating rafts of dead cattails and suggested that if such floating mats disappeared, their absence could lead to site abandonment by a colony. Martin and Zwank (1987), studying Forster's Terns on the Gulf and Atlantic coasts, also found that presence of wind- or wave-accumulated mats of floating vegetation was one of the most important factors influencing colony establishment. High water levels, causing increased wave action and exposure, was believed to have been responsible for removal of floating cattail rafts at

Long Point and caused colonies to relocate (McCracken 1982). Conversely, other areas that develop cattail rafts under ideal site-specific water level regimes, might foster new colonies. It seems likely that fluctuating water levels would affect where floating mats of cattail would develop and diminish, thereby dictating where Forster's Tern colonies develop. McCracken (1982) also suggested that suitable loafing and feeding areas were significant factors affecting colony site location.

OBBA atlas work, conducted between 1981 and 1985, estimated 123-1200 breeding pairs in Walpole Island marshes (Cadman et al. 1987). The 1991 colonial marsh bird survey found 1110 birds in the Walpole Island marshes (Austen and Cadman, 1991). The 2001 survey found 1362 birds around Walpole Island. These results suggest that the overall population in the Walpole Island area has remained fairly stable over the last 20 years.

Comparing 2001 and 1991 survey results with those from previous surveys indicates a decline of once healthy Forster's Tern populations at Rondeau Bay and Long Point, Lake Erie. In 1976, 50 breeding pairs were estimated at Long Point marshes (McCracken et al. 1981), and it is likely that the local population first colonized the area a few years prior to this. In 1981, there were about 150 pairs but this decreased to 106 pairs in 1982 (McCracken 1982). Over the next decade, the Long Point population declined as quickly as it had arisen. By 1991, only 10 pairs were estimated to remain (Austen et al. 1996). Reasons for this rapid decline are uncertain but may be explained by loss of suitable nesting habitat through the processes described above.

Fluctuation of the Forster's Tern population at Rondeau was just as dramatic and sudden as it was at Long Point. The area was estimated to have 11 to 100 pairs from 1981 to 1985 (Cadman et al. 1987). By 1990 this had increased to 200 pairs (Austen et al. 1996). But in 1992 the population had declined to just 3 pairs (Austen et al. 1996). Austen et al. (1996) noted that Ring-billed and Herring Gulls now nest on the island where Forster's Tern formerly bred in large numbers, and suggested that gulls were partially responsible for the rapid decline. However, an alternative explanation is that changes in water level may have resulted in changes in suitable nesting substrate (floating mats of cattails) which may have lead to abandonment of the site. Subsequently, gulls may have moved into an area already abandoned by the terns.

Forster's Terns of Walpole Island/ St. Clair NWA area comprise 97% of Ontario's known coastal population as measured by the 2001 survey. The 1991 survey found similar results: 95% of all Forster's Tern nests in Ontario occurred at Lake St. Clair (Austen et al. 1996). Ontario's Forster's Tern population is almost certainly dependent on the Walpole Island area acting as a "source" area for the species. Within this area, the population appears to be stable but fluid. As has been reported elsewhere, colonies appear to move from year to year, and fluctuate in numbers at any given site. Ensuring maintenance of the Lake St. Clair population requires not only protecting current locations of large active colonies, but also ensuring that sufficient alternate breeding sites persist within the area so that the terns can continue to be flexible in colony site selection.

Colonies need to be protected from human disturbance during the breeding season. Martin and Zwank (1987) described a colony of 2750 pairs of Forster's Tern that was deliberately disturbed by people during the breeding season. The colony was

subsequently abandoned and it appeared that no young fledged. Blokpoel (1977) also suggested that pleasure-boat traffic and human visits to colonies seriously affects reproductive success. Critical nesting areas could and should be designated as "Off Limit Areas" during nesting periods (Austen et al. 1994).

Another technique for maintaining or enhancing Forster's Tern numbers might be provision of artificial nesting platforms as has been done with Black Tern. Alvo et al. (1998) provided wire mesh nesting platforms in an impoundment near Kingston, Ontario and observed Black Terns nesting on 16 of 24 platforms. Moreover, chick survival appeared similar to that from nests on natural nest substrate. Forster's Terns might also benefit from provision of nest platforms in marshes with a scarcity of natural nest substrate.

Black Tern

A comparison of the 1991 and 2001 survey results in which the same squares were surveyed revealed that Black Terns increased in 17 squares, decreased in 27, and were not found in 37 (Figure 5). Black Tern numbers declined in Lake St. Clair (306 birds in 1991 versus 135 in 2001) and in Lake Erie (160 in 1991 versus 36 in 2001). Lake Huron numbers dropped from 378 in 1991 to 309 in 2001. Lake Ontario numbers also dropped slightly from 250 in 1991 to 237 in 2001 (Figure 6). Percent declines registered from 1991 to 2001 were as follows: Lake Ontario (-5.2%); Lake Huron (-18.2%); Lake St. Clair (-55.9%); and Lake Erie (-77.5%).

In the 2001 survey, 717 Black Terns were observed at 40 colonies. Excluding the St. Lawrence River, the 1991 survey estimated a total of 1094 birds distributed among 73 colonies (Austen et al. 1996). Overall, this represents a decline of –35% between survey periods (an average annual decline of –3.2% per year).

Most Black Tern colonies were quite small: only 8 colonies had more than 20 birds (Appendix 2). The biggest colonies were at East Lake in Prince Edward County (2 colonies each had 60 birds), Tiny Marsh in Simcoe County (2 colonies of 44 and 32 birds), Mitchell's Bay in Lake St. Clair (28 birds), Johnston Channel in Lake St. Clair (24 birds), and Big Mud Lake on the Bruce Peninsula (61 birds; see also Appendix 2).

As noted above, a comparison of data between 1991 and 2001 surveys revealed declines in Black Tern numbers throughout the sample area (Figure 6). These reductions are in accord with recent data from the Marsh Monitoring Program (Weeber and Vallianatos, 2000; Timmermans 2001) and with earlier data from the Ontario Nest Record Card Scheme, which indicated that many former colony sites such as Coote's Paradise, Oshawa Second Marsh and Rattray Marsh (all on Lake Ontario) have been abandoned (Austen et al. 1996). Such indications of decline are also consistent with results from the Ohio and New York State breeding bird atlases (Andrle and Carroll, 1988; Peterjohn and Rice, 1991). Similarly, Breeding Bird Survey results showed that Black Tern populations declined significantly at an average annual rate of 5.9% per year across eastern North America during the period 1966 to 2001 (Sauer et al. 2002).

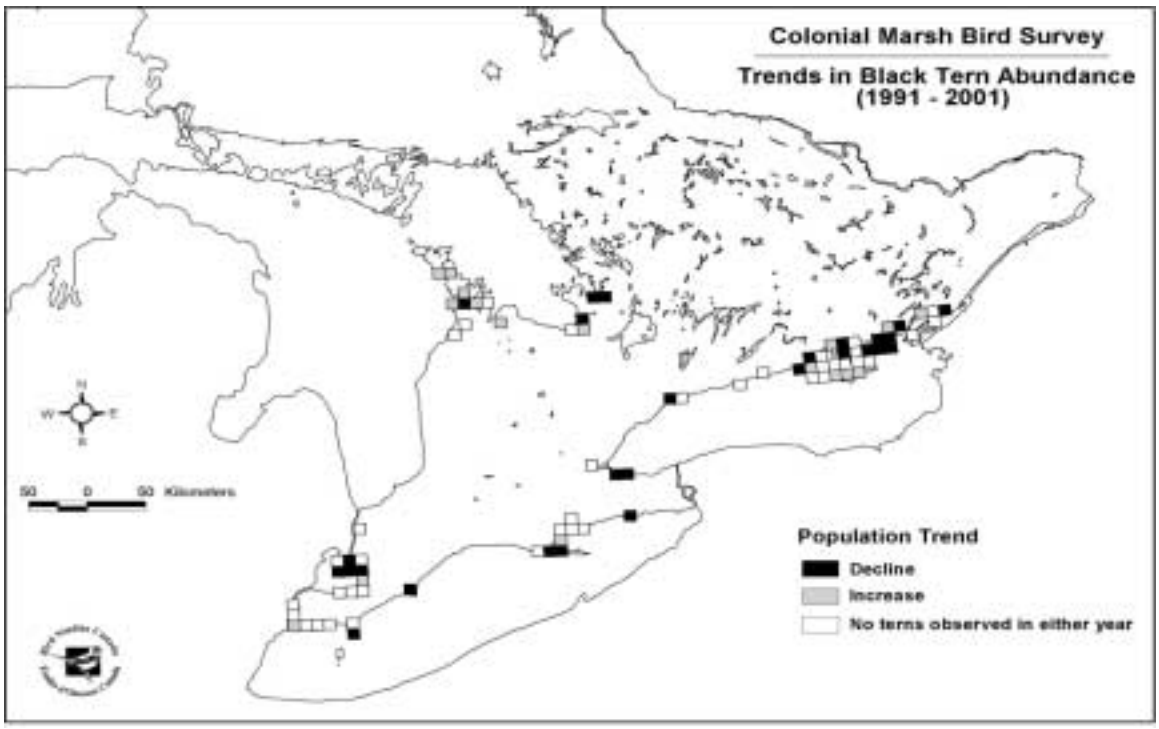

Figure 5. Black Tern population trends between 1991 and 2001 surveys for 81 survey squares that were sampled in both years. Black Tern numbers increased in 17 squares, decreased in 27 squares and had no terns in either survey in 37 squares.

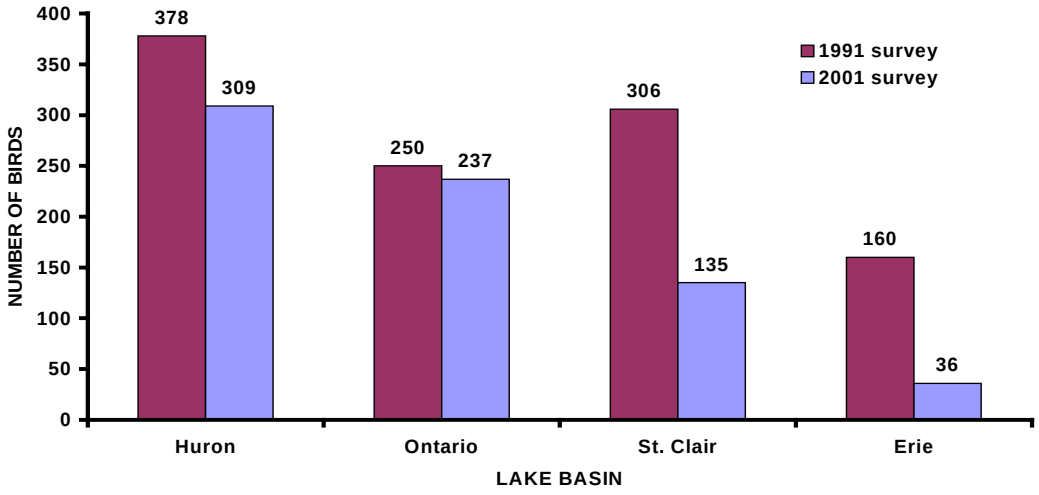

Figure 6. Number of Black Terns observed among Great Lake basins surveyed in 1991 and 2001. Number of colonies observed in 1991 and 2001 respectively, were 12 and 18 for Lake Huron, 21 and 10 for Lake Ontario, 20 and 8 for Lake St. Clair, and 20 and 4 for Lake Erie. Four colonies and 74 Black Terns were also observed along the St. Lawrence River in the 1991 survey. Colony numbers include confirmed, probable and possible breeding.

Some former nesting areas for Black Terns in Ontario coastal marshes no longer have suitable nesting habitat, while others have had the quality and/or quantity of habitat diminished (e.g.Bradley's Marsh and Frenchman's Bay; Austen et al. 1996). Dunn and Agro (1995) suggested that habitat loss on breeding grounds is a likely source of population decline in eastern North America.

Although some areas still have apparently adequate habitat, the Black Tern population has declined nevertheless. For instance, the population at Long Point was described as locally abundant in 1981 (McCracken et al. 1981). However, numbers diminished by 80% to 90% from the mid 1980s through to the present (Austen et al. 1994). Presquile Provincial Park had 250 birds in 1948, but this number had diminished to 20 to 30 pairs by the 1980s, further declined to 12 to 13 pairs during the 1991 survey (Austen et al. 1994), and still further to 2 birds in the 2001 survey. At Walpole Island, the 1991 survey found 230 birds (Austen and Cadman, 1991), while the 2001 survey found 99 birds.

Black Tern, like Forster's Tern, usually nest on floating mats of dead cattails lodged in emergent vegetation (McCracken et al. 1981; Dunn 1979). McCracken (pers. observations) suggests that a lack of floating debris (i.e. nesting substrate), a sustained period of high water levels, and a tendency towards milder winters (which do not give the marshes their usual ice protection), might be at least partially responsible for the reduction in tern numbers at Long Point. Similarly, Dunn and Agro (1995) reported that nests are fragile and easily destroyed by winds or high water levels.

Another factor in declining Black Tern numbers may relate to development of dense monotypic stand of cattails. Such monotypic stands are apt to develop during periods when water levels are sustained at a particular depth for long periods of time, without the usual fluctuations. Dunn (1979) found that Black Tern prefer nesting in areas with an interspersion of open water and emergent vegetation. Linz et al. (1994) suggested that cattails have formed dense stands in many marshes and that this has contributed to the decline of Black Tern because this species rarely breeds in this habitat.

While many colonies have diminished or even disappeared, East Lake birds in Prince Edward County increased from 2 birds in 1991 to 170 birds in 2001. New colonies have also been detected on the Bruce Peninsula (see Appendix 2).

Based on widespread declines and area sensitivity, Weeber and Vallianatos (2000) considered the Black Tern a species of high conservation priority, and Austen et al. (1994) recommended that it be designated as "threatened" in Ontario. Like the Forster's Tern, the Black Tern would benefit from measures to minimize human disturbance of breeding colonies. This would be particularly important for the largest colonies, such as those at Tiny Marsh and East Lake. Means of protection include land acquisition, lease, conservation easements or management agreements (Austen et al. 1994). Provision of nesting platforms in areas where there is a shortage of suitable nesting substrate might also prove useful (Austen et al. 1994; Dunn and Agro, 1995). As mentioned earlier, Black Terns readily use wire mesh nesting platforms successfully (Alvo et al. 1998). By fluctuating water levels through dikes and water pumps, wildlife managers can reduce

cattail stand extent and improve Black Tern nesting habitat (Motivans and Apfelbaum 1987; Dunn 1979).

Little Gull

The Little Gull is a rare, almost vagrant, breeding species in the Great Lakes region (Peterjohn and Rice 1991; Andrle and Carroll 1988; Cadman et al. 1987). The 1991 colonial marsh bird survey did not record any Little Gulls. The 2001 survey had one report of two birds at Erieau, Lake Ontario. The status of this species remained basically unchanged between the two survey periods.

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APPENDIX 1

An example of the Rare/Colonial Species Form and Square Summary Sheet follow.

APPENDIX 2

A list of Black and Forster's Tern and Little Gull colonies and the estimated number of birds based on the 2001 survey (records for each species are listed alphabetically by atlas square number for each species).

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17LG26	Big Creek	Erie	0	327800	4661600	FOTE
17LG26	Big Creek	Erie	0	327800	4660200	FOTE
17LG26	Detroit River	Erie	0	325500	4665000	FOTE
17LG27	Canard River mouth	Erie	0	326500	4670700	FOTE
17LG35	Harrow	Erie	2	330500	4656000	FOTE
17LG45	Dolson's Creek	Erie	0	349250	4654200	FOTE
17LG45	Cedar Creek	Erie	0	349000	4652200	FOTE
17LG55	Cedar Creek	Erie	0	351000	4653200	FOTE
17LG75	Pt. Pelee	Erie	30	370026	4652273	FOTE
17MG28	Rondeau	Erie	8	424200	4682800	FOTE
17MG28	Rondeau	Erie	4	422700	4680700	FOTE
17MH72	Port Stanley	Erie	0	479800	4728500	FOTE
17MH72	Port Stanley	Erie	0	479800	4725100	FOTE
17MH72	Fingal	Erie	0	473400	4724600	FOTE
17MH72	Port Talbot	Erie	0	470700	4721100	FOTE
17NH31	Hahn Marsh	Erie	0	539500	4714000	FOTE
17NH31	Jacksonburg	Erie	0	531000	4715500	FOTE
17NH41	Long Pt.	Erie	4	546200	4715300	FOTE
17NH51	Long Pt.	Erie	1	559450	4713400	FOTE
17NH51	Long Pt.	Erie	6	558350	4713100	FOTE
17NH51	Long Pt.	Erie	0	556200	4716200	FOTE
17NH51	Long Pt.	Erie	0	552000	4714600	FOTE
17NH52	Long Pt.	Erie	2	553403	4722217	FOTE
17NH52	Long Pt.	Erie	7	554566	4722391	FOTE
17NH53	Vittoria CA	Erie	0	557000	4735100	FOTE
17NH63	Port Dover	Erie	0	565900	4737000	FOTE
17NH63	Port Dover	Erie	0	562500	4739000	FOTE
17NH64	Port Dover	Erie	0	569400	4743100	FOTE
17NH73	Nanticoke	Erie	0	576500	4738200	FOTE
17PH05	Grand River	Erie	0	609000	4752100	FOTE
17PH14	Grand River mouth	Erie	0	616500	4749000	FOTE
17PH15	Dunnville	Erie	0	613500	4750400	FOTE
17PH15	Dunnville	Erie	0	611200	4750900	FOTE
17PH44	Port Colborne	Erie	0	642400	4748000	FOTE
17PH44	Cassidy Point	Erie	0	645500	4747700	FOTE
17PH44	Pine Crest Point	Erie	0	648000	4747900	FOTE
17PH44	Silver Bay Point	Erie	0	649400	4748500	FOTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17PH45	Port Colborne	Erie	0	641400	4753700	FOTE
16GS21	St. Joseph's Island	Huron	0	729750	5116600	FOTE
16GS22	Court Point	Huron	0	725700	5120700	FOTE
16GS22	Reed Point	Huron	0	723000	5127700	FOTE
16GS31	St. Joseph's Island	Huron	0	731000	5116250	FOTE
17KM70	St. Joseph's A	Huron	0	272400	5105400	FOTE
17KM70	St. Joseph's B	Huron	0	271700	5106000	FOTE
17KM70	St. Joseph's C	Huron	0	271000	5109500	FOTE
17KM70	St. Joseph's D	Huron	0	271000	5108500	FOTE
17KM73	Desbarats	Huron	0	274500	5135500	FOTE
17KM73	Desbarats	Huron	0	273400	5134100	FOTE
17KM73	Desbarats	Huron	0	275600	5134600	FOTE
17KM84	Ottertail Lake	Huron	0	287200	5141000	FOTE
17LM91	Spanish Marsh	Huron	0	386900	5115200	FOTE
17MH18	Kettle Point Marsh	Huron	0	417700	4781250	FOTE
17MH18	Kettle Point Marsh	Huron	0	417700	4781250	FOTE
17MK68	Stoke's Bay	Huron	0	468000	4983500	FOTE
17MK75	Oliphant	Huron	0	477500	4953000	FOTE
17MK78	Stoke's Bay	Huron	0	471500	4980100	FOTE
17ML38	Manitoulin Island	Huron	0	431300	5088500	FOTE
17ML38	Strawberry Island	Huron	0	432600	5087900	FOTE
17ML40	Sunset Park	Huron	0	444000	5008800	FOTE
17ML40	Baptist Marsh	Huron	0	446000	5007200	FOTE
17ML40	Barney Lake	Huron	0	447000	5006500	FOTE
17ML40	Otter Nook	Huron	0	443000	5007500	FOTE
17NK05	Wiarton	Huron	0	501500	4952300	FOTE
17NK05	Big Bay	Huron	0	502000	4957700	FOTE
17NK05	Big Bay	Huron	0	502800	4958300	FOTE
17NK72	Wasaga Beach	Huron	0	577500	4929000	FOTE
17NK72	Wasaga Beach	Huron	0	579500	4925800	FOTE
17NK76	Thunder Bay	Huron	0	575000	4960500	FOTE
17NK76	Awenda PP	Huron	0	578700	4962600	FOTE
17NK87	Cognashene Lake	Huron	0	585000	4979300	FOTE
17NK87	Brown Bay	Huron	0	587400	4977900	FOTE
17NK87	Longuissa Bay	Huron	0	587650	4978900	FOTE
17NK87	Bone Island	Huron	0	589000	4977150	FOTE
17NK87	Bone Island	Huron	0	589550	4977350	FOTE
17NK87	Franceville	Huron	0	586850	4977550	FOTE
17NK87	Brown Bay	Huron	0	586800	4978350	FOTE
17NK87	Cognashene Lake	Huron	0	586100	4979300	FOTE
17NK87	Cognashene Lake	Huron	0	585800	4979650	FOTE
17NK87	Longuissa Bay	Huron	0	589150	4980000	FOTE
17NK87	Longuissa Bay	Huron	0	589550	4979650	FOTE
17NK87	Longuissa Bay	Huron	0	589400	4979250	FOTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17NK95	Midland	Huron	0	590700	4952400	FOTE
17NH89	Coote's Paradise	Ontario	2	588114	4791821	FOTE
17PH08	Van Wagner's	Ontario	0	602000	4789000	FOTE
17PH08	Confederation Park	Ontario	0	600400	4789800	FOTE
17PH18	Fifty Point CA	Ontario	0	611800	4786500	FOTE
17PH18	Winona SL	Ontario	0	612270	4786000	FOTE
17PH18	Grimsby Harbour	Ontario	0	617800	4784400	FOTE
17PH38	Jordan Harbour	Ontario	0	632400	4781500	FOTE
17PH38	cattail marsh	Ontario	0	635200	4782000	FOTE
17PH38	16 Mile Creek	Ontario	0	636100	4781100	FOTE
17PH38	Martindale Pond	Ontario	0	639500	4782900	FOTE
17PJ55	Whitby	Ontario	4	653053	4854246	FOTE
17PJ55	Whitby	Ontario	1	651295	4850681	FOTE
17PJ65	Whitby	Ontario	3	666500	4857400	FOTE
17QJ16	Port Britain	Ontario	0	711200	4867600	FOTE
17QJ16	Gage Creek	Ontario	0	718800	4870000	FOTE
17QJ16	Port Britain	Ontario	0	711250	4867750	FOTE
17QJ17	Pigeon Hill	Ontario	0	719000	4870000	FOTE
17QJ37	Eddystone	Ontario	0	738600	4879400	FOTE
17QJ37	Victoria Beach	Ontario	0	750000	4877000	FOTE
17QJ37	Wicklow	Ontario	0	739600	4874500	FOTE
18TP96	Hawtho Point	Ontario	0	299000	4869000	FOTE
18TP98	Dead Creek	Ontario	0	291000	4881500	FOTE
18TP98	Murray Canal	Ontario	0	291000	4880500	FOTE
18TP98	Bay of Quinte	Ontario	0	293300	4881500	FOTE
18TQ60	Barry Lake	Ontario	0	267000	4910000	FOTE
18TQ60	Lake Cran	Ontario	0	264800	4908000	FOTE
18UP06	Huyck's Bay	Ontario	0	301500	4868100	FOTE
18UP07	Pleasant Bay	Ontario	0	300500	4870500	FOTE
18UP07	Consecon Lake	Ontario	0	300200	4874500	FOTE
18UP08	Ameliasburg	Ontario	0	305800	4881200	FOTE
18UP08	Fenwood Gardens	Ontario	0	308700	4886000	FOTE
18UP28	Big Island 1	Ontario	0	324000	4888500	FOTE
18UP28	Big Island 2	Ontario	0	321500	4886000	FOTE
18UP28	Fish Lake	Ontario	0	326500	4885000	FOTE
18UP29	Sucker Creek	Ontario	0	329600	4892900	FOTE
18UP37	Port Milford	Ontario	0	336200	4877700	FOTE
18UP37	Lake on the Mountair	Ontario	0	335000	4878000	FOTE
18UP38	Mallory Bay	Ontario	0	335000	4882600	FOTE
18UP38	Mallory Bay	Ontario	0	336200	4882500	FOTE
18UP38	Bay of Quinte	Ontario	0	338700	4880200	FOTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
18UP39	Telegraph Narrows	Ontario	0	332300	4893600	FOTE
18UP39	Telegraph Narrows	Ontario	0	330200	4893200	FOTE
18UP39	Telegraph Narrows	Ontario	0	337700	4896000	FOTE
18UP39	Telegraph Narrows	Ontario	0	336400	4898500	FOTE
18UP39	Telegraph Narrows	Ontario	0	337800	4894500	FOTE
18UP47	Prince Edward	Ontario	0	346600	4879200	FOTE
18UP48	Cressy	Ontario	0	348000	4882900	FOTE
18UP48	Cressy	Ontario	0	348200	4881700	FOTE
18UP48	Hay Bay	Ontario	0	342400	4887700	FOTE
18UP59	Upper Gap	Ontario	0	352700	4891000	FOTE
18UP89	Wolfe Island A	Ontario	0	386200	4895000	FOTE
18UP89	Wolfe Island B	Ontario	0	389400	4894700	FOTE
18UP99	Lewis Bay	Ontario	0	399000	4896300	FOTE
18UP99	Irvine Bay	Ontario	0	397200	4897000	FOTE
18UP99	Holliday Bay	Ontario	0	395500	4897600	FOTE
18UP99	Bayfield Bay	Ontario	0	390600	4894500	FOTE
18VQ00	Bateau Channel	Ontario	0	403000	4908000	FOTE
18VQ00	Howe Island A	Ontario	0	402100	4906000	FOTE
18VQ00	Howe Island B	Ontario	0	400206	4905500	FOTE
18VQ00	Thousand Islands	Ontario	0	407500	4906700	FOTE
18VQ01	Gananoque River	Ontario	0	405000	4912000	FOTE
18VQ01	Gananoque River	Ontario	0	405000	4919500	FOTE
18VQ11	Ivy Lea	Ontario	0	418900	4915700	FOTE
18VQ11	Ivy Lea	Ontario	0	417100	4911500	FOTE
18VQ11	Ivy Lea	Ontario	0	415000	4911500	FOTE
18VQ11	Ivy Lea	Ontario	0	414200	4911800	FOTE
18VQ11	Gananoque	Ontario	0	412500	4910500	FOTE
18VQ11	Gananoque	Ontario	0	410600	4910200	FOTE
17LG68	Deerbrook	St. Clair	0	367200	4684500	FOTE
17LG78	Tremblay CA	St. Clair	0	375200	4684500	FOTE
17LG78	Lighthouse Cove	St. Clair	0	379400	4684800	FOTE
17LG88	Jeannette's Creek	St. Clair	0	382100	4686000	FOTE
17LG88	Auclan's Marina	St. Clair	0	381100	468550	FOTE
17LG89	St. Clair NWA	St. Clair	25	383296	4694644	FOTE
17LG89	St. Clair NWA	St. Clair	200	383173	4695261	FOTE
17LG89	St. Clair NWA	St. Clair	5	383500	4694000	FOTE
17LG89	St. Clair NWA	St. Clair	11	383500	4693000	FOTE
17LG89	Walpole Island	St. Clair	400	382123	4699418	FOTE
17LG89	Walpole Island	St. Clair	400	382275	4699458	FOTE
17LH60	Walpole Island	St. Clair	0	363100	4709500	FOTE
17LH60	Bassett Island	St. Clair	0	369000	4708000	FOTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17LH61	Seaway Island	St. Clair	0	367500	4711200	FOTE
17LH70	Walpole Island	St. Clair	300	377051	4702245	FOTE
17LH70	Walpole Island	St. Clair	4	377302	4702122	FOTE
17LH70	Walpole Island	St. Clair	250	377286	4701850	FOTE
17LH71	Walpole Island	St. Clair	2	379000	4717500	FOTE
17LH72	St. Clair River	St. Clair	0	377700	4725000	FOTE
17LH80	Mitchell's Bay	St. Clair	2	381710	4704104	FOTE
17LH80	Mitchell's Bay	St. Clair	4	384700	4700900	FOTE
17LH81	St. Anne Island	St. Clair	0	381000	4713000	FOTE
17LH83	St. Clair River	St. Clair	0	380200	4735700	FOTE
17LH84	St. Clair River	St. Clair	0	380700	4746500	FOTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17LG25	Amherstburg	Erie	1	325000	4657500	BLTE
17LG26	Big Creek	Erie	0	327800	4661600	BLTE
17LG26	Big Creek	Erie	0	327800	4660200	BLTE
17LG26	Detroit River	Erie	0	325500	4665000	BLTE
17LG27	Canard River mouth	Erie	0	326500	4670700	BLTE
17LG45	Dolson's Creek	Erie	0	349250	4654200	BLTE
17LG45	Cedar Creek	Erie	0	349000	4652200	BLTE
17LG55	Cedar Creek	Erie	0	351000	4653200	BLTE
17LG74	Pt. Pelee	Erie	2	373338	4647423	BLTE
17LG74	Pt. Pelee	Erie	2	373470	4647627	BLTE
17LG74	Pt. Pelee	Erie	3	373725	4646852	BLTE
17LG74	Pt. Pelee	Erie	2	374664	4648540	BLTE
17MH72	Port Stanley	Erie	0	479800	4725100	BLTE
17MH72	Fingal	Erie	0	473400	4724600	BLTE
17MH72	Port Talbot	Erie	0	470700	4721100	BLTE
17NH31	Hahn Marsh	Erie	0	539500	4714000	BLTE
17NH31	Jacksonburg	Erie	0	531000	4715500	BLTE
17NH41	Long Pt.	Erie	2	544162	4715845	BLTE
17NH41	Long Pt.	Erie	2	544286	4716892	BLTE
17NH41	Long Pt.	Erie	2	544394	4715857	BLTE
17NH41	Long Pt.	Erie	2	544345	4715986	BLTE
17NH41	Long Pt.	Erie	2	544573	4716275	BLTE
17NH51	Long Pt.	Erie	0	556200	4716200	BLTE
17NH51	Long Pt.	Erie	0	552000	4714600	BLTE
17NH52	Long Pt.	Erie	12	553632	4723343	BLTE
17NH52	Long Pt.	Erie	2	553639	4723477	BLTE
17NH52	Long Pt.	Erie	2	553649	4723499	BLTE
17NH53	Vittoria CA	Erie	0	557000	4735100	BLTE
17NH63	Port Dover	Erie	0	565900	4737000	BLTE
17NH63	Port Dover	Erie	0	562500	4739000	BLTE
17NH64	Port Dover	Erie	0	569400	4743100	BLTE
17NH73	Nanticoke	Erie	0	576500	4738200	BLTE
17PH05	Grand River	Erie	0	609000	4752100	BLTE
17PH14	Grand River mouth	Erie	0	616500	4749000	BLTE
17PH15	Dunnville	Erie	0	613500	4750400	BLTE
17PH15	Dunnville	Erie	0	611200	4750900	BLTE
17PH44	Port Colborne	Erie	0	642400	4748000	BLTE
17PH44	Cassidy Point	Erie	0	645500	4747700	BLTE
17PH44	Pine Crest Point	Erie	0	648000	4747900	BLTE
17PH44	Silver Bay Point	Erie	0	649400	4748500	BLTE
17PH45	Port Colborne	Erie	0	641400	4753700	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
16GS21	St. Joseph's Island	Huron	16	729750	5116600	BLTE
16GS22	Court Point	Huron	0	725700	5120700	BLTE
16GS22	Reed Point	Huron	0	723000	5127700	BLTE
16GS31	St. Joseph's Island	Huron	0	731000	5116250	BLTE
17KM70	St. Joseph's A	Huron	0	272400	5105400	BLTE
17KM70	St. Joseph's B	Huron	0	271700	5106000	BLTE
17KM70	St. Joseph's C	Huron	0	271000	5109500	BLTE
17KM70	St. Joseph's D	Huron	0	271000	5108500	BLTE
17KM73	Desbarats	Huron	4	279200	5139300	BLTE
17KM73	Desbarats	Huron	0	274500	5135500	BLTE
17KM73	Desbarats	Huron	0	273400	5134100	BLTE
17KM73	Desbarats	Huron	0	275600	5134600	BLTE
17KM84	Ottertail Lake	Huron	20	287200	5141000	BLTE
17LM91	Spanish Marsh	Huron	0	386900	5115200	BLTE
17MH18	Kettle Point Marsh	Huron	0	417700	4781250	BLTE
17MH18	Kettle Point Marsh	Huron	0	417700	4781250	BLTE
17MK68	Stoke's Bay	Huron	4	469800	4986600	BLTE
17MK68	Stoke's Bay	Huron	4	470000	4986330	BLTE
17MK68	Stoke's Bay	Huron	0	468000	4983500	BLTE
17MK75	Spry Lake	Huron	10	479942	4954706	BLTE
17MK75	Oliphant	Huron	0	477500	4953000	BLTE
17MK76	Sky Lake	Huron	6	479800	4960900	BLTE
17MK78	Ira Lake	Huron	2	470400	4986400	BLTE
17MK78	Stoke's Bay	Huron	0	471500	4980100	BLTE
17MK85	Boat Lake	Huron	0	482500	4954500	BLTE
17MK85	Boat Lake	Huron	0	480750	4951900	BLTE
17MK85	Issac lake	Huron	10	480500	4959400	BLTE
17MK86	Big Mud Lake	Huron	61	487300	4960500	BLTE
17MK86	Sky Lake	Huron	6	480200	4961000	BLTE
17MK86	Sky Lake	Huron	0	480500	4963600	BLTE
17MK95	Geason Lake	Huron	1	497900	4957750	BLTE
17MK95	Lake Charles	Huron	8	498200	4955900	BLTE
17MK95	Mountain lake	Huron	0	495000	4950290	BLTE
17MK95	Oxenden	Huron	20	494514	4954156	BLTE
17MK95	Oxenden	Huron	0	493000	4954800	BLTE
17ML38	Manitoulin Island	Huron	0	431300	5088500	BLTE
17ML38	Strawberry Island	Huron	0	432600	5087900	BLTE
17ML40	Sunset Park	Huron	0	444000	5008800	BLTE
17ML40	Baptist Marsh	Huron	0	446000	5007200	BLTE
17ML40	Barney Lake	Huron	0	447000	5006500	BLTE
17ML40	Otter Nook	Huron	0	443000	5007500	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17ML60	Dyer's Bay	Huron	7	467230	5002670	BLTE
17NK05	Wiarton	Huron	0	501500	4952300	BLTE
17NK05	Big Bay	Huron	0	502000	4957700	BLTE
17NK05	Big Bay	Huron	0	502800	4958300	BLTE
17NK72	Wasaga Beach	Huron	0	577500	4929000	BLTE
17NK72	Wasaga Beach	Huron	0	579500	4925800	BLTE
17NK76	Thunder Bay	Huron	0	575000	4960500	BLTE
17NK76	Awenda PP	Huron	0	578700	4962600	BLTE
17NK82	Marl Lake	Huron	20	581300	4929200	BLTE
17NK83	Tiny Marsh	Huron	44	584000	4939800	BLTE
17NK84	Tiny Marsh	Huron	32	584500	4940500	BLTE
17NK87	Cognashene Lake	Huron	0	585000	4979300	BLTE
17NK87	Brown Bay	Huron	0	587400	4977900	BLTE
17NK87	Longuissa Bay	Huron	0	587650	4978900	BLTE
17NK87	Bone Island	Huron	0	589000	4977150	BLTE
17NK87	Bone Island	Huron	0	589550	4977350	BLTE
17NK87	Franceville	Huron	0	586850	4977550	BLTE
17NK87	Brown Bay	Huron	0	586800	4978350	BLTE
17NK87	Cognashene Lake	Huron	0	586100	4979300	BLTE
17NK87	Cognashene Lake	Huron	0	585800	4979650	BLTE
17NK87	Longuissa Bay	Huron	0	589150	4980000	BLTE
17NK87	Longuissa Bay	Huron	0	589550	4979650	BLTE
17NK87	Longuissa Bay	Huron	0	589400	4979250	BLTE
17NK95	Wye Marsh	Huron	8	590500	4951500	BLTE
17NK95	Midland	Huron	16	590700	4952400	BLTE
17PK05	Matchedash Bay	Huron	3	604525	4958319	BLTE
17PK05	Matchedash Bay	Huron	7	604969	4955586	BLTE
17NH89	Coote's Paradise	Ontario	0	588114	4791821	BLTE
17PH08	Van Wagner's	Ontario	0	602000	4789000	BLTE
17PH08	Confederation Park	Ontario	0	600400	4789800	BLTE
17PH18	Fifty Point CA	Ontario	0	611800	4786500	BLTE
17PH18	Winona SL	Ontario	0	612270	4786000	BLTE
17PH18	Grimsby Harbour	Ontario	0	617800	4784400	BLTE
17PH38	Jordan Harbour	Ontario	0	632400	4781500	BLTE
17PH38	cattail marsh	Ontario	0	635200	4782000	BLTE
17PH38	16 Mile Creek	Ontario	0	636100	4781100	BLTE
17PH38	Martindale Pond	Ontario	0	639500	4782900	BLTE
17QJ16	Port Britain	Ontario	0	711200	4867600	BLTE
17QJ16	Gage Creek	Ontario	0	718800	4870000	BLTE
17QJ16	Port Britain	Ontario	0	711250	4867750	BLTE
17QJ17	Pigeon Hill	Ontario	0	719000	4870000	BLTE
17QJ37	Eddystone	Ontario	0	738600	4879400	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17QJ37	Victoria Beach	Ontario	0	750000	4877000	BLTE
17QJ37	Wicklow	Ontario	0	739600	4874500	BLTE
18TP87	Brighton	Ontario	2	282675	4878569	BLTE
18TP96	Hawtho Point	Ontario	0	299000	4869000	BLTE
18TP97	Weller's Bay	Ontario	2	299091	4874750	BLTE
18TP97	Weller's Bay	Ontario	4	299344	4874841	BLTE
18TP98	Dead Creek	Ontario	0	291000	4881500	BLTE
18TP98	Murray Canal	Ontario	0	291000	4880500	BLTE
18TP98	Bay of Quinte	Ontario	0	293300	4881500	BLTE
18TQ60	Barry Lake	Ontario	1	267000	4910000	BLTE
18TQ60	Lake Cran	Ontario	4	264800	4908000	BLTE
18UP06	Huyck's Bay	Ontario	0	301500	4868100	BLTE
18UP07	Pleasant Bay	Ontario	0	300500	4870500	BLTE
18UP07	Consecon Lake	Ontario	0	300200	4874500	BLTE
18UP08	Ameliasburg	Ontario	0	305800	4881200	BLTE
18UP08	Fenwood Gardens	Ontario	0	308700	4886000	BLTE
18UP16	Sandbanks PP	Ontario	8	316364	4869021	BLTE
18UP16	Sandbanks PP	Ontario	2	319093	4869895	BLTE
18UP16	Sandbanks PP	Ontario	2	319093	4869895	BLTE
18UP17	Sandbanks PP	Ontario	0	319048	4870232	BLTE
18UP19	Belleville	Ontario	2	313350	4892500	BLTE
18UP26	East Lake	Ontario	10	326277	4868347	BLTE
18UP26	East Lake	Ontario	60	321180	4864560	BLTE
18UP26	East Lake	Ontario	20	322520	4862381	BLTE
18UP26	East Lake	Ontario	60	321180	4864560	BLTE
18UP26	East Lake	Ontario	20	322520	4862381	BLTE
18UP28	Big Island 1	Ontario	0	324000	4888500	BLTE
18UP28	Big Island 2	Ontario	0	321500	4886000	BLTE
18UP28	Fish Lake	Ontario	0	326500	4885000	BLTE
18UP29	Sucker Creek	Ontario	0	329600	4892900	BLTE
18UP35	Pt. Petre	Ontario	8	331677	4859772	BLTE
18UP35	Pt. Petre	Ontario	1	331569	4858879	BLTE
18UP35	Pt. Petre	Ontario	1	331569	4858879	BLTE
18UP36	Pt. Petre	Ontario	2	331712	4860055	BLTE
18UP37	Port Milford	Ontario	0	336200	4877700	BLTE
18UP37	ake on the Mountai	Ontario	0	335000	4878000	BLTE
18UP38	Mallory Bay	Ontario	0	335000	4882600	BLTE
18UP38	Mallory Bay	Ontario	0	336200	4882500	BLTE
18UP38	Bay of Quinte	Ontario	0	338700	4880200	BLTE
18UP39	Telegraph Narrows	Ontario	0	332300	4893600	BLTE
18UP39	Telegraph Narrows	Ontario	0	330200	4893200	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
18UP39	Telegraph Narrows	Ontario	0	337700	4896000	BLTE
18UP39	Telegraph Narrows	Ontario	0	336400	4898500	BLTE
18UP39	Telegraph Narrows	Ontario	0	337800	4894500	BLTE
18UP47	Prince Edward	Ontario	0	346600	4879200	BLTE
18UP48	Cressy	Ontario	0	348000	4882900	BLTE
18UP48	Cressy	Ontario	0	348200	4881700	BLTE
18UP48	Hay Bay	Ontario	0	342400	4887700	BLTE
18UP58	Amherst Island	Ontario	0	357789	4886431	BLTE
18UP59	Upper Gap	Ontario	0	352700	4891000	BLTE
18UP68	Amherst Island	Ontario	0	363293	4887361	BLTE
18UP69	Kingston area	Ontario	0	367343	4899065	BLTE
18UP89	Wolfe Island A	Ontario	0	386200	4895000	BLTE
18UP89	Wolfe Island B	Ontario	0	389400	4894700	BLTE
18UP99	Lewis Bay	Ontario	0	399000	4896300	BLTE
18UP99	Irvine Bay	Ontario	0	397200	4897000	BLTE
18UP99	Holliday Bay	Ontario	0	395500	4897600	BLTE
18UP99	Bayfield Bay	Ontario	0	390600	4894500	BLTE
18UQ60	Odessa Lake	Ontario	4	364500	4907500	BLTE
18UQ70	Kingston area	Ontario	0	375000	4904502	BLTE
18UQ91	Kingston area	Ontario	24	390445	4911977	BLTE
18VQ00	Bateau Channel	Ontario	0	403000	4908000	BLTE
18VQ00	Howe Island A	Ontario	0	402100	4906000	BLTE
18VQ00	Howe Island B	Ontario	0	400206	4905500	BLTE
18VQ00	Thousand Islands	Ontario	0	407500	4906700	BLTE
18VQ01	Gananoque River	Ontario	0	405000	4912000	BLTE
18VQ01	Gananoque River	Ontario	0	405000	4919500	BLTE
18VQ11	Ivy Lea	Ontario	0	418900	4915700	BLTE
18VQ11	Ivy Lea	Ontario	0	417100	4911500	BLTE
18VQ11	Ivy Lea	Ontario	0	415000	4911500	BLTE
18VQ11	Ivy Lea	Ontario	0	414200	4911800	BLTE
18VQ11	Gananoque	Ontario	0	412500	4910500	BLTE
18VQ11	Gananoque	Ontario	0	410600	4910200	BLTE
17LG68	Deerbrook	St. Clair	0	367200	4684500	BLTE
17LG78	Tremblay CA	St. Clair	0	375200	4684500	BLTE
17LG78	Lighthouse Cove	St. Clair	0	379400	4684800	BLTE
17LG88	Jeannette's Creek	St. Clair	0	382100	4686000	BLTE
17LG88	Auclan's Marina	St. Clair	0	381100	468550	BLTE
17LG89	St. Clair NWA	St. Clair	10	383500	4693000	BLTE
17LG89	St. Clair NWA	St. Clair	3	384687	4692753	BLTE
17LG89	St. Clair NWA	St. Clair	10	383420	4692729	BLTE
17LG89	St. Clair NWA	St. Clair	5	384651	4691574	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17LG89	St. Clair NWA	St. Clair	2	383805	4691962	BLTE
17LG89	St. Clair NWA	St. Clair	2	383664	4691873	BLTE
17LG89	St. Clair NWA	St. Clair	4	383500	4691350	BLTE
17LH60	Walpole Island	St. Clair	0	363100	4709500	BLTE
17LH60	Bassett Island	St. Clair	0	369000	4708000	BLTE
17LH61	Seaway Island	St. Clair	0	367500	4711200	BLTE
17LH70	Walpole Island	St. Clair	4	378500	4706218	BLTE
17LH70	Walpole Island	St. Clair	24	375748	4705607	BLTE
17LH70	Walpole Island	St. Clair	8	375313	4704470	BLTE
17LH70	Walpole Island	St. Clair	4	378498	4706259	BLTE
17LH70	Walpole Island	St. Clair	10	374601	4703972	BLTE
17LH70	Walpole Island	St. Clair	6	373909	4706694	BLTE
17LH70	Walpole Island	St. Clair	3	374708	4709849	BLTE
17LH70	Walpole Island	St. Clair	2	376479	4708995	BLTE
17LH70	Walpole Island	St. Clair	2	378809	4707442	BLTE
17LH71	Walpole Island	St. Clair	2	372588	4710579	BLTE
17LH71	Walpole Island	St. Clair	3	372683	4711273	BLTE
17LH72	St. Clair River	St. Clair	0	377700	4725000	BLTE
17LH80	Walpole Island	St. Clair	2	385012	4709298	BLTE
17LH80	Walpole Island	St. Clair	1	385400	4701600	BLTE
17LH80	Walpole Island	St. Clair	28	381710	4704104	BLTE
17LH81	St. Anne Island	St. Clair	0	381000	4713000	BLTE
17LH83	St. Clair River	St. Clair	0	380200	4735700	BLTE
17LH84	St. Clair River	St. Clair	0	380700	4746500	BLTE

Square No.	Site	Basin	# of birds	Easting	Northing	Species code
17MG28	Erieau	Erie	2	422700	4680700	LIGU