



Reports of rare birds (those for which the OBRC requires documentation---see supplement to Ontario Birds 5[3]) should be sent to: Secretary, Ontario Bird Records Committee c/o Ontario Field Ornithologists Box 1204, Station B Burlington, Ontario L7P 3S9

Ontario Birds

Editor: Donald M. Fraser Editorial Consultant: Mitchell Temkin Design/Production: Franca Leeson Copy Editor: Chip Weseloh Book Review Editor: William J. Crins Editorial Assistants: Don Ford, William J. Crins, Donald A. Sutherland, Alan Wormington

All items submitted for publication should be sent to: **The Editor, Ontario Birds** c/o Ontario Field Ornithologists Box 1204, Station B Burlington, Ontario L7P 3S9

Material should be double-spaced and typewritten if possible.

Publication costs of *Ontario Birds* are partially offset by an annual grant from the James L. Baillie Memorial Fund. OFO gratefully acknowledges this generous support.

Editorial Policy

Ontario Birds is the journal of the Ontario Field Ornithologists. Its aim is to provide a vehicle for the documentation of the birds of Ontario. We encourage the submission of full length articles or short notes on the status of bird species in Ontario, significant provincial or county distributional records, tips on bird identification, behavioural observations of birds in Ontario, location guides to significant birdwatching areas in Ontario, book reviews and similar material of interest on Ontario birds. We do not accept submissions dealing with "listing" and we discourage Seasonal Reports of bird sightings as these are covered by *Bird Finding in Canada* and *American Birds*, respectively. Distributional records of species for which the Ontario Bird Records Committee (OBRC) requires documentation must be accepted by them before they can be published in *Ontario Birds*.

Ontario Birds Volume 6 Number 2	August 1988	Pages 41-80
Table of Contents		
Letters to the Editor Additional northern On	tario records of Eurasian Wigeon /	41
Nicholas Escott Illinois records of Snowy Mary Gustafson	Plover overlooked /	41
Articles	ommittee Report for 1987 /	42
Glenn Coady	Vaterbirds Nesting at Hamilton Harbour,	
Lake Ontario, 1959-198' Rob Z. Dobos, John Stru Gull Behaviour and Mov	51 61	
A.P. Sandilands	al Waterbirds Breeding at Presqu'ile	68
Note Wing-tail Flicking as a M Crows from Ravens / Ron Pittaway	leans of Distinguishing	74
	and Field (5th Edition) /	75
reviewed by Wayne C. Blackbirds of the Americas	/	76
reviewed by Geoffrey (The Mountain and the Ma reviewed by Bruce W.	igration: A Guide to Hawk Mountain /	78
OFO Announcements		80
Cover illustration: Ame	rican Swallow-tailed Kite by Ron Ridout	

Letters to the Editor

Additional northern Ontario records of Eurasian Wigeon Chris Blomme (*Ontario Birds* 6(1):25–26, April 1988) is incorrect in his statement that there has only been one previous record of Eurasian Wigeon in northern Ontario. I am aware of six published records in Thunder Bay District, as follows:

12 May 1950 (1) Port Arthur waterfront, first Thunder Bay District record;
1-8 May 1954 (1) Fort William (referred to in Mr. Blomme's article);
6 May 1956 (1) Fort William waterfront;
6 May 1958 (2) Fort William;
7 May 1961 (1) Fort William;
20 May 1983 (1 male) Marathon (Ontario Birds 2(2):56).

The Port Arthur and Fort William records were published in the Newsletter of the Thunder Bay Field Naturalists.

Also, the location of Kelley Lake, the site of the Sudbury District record, is erroneously described as 46°27'W, 81°03'N. It should be 46°27'N, 81°03'W. This location is not in northern Ontario, but rather in southern Ontario, according to the official OFO line of demarcation described in *Ontario Birds* 2(1):14, which approximates the 4°C mean daily temperature for the year isotherm.

> Nicholas G. Escott Thunder Bay, Ontario

Editor's Note: As described on p. 42 of this issue of *Ontario Birds*, the Ontario Bird Records Committee now recognizes 47°N Latitutde as the line of demarcation between northern and southern Ontario. Kelley Lake is, therefore, considered part of southern Ontario under the new OBRC guidelines. D.M.Fraser

Illinois records of Snowy Plover overlooked

I am amazed that the article entitled "Snowy Ployer: new to Ontario" (Ontario Birds 6(1):4-10) did not mention either Illinois record of Snowy Ployer, Illinois' first Snowy Plover was photographed 7 May 1986, ten days before the Presque Isle, Pennsylvania sight record. A Snowy Plover was seen in Illinois 10-11 May 1987, immediately after the LPBO sighting. Both records were published in American Birds (40:478 and 41:438, respectively). I feel that omission of these records flaws an otherwise excellent article. Mary Gustafson

VOLUME 6 NUMBER 2

Westerville, Ohio

Ontario Bird Records Committee Report for 1987

by Glenn Coady

This is the sixth annual report of the Ontario Bird Records Committee (OBRC) of the Ontario Field Ornithologists (OFO). A total of 77 records was reviewed by the OBRC during 1987, of which 53 (about 69 per cent) were found to be acceptable.

This report officially adds two new species to Ontario's Checklist of Birds — Snowy Plover and Western Wood-Pewee — bringing the provincial total to 436 species. There were no changes to the Ontario breeding bird list as a result of the records reviewed in 1987. Added to the list of birds which have been recorded in northern Ontario are Western Wood-Pewee and Sage Thrasher.

The 1987 OBRC members were Ronald J. Pittaway (Chairman), Glenn Coady (Secretary), Robert Curry, Kevin A. McLaughlin, Mark Gawn, Michael W.P. Runtz, Ian L. Jones and D. James Mountjoy.

Changes to the Review List

Commencing in 1988 the dividing line between northern and southern Ontario has been changed. The previous line, approximately the 4°C mean annual temperature isotherm, is imprecise, can change with time, and is not available on most maps. The committee has adopted 47° N latitude as the new dividing line. This line is precise, constant, available on most maps, passes through relatively uninhabited country close to the old line, and no records will require any changes as a result of its adoption.

Species Accounts

In the following accounts, information on age/sex/plumage for each record is included, if known. This information is based on the system outlined by Sharrock (1985). Place names in italics refer to a county, regional municipality or district in Ontario. All contributors who have provided a written description, photograph or specimen have been credited. Contributors names have been underlined if they were a discoverer of the bird(s). All records pertain to sight records unless it is indicated that a photograph or specimen was received.

Glenn Coady, #1424-20 Carlton St., Toronto, Ontario M5B 2H5

Accepted Records

Northern Gannet (Sula bassanus)

1986 — one juvenile, 22–30 Nov., Cornwall, Stormont, Dundas and Glengarry (Mark Gawn, J. Van Reit) — photos on file.

American White Pelican (Pelecanus erythrorhynchos)

1986 — one adult, 27–30 Sept., Long Point Causeway, Haldimand-Norfolk (Terrie J. Woodrow).

Little Blue Heron (Egretta caerulea)

- 1987 one adult, 6 May, Stoney Point, Essex (John R. Carley) photo on file.
 - one adult, 6-7 May, Cloud Bay, Thunder Bay (Nicholas G. Escott).
 - one juvenile, 18 Oct., Ajax, Durham (Mark Gawn, Glenn Coady).

Tricolored Heron (Egretta tricolor)

1986 — one adult, 4 May, Squirrel Island, Lambton; 5 May, Stoney Point, Essex (Scott Connop, Ed P. LeBlanc) — photo on file.

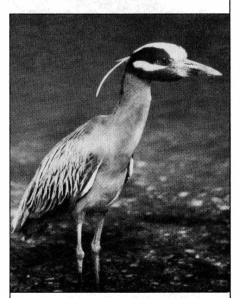
These two sightings, at opposite ends of Lake St. Clair on successive days, are assumed to be referable to the same individual, although there is no way to positively determine this.

Yellow-crowned Night-Heron (Nycticorax violaceus)

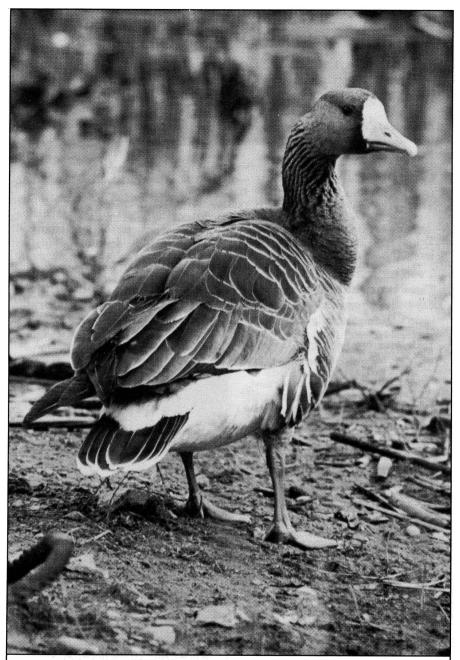
- 1987 one adult, 10 May, Rondeau Prov.
 Park, Kent (<u>Andrew Slater</u>).
 one adult, 16 May, Grand Bend,
 - Lambton (Jean Stewart).
- 1985 one adult, 7 June–10 July, Cedar Mills, Peel (Gordon B. Cameron, Luc Fazio, Jonathon Grant) photos on file.

Glossy Ibis (Plegadis falcinellus)

- 1987 two adults, 27–29 Apr., one to 2 May, Ericau, Kent (William Houghton).
- 1984 one adult, 17–24 Oct., Guelph, Wellington (Jeffrey F. Poklen, Alvaro Jaramillo).
- 1971 two adults, 24–30 May, Dundas Marsh, Hamilton-Wentworth (Alan Wormington).



Yellow-crowned Night-heron, 7 June–10 July 1985, Cedar Mills, Peel. Photo by Jonathon Grant.



Greater White-fronted Goose, adult frontalis, 2-23 April 1978, Toronto, Metropolitan Toronto. Photo by Alan Wormington.

Greater White-fronted Goose (Anser albifrons)

- 1987 one adult, 22 March, Cranberry Marsh, Durham (Verna J. Higgina, Anne MacDonald, Anne Farraway).
- 1978 one frontalis adult, 2–23 Apr., Toronto Island, Metropolitan Toronto (Verna J. Higgins, Anne MacDonald, Alan Wormington) — photos on file.

Eurasian Wigeon (Anas penelope)

- 1987 one rufous phase female, 28–30 March, Smithville, Niagara (Robert Curry, Kayo Roy) — photos on file.
 - one male, 11 April, Presqu'ile Prov. Park, Northumberland (Kathleen MacNamara, Ralph Speak).
 - one male, 26 April, Blenheim, Kent (George D. Bryant, Robert Curry).
 - two males, 21–26 May, one 16–27 May, Presqu'ile Prov. Park, Northumberland (Peter Burke).
 - one male, 6 Sept., Presqu'ile Prov. Park, Northumberland (Ronald J. Pittaway).
 - one adult male, 27 Sept., Presqu'ile Prov. Park, Northumberland (R. D. McRae).

The Smithville individual, impeccably documented, represents the first female of this species accepted for the province. A mounted specimen of a female (rufous phase) of this species, reportedly collected 3 Nov. 1934 at Wendover, Prescott and Russell, has been determined to have been collected on the Quebec side of the Ottawa River.

Harlequin Duck (Histrionicus histrionicus)

 1977 — one immature female, mid-October, collected between 19 and 22 Oct., Eskwanonwatin Lake, *Thunder Bay* (<u>F. G. Cooch</u>) — specimen (skin) in NMC: #65899.

American Swallow-tailed Kite (Elanoides forficatus)

1987 — one, 8 May, Point Pelee Nat. Park, Essex (William Gilmour, Michael McEvoy, Alan Wormington, Kevin A. McLaughlin).

 one, 14 May, Walsingham, Haldimand-Norfolk; 16 May, Long Point Prov. Park, Haldimand-Norfolk; 16 May, Port Rowan, Haldimand-Norfolk (<u>Mike Furber</u>, Ian Richards, Don Baldwin).

Mississippi Kite (Ictinia mississippiensis)

1987 — one first summer, 25 May, Point Pelee Nat. Park, Essex (Peter Whelan).
 — one adult, 26 May, Long Point Prov. Park and Tip, Haldimand-Norfolk (David Beadle, David Curson).

Swainson's Hawk (Buteo swainsoni)

1985 — one first summer, 21 April, Grimsby, Niagara (Eric Single).

Gyrfalcon (Falco rusticolus)

- 1986 one intermediate phase, 24 Sept., Long Point Tip, Haldimand-Norfolk (John Curson, Katherine Thomas).
 - one intermediate phase, 2 Nov., Long Point Flats, Haldimand-Norfolk (Beverly Collier, George E. Wallace).



Snowy Plover, adult male, 4–9 May 1987, Long Point Flats, Haldimand-Norfolk. Photo by Ed Johns.

Snowy Plover (Charadrius alexandrinus)

1987 — one adult male, 4–9 May (but not observed 6–8 May), Long Point Flats, Haldimand-Norfolk (Jon Curson, Alan Wormington, Dennis F. Rupert, Edmund D. Johns) — photos on file.

This represents the first accepted record of this species for the province. For a detailed account of this record see Collier and Curson (1988).

American Avocet (Recurvirostra americana)

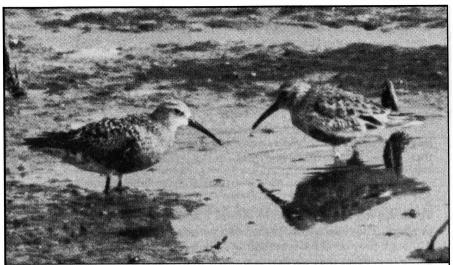
- 1987 one adult, summer plumage, 20 April, Toronto, Metropolitan Toronto (Beth Jefferson) photo on file.
 - five adults, summer plumage, 14 May, Hillman's Marsh, Essex (Michael E. Seymour).
 - one adult, summer plumage, 8 June, Windy Point, Rainy River (Dave H. Elder) photo on file.
- 1986 one adult, summer plumage, 19–25 May, Warkworth, Northumberland (A. Geoff Carpentier) — photos on file.
 - two, 24 Sept., Long Point Flats, Haldimand-Norfolk (David Beadle).

Curlew Sandpiper (Calidris ferruginea)

- 1987 one male, summer plumage, 16 and 18–20 May, Harrow, Essex; 16–17 May, Kingsville, Essex (Alan J. Smith, Alan Wormington).
 - one female, summer plumage, 29 May, Harrow, Essex (<u>Alan Wormington</u>) photos on file.

Band-tailed Pigeon (Columba fasciata)

- 1979 one, 18 Dec. (not 19 Dec. as in McRae 1982: 38), Presqu'ile Prov. Park, Northumberland (<u>R. D. McRae</u>).
- 1978 one, 12–27 Oct., Dorion, *Thunder Bay* (Arnie L. Maki, Alan Wormington) photos on file.



Curlew Sandpiper (left), female, 29 May 1987, Harrow, Essex. Photo by Alan Wormington.

Western Wood-Pewee (Contopus sordidulus)

1984 — one adult male, 18–20 June, North Point, Cochrane (Mark Fournier, Christopher J. Rimmer) — specimen (skin) in NMC: #84372.

This specimen represents the first accepted record of this species for the province.

Western Kingbird (Tyrannus verticalis)

1978 — one, 19–20 Nov., Port Stanley, Elgin (Bruce W. Duncan, Marshall H. Field) — photo on file.

Eurasian Jackdaw (Corvus monedula)

1985 — one, 20 Oct., Toronto, Metropolitan Toronto (<u>Tom C.</u> <u>Hutchinson</u>).

This represents the second accepted record of this species for the province. An account of the first record is given by Bain (1986). Smith (1985) and Baicich (1986) summarize the North American records of this species and the factors responsible for its occurrence.



Band-tailed Pigeon, 12–27 October 1978, Dorion, Thunder Bay. Photo by Alan Wormington.

47

Bewick's Wren (Thyromanes bewickii)

1986 — one, 8-9 May, Long Point Tip, Haldimand-Norfolk (George E. Wallace).

Townsend's Solitaire (Myadestes townsendi)

- 1987 one, 6 March–2 April, Silver Islet, *Thunder Bay* (Nicholas G. Escott, Thomas Dyke).
- 1986 one, 6 Nov., Point Pelee Nat. Park, Essex (Stephen Wingfield, G. Tom Hince) photos on file.

Sage Thrasher (Oreoscoptes montanus)

- 1987 one, 28 May, Thunder Bay, *Thunder Bay* (<u>Barry Atkinson</u>, Allan G. Harris) photo on file.
 - one, 3 June, Atikokan, Rainy River (David W. Fidler, Tom R. Murray, Dave H. Elder) photos on file.

These are the fifth and sixth records of this species now accepted for the province. They represent the first two records for northern Ontario. Although they occurred less than 200 kilometres apart, there is no evidence to suggest they pertain to a single individual.

Bell's Vireo (Vireo bellii)

1987 — two, 12–13 May, Port Rowan, Haldimand-Norfolk (Martin K. McNicholl).

This represents the first accepted record for the province involving more than one bird.

Yellow-throated Warbler (Dendroica dominica)

1986 — one albilora, 10 Nov.-1 Dec., Ottawa, Ottawa-Carleton (Mark Gawn).



Cassin's Sparrow, 7–8 May 1987, Point Pelee National Park, Essex. Photo by Alan Wormington.

Blue Grosbeak (Guiraca caerulea)

1987 — one immature male, 23 May, Point Pelee Nat. Park, *Essex* (<u>Duane H. Bradford</u>, David Helm, Joseph E. Faggan, Peter Whelan, T. R. Zberanowsky).

Cassin's Sparrow (Aimophila cassinii)

1987 — one, 7-8 May, Point Pelee Nat. Park, Essex (James H. Fairchild, Robert W. Storms, James Flynn, Alan Wormington, Derek Spindlow) — photos on file.

This represents the fourth accepted record for the province.

Field Sparrow (Spizella pusilla)

1984 — one adult, 11 July, North Point, Cochrane (Christopher J. Rimmer) — photo on file.

Lark Sparrow (Chondestes grammacus)

- 1987 one, 6–7 April, Presqu'ile Prov. Park, Northumberland (A. Geoff Carpentier) photos on file.
- 1984 one, 13 June, Dunrobin, Ottawa-Carleton (Bruce M. DiLabio).

Unaccepted Records

Identification uncertain

In the majority of the records listed below, the description presented in the reports was deemed insufficient to establish with certainty the identity of the species claimed; in very few cases was the committee actually convinced an incorrect identification was made.

1987

37 — Western Grebe, 16 May, Point Pelee Nat. Park, Essex.

- Little Blue Herons (two), 14 May, Point Pelee Nat. Park, Essex.
- Yellow-crowned Night-Heron, 16 Aug., Presqu'ile Prov. Park, Northumberland.
- Eurasian Wigeon, 14 Aug., Little Current, Manitoulin.
- Gyrfalcon, 14 Feb., Queenston, Niagara.
- Roseate Tern, 16 May, Point Pelee Nat. Park, Essex.
- Bell's Vireo, 10 May, Point Pelee Nat. Park, Essex.
- Bell's Vireo, 14 May, Point Pelee Nat. Park, Esser.
- Western Tanager, 9 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 9 May, Point Pelee Nat. Park, Essex
- Blue Grosbeak, 10 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 13 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 14 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 15 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 16 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 17 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeak, 17 May, Point Pelee Nat. Park, Essex
- Blue Grosbeaks (two), 23 May, Point Pelee Nat. Park, Essex.
- Blue Grosbeaks (two), 24 May, Point Pelee Nat. Park, Essex.
- 1986 Greater White-fronted Goose, 4 Aug., Port Perry, Durham.
 - Swainson's Hawk, 2 Nov., Squaw Bay, Thunder Bay.
 - Western Kingbird, 13 May, Point Pelee Nat. Park, Essex.
- 1984 Willow Flycatcher, 31 May, Rainy River, Rainy River.
- 1970 Ferruginous Hawk, 12 Apr., Websterville, Simcoe.

Acknowledgements

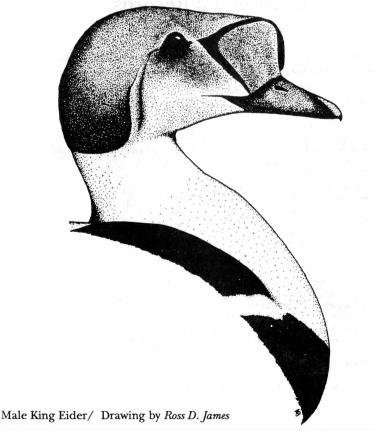
The following individuals provided valuable assistance or information in 1987 for which the OBRC is most thankful: A. Geoff Carpentier, Jon L. Dunn, Luc Fazio, Tom Hince, Ross D. James, Harry Kerr, Steve Laforest, R.D. McRae, J.L. Olmsted, Don Sutherland, George E. Wallace, Robert Watt, Peter Whelan and Alan Wormington.

The members of the OBRC would like to thank Ross James for hosting our annual meeting at the Royal Ontario Museum, Toronto.

Literature Cited

- Baicich, P.J. 1986. Jackdaw in the United States - visitors or invaders? Birdwatcher's Digest 8(5): 42-45.
- Bain, M. 1986. Eurasian Jackdaw: new to Ontario. Ontario Birds 4(2): 64-65.
- Collier, B. and J. Curson. 1988. Snowy Plover: new to Ontario. Ontario Birds 6(1): 4-10.
- McRae, R.D. 1982. Birds of Presqu'ile, Ontario. Ministry of Natural Resources, Toronto. 74pp.
- Sharrock, J.T.R. 1985. Plumage, age and moult terminology. British Birds 78(9): 419-427.

Smith, W.P. 1985. Jackdaws reach the new world. American Birds 39(3): 255-258.



The Status of Colonial Waterbirds Nesting at Hamilton Harbour, Lake Ontario, 1959-1987

by

Rob Z. Dobos, John Struger, Hans Blokpoel and D.V. Chip Weseloh

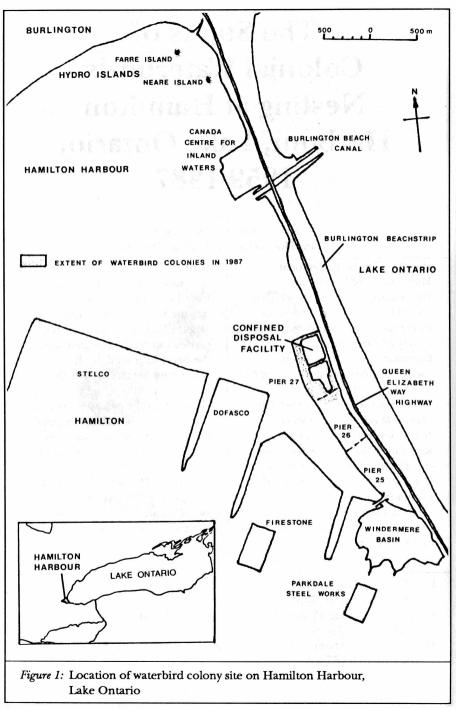
Hamilton Harbour, Regional Municipality of Hamilton-Wentworth, located at the western end of Lake Ontario, is home to what may be the most diverse colony of waterbirds on the Canadian Great Lakes. Seven species of colonial waterbirds, the Double-crested Cormorant (Phalacrocorax auritus), Snowy Egret (Egretta thula), Black-crowned Night-Heron (Nycticorax nycticorax), Ring-billed Gull (Larus delawarensis), Herring Gull (L. argentatus), Caspian Tern (Sterna caspia) and Common Tern (S. hirundo), nested there in 1986. The purpose of this paper is to document the numbers of these species which have nested at Hamilton Harbour in recent

years.

Hamilton Harbour is separated from Lake Ontario by a large sandbar, the Burlington Beachstrip (Figure 1). Landfilling has been carried out on the Harbour side of the Beachstrip south of the Burlington Beach Canal by the Hamilton Harbour Commissioners (HHC) over the past 30 years to create the present Confined Disposal Facility (CDF), for containment of harbour dredged sediments, and the Pier 25, 26 and 27 port facilities (Figure 1). The berms and filled cells of the CDF have provided a relatively isolated site for the nesting of colonial waterbirds since the mid-1970s.

- Rob Z. Dobos, Canadian Wildlife Service. Present address: 1319 Book Rd. W., R.R. #1, Jerseyville, Ontario LOR 1R0.
- John Struger, Canadian Wildlife Service. Present address: 269 Wexford Ave. S., Hamilton, Ontario L8K 2P4.
- Hans Blokpoel, Canadian Wildlife Service, 1725 Woodward Dr., Ottawa, Ontario K1A 0E7.
- D. V. Chip Weseloh, Canadian Wildlife Service, P.O. Box 5050, 867 Lakeshore Rd., Burlington, Ontario L7R 4A6.





The flat earth and rubble substrate which is largely unvegetated has proven suitable for the nesting of Herring and Ring-billed Gulls and Common and Caspian Terns. A small grove of Eastern Cottonwood (*Populus deltoides*) trees on the northwest end of the site has supported a colony of Black-crowned Night-Herons, Double-crested Cormorants and the first known nesting of the Snowy Egret in Canada (Curry and Bryant 1987).

Two small islands in the northeast corner of the harbour, which are 3 km distant from the CDF and are known locally as the Hydro Islands (also referred to as Neare and Farre Islands by Morris et al. [1976]), each support a colony of Common Terns and a few Herring and Ring-billed Gulls (Figure 1). These artificially created rock piles were the supports for hydro towers which have since been removed. Both the Pier 27 and Hydro Islands sites have been designated as **Environmentally Sensitive Areas** within the Hamilton-Wentworth Region's Official Plan (Ecologistics 1976).

This paper summarizes all records for colonial waterbirds nesting at the Pier 27 and Hydro Islands sites during the period 1959-1987.

Species Composition

An annual summary of the number of nests of each colonial waterbird species on Hamilton Harbour, from 1959 to 1987, is provided in Table 1. A species by species discussion is presented below. Double-crested Cormorant Double-crested Cormorants (DCC) first nested in Hamilton Harbour in 1984, when one nest was found on the ground. The number has since risen to 51 nests in 1987, all in trees (Table 1). The cormorants nested in the upper branches of the cottonwoods (Figure 2). These birds have yet to exploit the ground nesting habitat available to them.

At present, Hamilton harbour is the only cormorant colony on western Lake Ontario. In size, it ranks as the sixth largest among the 9 active colonies on Lakes Ontario and Erie (Weseloh, in prep.). Since the mid-1970s, when numbers were at a low due to toxic chemical induced reproductive failure (Price and Weseloh 1986), the nesting populations of DCCs has increased markedly on all the Great Lakes.

Snowy Egret

Snowy Egrets nested for the first time in Canada at Hamilton harbour in 1986, as described in detail by Curry and Bryant (1987); the species did not nest there in 1987. However, one bird, believed to be a second summer Snowy Egret, was observed at the colony throughout the summer of 1987.

Black-crowned Night-Heron

Black-crowned Night-Herons (BCNH) were first recorded nesting at the Pier 27 colony in 1975, with five nests reported (Table 1). The number has grown steadily to 212 nests in 1987 (Table 1). The BCNHs nest mostly in the lower

Year	Double- crested Cormorant	Snowy Egret	Black- crowned Night-Heron	Ring- billed Bull	Herring Gull	Caspian Tern	Common Tern	
1959	0	0	150	0	0	0	e <u>–</u> tiča	
1961	0	0	64 - <u>-</u> - 19	2 <i>f</i>	0	0	3f	
1966	0	0		0	0	0	66 <i>f</i>	
1967	0	0		0	0	0	83f	
1968	0	0	· <u>· · ·</u> ·	0	0	0	79f	
1970	0	0	· · · · · · · · · · · · · · · · · · ·	0	0	0	+k	
1971	0	0		0	0	0	95m	
1972	0	0		0	0	0	150 <i>n</i>	
1973	0	0	· · · ·	0	0	0	42 <i>n</i>	
1975	0	0	6d	0	0	0	0	
1976	0	0		0	7j	0	0	
1977	0	0	· · · ·	0	140	0	0	
1978	0	0	2 2 <u>2 6</u> 632	171	· _ ·	0	0	
1980	0	0	10	329i	102e	0	0	
1981	0	0	190	2400i	1300	0	0	
1982	0	0	13 <i>f</i>	5000f	50f	0	+g	
1984	200 1 1 6 5 1 6	0	51 <i>a</i>	11224i	2020	0	+g	
1985	24	0	98g	13778e	150g	0	225g	
1986	14 <i>a</i>	16	1834	16000 <i>e</i>	106e	480	+a	
1987	51 <i>a</i>	s - 1877 0 - 84	212 <i>a</i>	21207 <i>e</i>	225e	134e	55 3e	
— No data available					nond (1985)			
		L. Simser, pers. comm. Curry and Bryant (1987)			 h North (1978) i Blokpoel and Tessier (1986) j Blokpoel (1977) k Gilbertson (1975) 			
d North (1975)				m Morris et al. (1976)				
		VS census	Record Scheme		n Mo	rris and Hunt	er (1976)	

Table 1: Colonial waterbird populations nesting on Hamilton Harbour, 1959–1987

branches of the cottonwood trees (Figure 2). Sufficient nesting sites appear to be available for future increases in nesting birds. However, BCNHs are know to desert their colony site if large numbers of DCCs nest above them in the same trees (*e.g.*, at Pigeon Island, Frontenac County, Lake Ontario). Such a situation could also occur at the Hamilton Harbour colony.

The earliest record of BCNHs nesting in the Hamilton Harbour area was of three nests in 1936 at Van Wagner's Beach, just east of the harbour (Sheppard 1944). Anothern BCNH colony was located in a grove of trees on an old inlet on the southeast shore of the harbour behind the Firestone factory. Fifteen nests were reported there in 1959 (Table 1). This colony was substantially larger before this time and was believed to have numbered over 100 nests during the 1950s (R. Curry, pers. comm.).

The Hamilton Harbour BCNH colony was the second largest on western Lake Ontario in 1987 A colony at Tommy Thompson Park (Leslie Street Spit), Metropolitan Toronto, numbered 591 nests in 1987 (Blokpoel, unpubl. data). A colony on a small island in the Niagara River directly above the Horseshoe Falls, Regional Municipality of Niagara, had 155 nests in 1987, while a colony at Mugg's Island in Toronto Harbour, Metropolitan Toronto, had more than 50 nests in 1986, but was deserted in 1987 (E. Machell, pers. comm.). Data from the Ontario Breeding Bird Atlas (Cadman et al. 1987) indicate that only five colonies in Ontario had more than 100 nests during the period 1981-85, those being at Middle Island and East Sister Island, Essex County, in western Lake Erie, Nottawasaga Island, Simcoe County, in southern Georgian Bay and Mugg's Island and Tommy Thompson Park, Metropolitan Toronto (Goodwin 1987). The BCNH population has fluctuated considerably in Ontario over the last 50 years. It has recovered from low numbers during the 1960s and

early 1970s and at present the species appears to be expanding its range within the province (Goodwin 1987).

Ring-billed Gull

The Ring-billed Gull (RBG) was first reported nesting on Hamilton Harbour in 1961, with nests being found along the south shore of Windermere Basin, behind the Parkdale Steel Works (ONRS 1961a). It was not recorded again until 1978, when 17 nests were recorded at the CDF (Table 1). Numbers increased rapidly to approximately 2,400 in 1981, 11.224 in 1984 and 21.207 in 1987 at the CDF site (Table 1). RBG's have experienced rapid population growth throughout the entire Great Lakes. The Great Lakes RBG population has more than doubled from 1976 to 1984, with an average annual growth rate of 11% (Blokpoel and Tessier 1986). On Lake Ontario, the saturation of nesting sites at several colonies, successional increases in vegetation (reducing the amount of available nesting habitat) and control programs to deter nesting at the Tommy Thompson Park and Mugg's Island colonies in Toronto most likely contributed to the rapid increase at the Hamilton colony. Available nesting sites are still abundant on the filled cells of the CDF, depending on plans by the HHC to develop the site (Figure 3).

The Hamilton Harbour RBG colony was the fifth largest on all of Lake Ontario in 1984. Colonies at Little Galloo Island, Tommy Thompson Park, Gull Island and High Bluff Island, Northumberland County, as well as at the Port Colborne mainland, Regional Municipality of Niagara, (the largest on Lake Erie and within close proximity to Hamilton Harbour) were larger than the Hamilton Harbour colony in 1984 (Blokpoel and Tessier 1986).

Herring Gull

Herring Gulls were first recorded nesting at Hamilton Harbour in 1976, when 7 nests were counted (Table 1). By 1980 the number had risen to 102 (Table 1). Since 1984 the number of nests has remained fairly stable, with 225 nests counted in 1987 (Table 1). The Herring Gulls nest mostly at the northern end of the waterbird colony, along the connecting dykes and along the periphery of the RBGs.

The Herring Gull has been shown to be the most widespread breeding species in Ontario (Cadman et al. 1987). In recent years, its population has been slowly increasing on Lakes Ontario and Huron (Weseloh et al. 1987). The Hamilton Harbour colony is one of the largest on western Lake Ontario, with other large colonies being located at Tommy Thompson Park in Toronto, Scotch Bonnet Island and Gull Island near Brighton, above the Horseshoe Falls on the Niagara River, and on the Port Colborne breakwall.

Common Tern

The first reported nestings of Common Terns in the Hamilton area were in 1946 (15 nests) and 1949 (two nests) (North 1972). The first record of Common Terns nest-

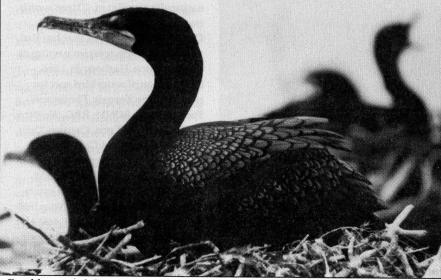


Figure 2: Double-crested Cormorant and Black-crowned Night-Heron nests, Tollgate Ponds, Hamilton Harbour. Photo courtesy CWS.

ing specifically on the Harbour was in 1961, when three nests were found on the south shore of Windermere Basin behind the Parkdale Steel Works (ONRS 1961a). Nesting was first reported at the Hydro Islands in 1966, with 66 nests recorded (ONRS 1966). Nesting occurred at the Hydro Islands up to 1972 inclusive (ONRS 1967; ONRS 1968; Gilbertson 1975: Morris et al. 1976). In 1971 one Common Tern nest was also found at the Pier 27 CDF site (ONRS 1971). In 1973 the terns nested (42 nests) on the mainland shoreline adjacent to the islands due to inundation of the islands resulting from record high water levels (Morris and Hunter 1976). A year later this colony was deserted, probably due to the combined effects of the loss of nesting habitat and several years of reduced reproductive success

induced by toxic chemical bioaccumulation (Morris and Hunter 1976). Common Terns did not subsequently nest on the Harbour until 1982 (Lamond 1985). Numbers have since increased to a total of 553 nests in 1987 (Table 1). Of these, 151 were located at the Pier 27 site adjacent to the RBG colony.

The only other Common Tern colony on western Lake Ontario is at Toronto's Tommy Thompson Park, which historically supported over 1000 nests, but in 1987 had only 332 nests. Data from the Atlas of the Breeding Birds of Ontario indicate that less than 5% of the 123 10x10 km squares in which Common Tern breeding was confirmed had more than 100 nests (Blokpoel 1987b). Hamilton Harbour is, therefore, a major nesting area for Common Terns in the province. Other Common Tern



Double-crested Cormorant. Photo by John Mitchell.

colonies in the vicinity of Hamilton and the number of nests at each in 1987 were as follows: 1331 at Port Colborne breakwall (R.D. Morris, pers. comm.); 157 on the Niagara River [Tower Island, Far Crib, Near Crib and Buckhorn Weir] (G. Batcheller, pers. comm.); and 496 at Buffalo, New York [Donnelly's Pier, Reef Lighthouse and Short Breakwater] (G. Batcheller, pers. comm.).

Caspian Tern

Caspian Terns have nested at Hamilton Harbour since 1986, when 48 nests were counted. In 1987, the number increased substantially to 134 nests (Table 1). These birds nest in an area within



Figure 3: Ring-billed Gull nesting habitat, Pier 27, Hamilton Harbour. Photo by Hans Blokpoel.

the RBG colony. All Caspian Tern colonies in Ontario are associated with nesting RBCs (Blokpoel 1987a). The only other Caspian Tern colony on western Lake Ontario is at the Tommy Thompson Park, which has decreased from 197 nests in 1985 to 45 nests in 1987. The rapid growth of the Hamilton colony may be attributed to immigration of displaced birds from the Toronto colony. The Caspian Tern is considered rare in Ontario and Canada (Blokpoel 1987a), thus the Hamilton colony is significant provincially and nationally.

Future of the Pier 27 colonies

Over the last decade, the colonial waterbird nesting area at Pier 27 has become one of the most important nesting sites on the Great Lakes, with populations of birds that are regionally, provincially or nationally significant. There is only one other colony site on the Canadian Great Lakes that has had as many as seven spiecies nesting as did Hamilton Harbour in 1986. Seven colonial waterbird species nested at the Tommy Thompson Park in 1982: BCNH, RBG, Herring Gull, Common Tern, Caspian Tern, Great Black-backed Gull (Larus marinus) and California Gull(L. californicus) (Fraser 1983). Both of these colonies have become established on man-made sites. Very little suitable nesting habitat for colonial waterbirds existed on the Harbour prior to the 1970s. However, the future of the Pier 27 site is not

secure, due to eventual development plans for port and industrial facilities by the HHC.

The HHC has recognized the ecological significance of the site to some degree, by allowing most of the nesting area to remain undisturbed until it is required for development in approximately 15 years. Thus, the short-term prospects for the colonies look promising. In fact, it is likely that Ring-billed Gulls will continue to increase rapidly in numbers, and in the process are likely to encroach upon, or completely usurp the nesting areas of Common and Caspian Terns. The RBGs arrive several weeks before the terns do, and their burgeoning numbers are likely to overtake the nesting areas of the terns. One technique to prevent this encroachment and to maintain nesting habitat for Common Terns is to exclude gulls by installing wires or monofilament early in the season. The gulls tend to avoid the 'wired' area. while terns can sometimes be induced to nest beneath the wires. To prevent RBGs from completely taking over the tern colonies at the two Hydro Islands, CWS has already discouraged colonizing gulls by destroying their eggs (under CWS permit) in recent years.

Although the short-term prospects for the Pier 27 colonies are reasonably good, the colonies are most likely to disappear once Pier 27 is further developed into an operational harbour facility. The displaced birds would probably move out of Hamilton Harbour

because, apart from the two small Hvdro Islands, there are presently no other suitable nesting sites in the Harbour. In order to prevent this loss of valuable and interesting waterbird colonies, alternative nesting habitat in Hamilton Harbour could be built and maintained for optimal use by a diversity of colonial waterbird species. HHC might be interested in greatly enlarging the Hydro Islands or in constructing new islands in Hamilton Harbour. Those islands could then be managed for colonial waterbirds by a local naturalist group (e.g., the Hamilton Naturalists' Club with assistance from CWS). In fact, the Hamilton Harbour Remedial Action Plan (RAP) for the clean-up of Hamilton Harbour is at present considering a proposal to encourage the birds now nesting at the CDF to move to an expanded Hydro Island site.

Acknowledgements

We would like to thank those ornithologists who have provided their data on nesting waterbirds on the Great Lakes, and historical information, including Len Simser (Royal Botanical Gardens), Gaston Tessier (Canadian Wildlife Service), Robert Curry (Hamilton Naturalists' Club) and Eric Machell (Toronto Bird Observatory). Also, we thank the Hamilton Harbour Commissioners for permitting CWS to census waterbirds nesting on their site.

Literature Cited

- Blokpoel, H. 1977. Gulls and terns nesting in northern Lake Ontario and the upper St. Lawrence River. Can. Wildl. Serv. Prog. Note No. 75.
- Blokpoel, H. 1987a. Caspian Tern. In Cadman, M.D., P.F.J. Eagles and F.M. Helleiner. 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ont.
- Blokpoel, H. 1987b. Common Tern. In Cadman, M.D., P.F.J. Eagles and F.M. Helleiner. 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ont.
- Blokpoel, H. and G.D. Tessier 1986. The Ringbilled Gull in Ontario: a review of a new problem species. Can. Wildl. Serv. Occas. Pap. No. 57.
- Cadman, M.D., P.F.J. Eagles and F.M. Helleiner. 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ont.
- Curry, R. and G.D. Bryant. 1987. Snowy Egret: a new breeding species for Ontario and Canada. Ontario Birds 5:64-67.
- Ecologistics Limited. 1976. Hamilton-Wentworth Region Environmentally Sensitive Areas Study. Hamilton Region Conservation Authority.
- Fraser, D.M. 1983. Breeding birds as indicators of ecological succession on a man-made peninsula. M.Sc. Thesis, University of Toronto.
- Goodwin, C.E. 1987.Black-crowned Night-Heron. In Cadman, M.D., P.F.J. Eagles and F.M. Helleiner. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ont.
- Gilbertson, M. 1975. A Great Lakes tragedy. Nature Canada 4:22-25.
- Lamond, B. 1985. Tollgate ponds. Wood Duck 39:122-124.
- Morris, R.D. and R.A. Hunter. 1976. Factors influencing desertion of colony sites by Common Terns (Sterna hirundo). Canadian Field-Naturalist 90:137-143.
- Morris, R.D., R.A. Hunter and J.F. McEiman. 1976. Factors affecting the reproductive success of Common Tern (Sterna hirundo) colonies on the lower Great Lakes during the summer of 1972. Canadian Journal of Zoology 54:1850-1862.
- North, G.W. 1959. Noteworthy bird records. Wood Duck 13:16.

- North, G.W. 1972. Unpublished ornithological records, 1925-1972. Department of Ornithology, Royal Ontario Museum, Toronto.
- North, G.W. 1975. Noteworthy bird records. Wood Duck 29:31.
- North, G.W. 1978. Noteworthy bird records. Wood Duck 32:29.
- Ontario Nest Record Scheme. 1961a. Nest record card for Common Tern in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Ontario Nest Record Scheme. 1961b. Nest record card for Ring-billed Gull in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Ontario Nest Record Scheme. 1966. Nest record card for Common Tern in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Ontario Nest Record Scheme. 1967. Nest record card for Common Tern in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Ontario Nest Record Scheme. 1968. Nest record card for Common Tern in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Ontario Nest Record Scheme. 1971. Nest record card for Common Tern in Wentworth County. Department of Ornithology files, Royal Ontario Museum, Toronto.
- Prize, I.M. and D.V. Wessloh. 1986. Increased numbers and productivy of Double-crested Cormorants, *Phalacrocorax auritus*, on Lake Ontario. Canadian Field-Naturalist 100:474-482.
- Sheppard, R.W. 1944. Black-crowned Night Heron nesting in Lincoln County, Ontario. Canadian Field-Naturalist 58:31-33.
- Weseloh, D.V. In prep. Double-crested Cormorants of the Great Lakes: increased breeding populations, 1972-1987. Unpublished report, Canadian Wildlife Service, Burlington, Ontario.
- Weseloh, D.V., P. Mineau, S.M. Teeple, H. Blokpoel and B. Ratcliff. 1986. Colonial waterbirds nesting in Canadian Lake Huron in 1980. Can. Wildl. Serv. Prog. Note No. 165. 28 pp.

Gull Behaviour and Movement Patterns at Maple, Ontario

by A.P. Sandilands

Introduction

Ring-billed Gull (Larus delawarensis) populations have dramatically increased on the Great Lakes (Ludwig 1974) and particularly on the Leslie Street Spit in Toronto. Steers (1979) reported that gulls initiated nesting on the spit in 1973 when 10 pairs of Ring-billed Gulls nested. In 1976, 10 382 pairs of Ring-billed Gulls nested, along with 12 pairs of Herring Gulls (Larus argentatus), 1246 pairs of Common Terns (Sterna hirundo) and 4 pairs of Caspian Terns (S. caspia) (Blokpoel 1977; Fetterolf and Blokpoel 1977). This Ring-billed Gull breeding colony continued to increase annually and comprised approximately 67 000 pairs in 1981 (W.E. Southern, pers. comm.).

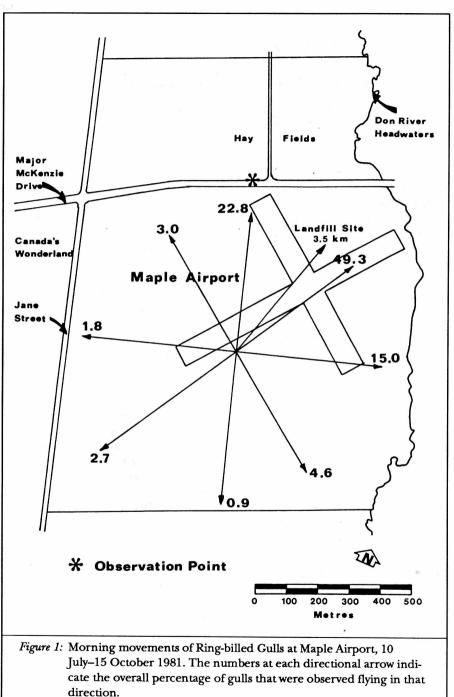
The purpose of this study, conducted in 1981, was to determine the existing number of gulls and their behaviour in the vicinity of Maple, Regional Municipality of York, Ontario, and to assess the hazard they posed to aircraft. A new landfill site was proposed north of the town, which would handle a large portion of Metropolitan Toronto's wastes. The Maple Airport is located immediately adjacent to a seasonally operated theme park (Canada's Wonderland), and there was concern that gulls flying between the amusement park and the landfill site could be a hazard to aircraft. A landfill site serving the local area was operating north of the proposed landfill at the time of the study.

Methods

Observations of gulls were made from a car parked on the north side of Major McKenzie Drive at the end of one of Maple Airport's runways. The study area was a rectangle defined by Jane Street on the west, the first fenceline north of Major McKenzie Drive, the trees along the headwaters of the Don River on the east and the woodlot south of the airport (Figure 1).

All gulls seen within this area were recorded, as was the time, the number of gulls in each flock, their approximate altitude, and the direction of flight. When possible, their origin and destination were recorded, as were any other behavioural

A.P. Sandilands, Gore & Storrie Limited, 73 Water St. N., Ste. 203, Cambridge, Ontario N1R 7L6



62

patterns that were of significance.

Observations began at, or shortly before, dawn and lasted a minimum of three hours. In the first four observation periods, an evening watch of two and a half to three hours was conducted before dusk. Observations were made on a total of 14 days, starting on 10 July 1981. After 23 July, observations were conducted at weekly intervals, until 15 October.

The number of take-offs and landings at the airport was recorded during the observation period to determine possibilities of aircraftgull collisions. Collisions, near-collisions and potential problems were also noted, and the number of birds landed on the ground within the study area were recorded.

When it became apparent that gulls were roosting overnight in the study area, frequent pre-dawn visits were made to Canada's Wonderland and occasional notes were made on pre-dawn gull populations in the existing and proposed landfill sites nearby.

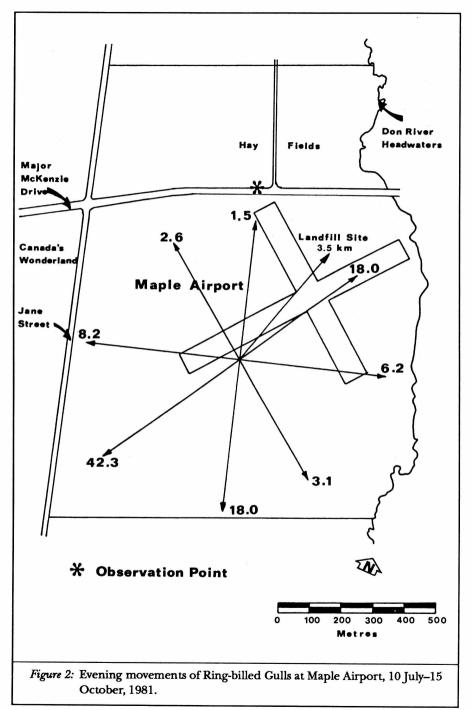
Results

Gull Activity Around the Airport Gulls were most active in the morning, particularly during the first hour after dawn. The number of gulls observed at the airport in mornings ranged from 6 to 391. Maximum numbers were seen in July, with sightings gradually tapering off to a minimum observed on 15 October. The total number of gulls seen during the morning counts was 1693, an average of 121 per morning. During July, 189–391 gulls were seen per morning (~277); in August, 34–173 were seen (~97); in September, 60–102 were seen (~74); and in October, 6–110 were seen (~60).

As many as 150 gulls were seen during the first hour of daylight. During July and August, 40–60% of all gulls seen appeared in the first hour. In September and October, gulls stayed active into the second hour of daylight; occasionally more were seen during the second hour than the first. Gull movement dropped off as the day continued so that by the third hour of daylight, gull activity was negligible.

Gulls landed on the airport during 11 of the 14 morning observation periods, with a maximum of 54 recorded at one time. On the airport, gulls foraged on freshly-cut grass or loafed on the runways. They generally ignored airport traffic, moving casually out of the way of aircraft and then returning. On 13 August, an aircraft landed, hitting and killing a gull that was slow in getting off the runway. There were several other near-collisions observed during the study.

The hay fields situated just north of the airport were a favoured foraging spot, particularly shortly after the hay had been cut. Gulls landed during five of the morning observation periods, with a maximum of 243 being present at one time. While in the fields, gulls were constantly observed flying up, circling around the field at an altitude of 5m or less and dropping into



another location. Maximum activity was during the first two hours of daylight, with most leaving by the third hour. None was observed in the hay fields after 27 August.

Most mornings flocks of gulls were small, comprised of only two or three birds, but flocks of 10 were common. Larger flocks occurred in July, when a maximum of 54 was seen flying together. The mean number of birds per flock was 3.0.

In the mornings, most birds (49.3%) were heading in a northeast direction, the approximate direction of the landfill site (Figure 1). The directions north, northeast and east constituted 87.1% of the morning flight directions. Most of the eastern flights were of gulls coming from Canada's Wonderland and landing directly on the airport. Birds also came into the study area from the south, possibly from Lake Ontario.

Evening Activity

Evening gull activity around the airport was light, so that only four sets of observations were made. A total of 194 birds was seen in the evening, an average of 49. From 32 to 90 gulls were seen during a single observation period.

No gulls were observed landing on the airport in the evening and only five were seen landing on the hay fields. Most observations were of single birds, although one flock of 28 was seen. In the evening, the dominant direction of flight was southwest (42.3%) with the majority of birds returning to Canada's Wonderland (Figure 2).

Loafing

In the afternoons, gulls loafed in a variety of sites around Maple. The preferred area was the existing landfill, where a total of 1099 gulls was counted, representing 34.1% of all observations made during this phase of the study.

The parking lots at Canada's Wonderland had the second highest count of afternoon gulls, 898 (or 28.2% of the total). This area was not checked on the first day of the study, so that this total was probably higher. There was a noticeable decline in gull use of Canada's Wonderland after it was closed for the season on 10 September.

The proposed landfill site became attractive to loafing gulls after a heavy rainstorm in early August created ponds. The count here totaled 710 gulls (22.1%), with gulls being present on nine of 14 observation periods.

Other loafing and foraging spots were fields that were being ploughed and cultivated fields that had been planted to fall wheat. Six fields accounted for 512 afternoon gull sightings, or 15.6% of the total.

Daily numbers of gulls observed during afternoon counts ranged from 44 to 641 (~230). There appeared to be no seasonal trend in the number of gulls present, as counts fluctuated sporadically from one week to the next. Some weeks there may have been more attractive feeding sites that lured the gulls out of the study area.

Roosting

Pre-dawn counts revealed that almost 600 gulls were roosting overnight at Canada's Wonderland when it was open daily. Once the park was open only on weekends or closed for the season, the parking lots were abandoned as a roosting site.

Numbers and Species of Gulls

It was difficult to estimate the total number of gulls present in the study area at any given time. There appeared to be 600–700 gulls in the study area until mid-September, although this is a conservative estimate, as many gulls left the study area during the first hour of sunlight. By 8 October, there were about 400 and a week later when the study was terminated, approximately 200.

Almost all of the gulls observed were Ring-billed Gulls. Not all gulls could be positively identified to species, as many were seen at a distance and it was not possible to check all gulls in flocks. Herring Gull was the only other gull species positively identified during this study. A total of 11 was observed from 16 June to 13 August. The Herring Gull population appeared to be quite small and represented 0.5% or less of the total gull population.

Airport Traffic

Airport traffic was generally light during the observation periods. However, all observations were conducted on weekdays and weekends were busier. Only one aircraft landed during the first hour of daylight throughout the study. This represents 0.5% of the 191 take-offs and landings recorded during the morning observation periods. During this same period, 40.4% of the gull activity occurred, with an average of 49 gull sightings per hour. In the second hour of daylight, there were 12 take-offs and landings (6.3% of total) and 529 gulls were observed (31.2% of total); an average of 38 gulls per hour. The maximum number of gulls seen during the first hour was 157, while 135 was the most seen during the second hour. Evening aircraft traffic was considerably heavier. In four evenings, 508 takeoffs and landings occurred, compared to 191 in 14 mornings. However, evening gull activity was negligible, averaging approximately 13 sightings per hour.

Conclusions

Gulls were abundant in the vicinity of the Maple Airport. Considerable numbers of gulls flew through critical air space, and they often landed on runways, the mowed grass of the airport, and the hay fields immediately north of the airport.

Although peak times of gull activity did not coincide with periods of heavy air traffic, there remains some potential for aircraftgull collisions. One such collision was observed, as were a number of near misses.

Canada's Wonderland's parking lots were preferred overnight gull roosts until the park closed. At daylight, gulls dispersed from the park, primarily in a northeast direction to the existing landfill site or other preferred foraging sites such as ploughed fields, hay fields or the airport. Many gulls also remained to feed and loaf at Canada's Wonderland.

Behavioural patterns of gulls at Maple were similar to those reported in other studies. Southern (1976) reported that Ring-billed Gulls do not leave the breeding range immediately after leaving the colony, but gradually disperse. Starting in July and continuing through mid-October, they drift southward, with the mean distance between the colony and recovery sites gradually increasing with time. This is consistent with the steady decline in gull numbers at Maple as the season progressed.

Gilbertson (1975) found that Herring Gulls tended to stay in the immediate vicinity of the nesting colony and did not migrate out of the area. This may explain their relative rarity at Maple.

Gulls are opportunistic feeders. In addition to fish, they eat garbage, worms and insects. They have been observed hawking insects in flight, following tractors during ploughing and picking worms off pavement (Mueller and Berger 1965; Blokpoel 1976; Kirkham and Morris 1979). In this study, they were probably gleaning and hawking insects in the freshly cut hay fields and the airport grass. On the runways, they may have simply been loafing, or eating worms which had crawled out onto the pavement.

Acknowledgements

This study was conducted by Ecologistics Limited, Waterloo, Ontario, for WMI Waste Management of Canada, Inc. R. J. Poland of Waste Management managed the study and reviewed the text, I. McKerracher of the Metropolitan Toronto Works Department gave permission to have the results published. W. E. Southern visited the study area and suggested study techniques. S. Martin assisted in the field. P. L. McLaren and an anonymous reviewer offered valuable comments on the manuscript.

Literature Cited

- Blokpool, H. 1976. Bird Hazards to Aircraft. Clarke, Irwin and Company Limited, Toronto.
- Blokpoel, H. 1977. Gulls and terns nesting in northern Lake Ontario and the upper St. Lawrence River. Canadian Wildlife Service, Progress Notes, No. 75.
- Fetterolf, P.M., and H. Blokpoel. 1977. Terns and gulls nesting on Toronto's Eastern Headland. Ontario Field Biologist 31:51–52.
- Gilbertson, M. 1975. A Great Lakes tragedy. Nature Canada 4:22-25.
- Kirkham, I.R., and R.D. Morris. 1979. Feeding ecology of Ring-billed Gull (Larus delawarensis) chicks. Canadian Journal of Zoology 57:1086-1090.
- Ludwig, J.P. 1974. Recent changes in the Ringbilled Gull population and biology in the Laurentian Great Lakes. Auk 91:575–594.
- Mueller, H.C., and D.D. Berger. 1965. Ringbilled Gulls feed on flying ants. Auk 82:504.
- Southern, W.E. 1976. Migrational orientation in Ring-billed Gull chicks. Auk 93:78-85.

Steers, S. 1979. A bird census conducted at the Leslie Street spit, spring and summer 1978. Ontario Field Biologist 33:34-45.

Observations on Colonial Waterbirds Breeding at Presqu'ile Provincial Park

by James M. Richards and R. Douglas McRae

The status of colonial waterbirds breeding at Presqu'ile Provincial Park (most specifically on Gull Island and High Bluff Island), Northumberland Co. (Figure 1), has been well documented. Notes and observations on certain species (mainly laridae) have been made by personnel from the Canadian Wildlife Service (CWS), provincial park staff and certain individuals for several years. In some cases, these observations have been published. The most recent, inclusive publication that treats all colonial species here is the Birds of Presqu'ile Ontario (McRae 1982). The purpose of the present note is to update information pertaining to colonial waterbirds since the appearance of this publication, which includes information up to and including 1980.

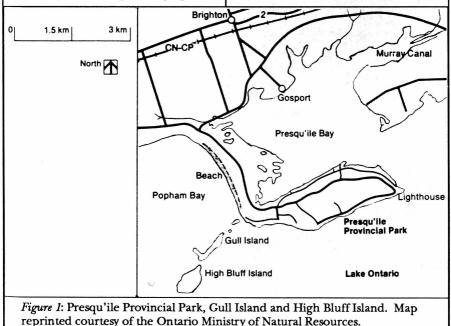
Species Accounts Double-crested Cormorant The rise and fall (and subsequent rise) of the Double-crested

Cormorant (Phalacrocorax auritus) on the Great Lakes has been well documented by the CWS. Cormorants first appeared as a breeding species on the Great Lakes in the late 1930s on Scotch Bonnet Island, Lake Ontario, off western Prince Edward Co. By 1940, there were about 200 pairs nesting there, and the species was expanding and establishing itself elsewhere. It would appear that cormorants reached a peak of about 925 pairs on the Great Lakes in the 1940s. By the late 1950s, there began a gradual decrease in cormorant numbers (due in part to persecution), and by 1972 it was estimated that only 175 breeding pairs remained on the Great Lakes; by mid-decade they had all but disappeared. The late 1970s witnessed an increase both in numbers and in new colonies. In 1980, the CWS estimated about 375 pairs breeding in three colonies on Lake Ontario, and a total of about 800 pairs in several colonies throughout the Great Lakes (D.V.

James M. Richards, Box 63, R.R.#2, Orono, Ontario L0B 1M0 R. Douglas McRae, Long Point Bird Observatory, P.O. Box 160, Port Rowan, Ontario N0E 1M0 Recent figures indicate that about 10,000 pairs of Double-crested Cormorants nested on the Great Lakes in 1987; 3400 of these in seven colonies on Lake Ontario alone! Cormorants first appeared as a breeding species at Presqu'ile in 1985, when McRae discovered them nest-building on Gull Island on 7 June. On 1 July McRae and M. Illes counted a total of 116 active nests, 114 in trees and 2 on the ground.

In 1986 (23 June), the authors counted 129 active nests on Gull Island (including 7 active nests on the ground), and an additional 23 nests on High Bluff Island. This was the first instance of nesting on High Bluff. Most nests were situated in live trees (willow, elm, ash, maple and poplar), at heights ranging

from 2.5 -8m above the ground. It appeared that most nests held eggs on that date, but a few young were noted. By 1987, the colony had experienced phenomenal growth, and on 17 June, Richards, M. Peck and W. Scorns counted 447 active nests on Gull Island (including 42 ground nests) and 42 active nests on High Bluff Island. While most nests held from one to four eggs on this date, a few contained young at various stages of growth. It would appear that on Gull Island tree nesting by cormorants has reached the saturation point due to the availability of sites, but that ground nesting could increase dramatically. At present there would appear to be nothing limiting future expansion of the colony on High Bluff.



Cattle Egret

The first known breeding records of the Cattle Egret (Bubulcus ibis) in Canada occurred in 1962, when an active nest was found on Luther Marsh, Wellington Co., in June, and a nest with one egg was discovered by Richards on 5 July on Gull Island, Presqu'ile Provincial Park amid a small colony of Blackcrowned Night-Herons (Nycticorax nycticorax) (Baillie 1963). There were no reported Cattle Egret nestings in Ontario in 1963. On 7 June 1964. Richards and R.G. Tozer discovered three active nests on Gull Island and a nest with three young was observed there by W. Wyett in 1965 (McRae 1982). There have been no known nestings at Presqu'ile since then, although



Common Tern. Photo by Donald M. Fraser.

adults were observed in the vicinity of Presqu'ile and its islands in 1966, 1973 and 1977. Peck and James (1983) list three other known breeding sites for this species in Ontario other than Luther Marsh and Presqu'ile; Pigeon Island, Frontenac Co., in 1968; Amherst Island, Lennox and Addington Co., in 1970 and Pelee Island and East Sister Island, Essex Co., during the mid-1970s. Peck and James (1983) document only 50 nests for the entire province. During the recent Ontario Breeding Birds Atlas Project (1981-1985), the only record of a potentially breeding Cattle Egret was obtained from Walpole Island, Kent Co. (Cadman et al. 1987); no nestings were confirmed.

Black-crowned Night-Heron

Since this species was first recorded as nesting at Presqu'ile by Richards in 1962 (McRae 1982), when he found 15 active nests in sumacs on Gull Island (5 July), the colony has fluctuated greatly in size and location. While Black-crowned Night Herons no longer nest on Gull Island, nesting has been regular on nearby High Bluff, but at scattered locations. The colony now seems to have stabilized, with between 30-40 nesting pairs as observed by the authors on 25 June 1986, and by Richards, Scorns and S. LaForest on 15 June 1987. H. Blokpoel (pers. comm.) of the CWS recorded only 19 nests in 1984. Once, in 1980, the main colony shifted from the islands to the mainland area, and was established in the cattail marsh

of Presqu'ile Bay with only two nests left active on the island (High Bluff) as observed by McRae, J. Dean and G. Fox on 16 June (McRae 1982). The colony appeared to peak in numbers in 1978–79 when about 79 active nests were counted by McRae and D. Moffatt on High Bluff Island.

Great Black-backed Gull

Peck and James (1983) present only four Ontario breeding records for the Great Black-backed Gull (Larus marinus) in the province. Three of these records are from Presqu'ile, and are undoubtedly the same three cited by McRae (1982) as follows: nest on Gull Island found by A. Bunker and G. Lambert on 24 June 1962; nest on Gull Island on 29 June 1963, by Richards; nest on Gull Island on 6 June 1970 by Tozer and Richards. There were no other known records from Presqu'ile until a nest was reported by CWS staff on High Bluff Island in 1984 (Blokpoel, pers. comm.). In 1985, there were two confirmed nesting for Presqu'ile; one pair on Gull Island and another pair on High Bluff Island noted by McRae et al. A nest was recorded by CWS staff on Gull Island on 19 May 1986 and on 23 June the authors noted a pair with three large flightless young there. Also in 1986, in the second known instance of more than one breeding pair at Presqu'ile, McRae and Richards discovered a nest with two eggs on High Bluff Island on June 25. On 15-16 June 1987 three breeding pairs were noted by

Richards, Peck, Scorns and LaForest; two pairs on High Bluff Island and one pair on Gull Island, all attending large young. In the *Atlas of Breeding Birds of Ontario* (Cadman *et al.* 1987), Blokpoel cites 8 confirmed nestings in the province during the period 1981–1985, including the two at Presqu'ile in 1985.

Herring Gull

Traditionally, Herring Gulls (L. argentatus) have nested on Gull Island with annual variations in their numbers. Usually between 50-100 pairs are present. In recent years, Herring Gull numbers appear to be lower. The first nest was discovered on High Bluff Island by Dean, McRae and R. Tait, on 17 July 1979. Nesting now occurs on both islands in good numbers. A complete summary and analysis of this species as it relates to the islands at Presqu'ile is in preparation by CWS staff (Blokpoel et al., in prep.).

Ring-billed Gull

The first recorded breeding of the Ring-billed Gull (*L. delawarensis*) at Presqu'ile was on Gull Island in 1948 when G. North found 10 active nests. Since that time the colony has continued to grow and appears to have peaked at about 100,000 pairs in 1958 according to R. Scovell (McRae 1982). We suspect that these figures actually represent individual birds, not pairs. CWS staff report that between 23,000 and 27,000 pairs continue to breed on Gull Island, In 1979 (17 July) a new colony was discovered on nearby High Bluff Island by Dean, McRae and Tait, and it was estimated that 679 nests were occupied at that time. The following year, the colony had grown to between 10-15,000 pairs according to Fox. Blokpoel (pers. comm.) estimates that a total of 35,200 nesting birds were on High Bluff in 1987. As with the preceding species, a paper is in preparation regarding the status of this species at Presqu'ile (Blokpoel et al., in prep.).

Common Tern

The first reported nesting of Common Tern (Sterna hirundo) for Presqu'ile was in 1948 when about 150 breeding pairs were discovered on Gull Island by G. North (McRae 1982). Tozer and Richards (unpubl. data) estimate that upwards of 10,000 pairs were present in the mid-1960s. Not unlike other colonies in southern Ontario. Common Tern numbers began to decrease in the early 1970s. In 1971, the Presqu'ile colony had dropped to about 180 pairs according to Richards. Blokpoel recorded only three pairs in 1976! The colony had grown to about 16 pairs in 1980, 62 in 1983, 161 in 1984 and 227 in 1985 (Blokpoel, pers. comm.). On 19 May 1986, CWS staff counted 42 nests around the central pond on Gull Island (the traditional nesting site) but it would appear that heavy rains and high water levels had reduced the colony

to a single pair as observed by the authors on 23 June. On 18 May 1987, the CWS counted 38 nests on Gull Island, but only 36 could be found by Richards, LaForest and Scorns on 15 June.

Caspian Tern

The breeding of the Caspian Tern (S. caspia) has been well established at several Lake Ontario sites, throughout Georgian Bay and Lake Huron and elsewhere in Ontario. It is also possible that Caspian Terns nest on Lake Erie and at scattered locations in northern Ontario (Cadman et al. 1987). McRae (1982) lists two breeding records for Presqu'ile. The first recorded nesting was on 15 June 1959 by J. Woodford and a second nest was found on 16 July of the same year (also on Gull Island) by D. Scovell. McRae (1982) also states that this species was reported as nesting at Presqu'ile (one or two pairs) from the late 1950s until 1966. This statement is based on nests found on 7 June 1964 by Tozer and Richards on Gull Island (a nest with one young and a second nest with three eggs) and a nest with two eggs on Gull Island on 22 May 1966 by Richards and Tozer.

A nest was reported from Gull Island in June, 1984 by J. Chardine (CWS). Cadman *et al.* (1987) record this species as a confirmed breeder at Presqu'ile between 1981 and 1985 but give no details. We know of no other published accounts. In 1986, the authors found a nest with one egg on Gull

Island and a second pair 'on territory', both on 23 June. In 1987. what would constitute the first "colony" for Presqu'ile was initiated. Seven nests were noted by CWS personnel on 18 May, and on 15 June Richards, LaForest and Scorns discovered 36 active nests. The majority of nests held one to two eggs (some contained three) on that date, and a few nests contained newborn young. The colony was located in a barren zone resulting from receding water levels at a nearby pond in the central portion of Gull Island. The colony was being heavily preyed upon by Ringbilled Gulls. This colony warrants periodic monitoring and special protection in the coming years if it is to succeed.

Summary

Knowledge of the actual breeding status and success of these colonial waterbirds can only be determined through periodic visitation and aircraft surveillance of the nesting islands. Careful monitoring is necessary to determine numbers, conditions and success/failure rates. However, it cannot be stressed too strongly that the Ontario Ministry of Natural Resources (OMNR), under whose jurisdiction these particular islands fall, should make every attempt to discourage unwarranted visits by persons not authorized to conduct such field work. As well, they should enforce present restrictions which govern visitation by park visitors, campers and boaters.

Acknowledgements

We wish to thank D.V. Chip Weseloh (CWS, Canada Centre for Inland Waters, Burlington, Ontario) and Hans Blokpoel, (CWS, Ontario Region, Ottawa, Ontario) for historical notes and information of recent surveys by CWS staff. We also convey our thanks to Steve LaForest, Park Naturalist at Presqu'ile, and Brian Peck, Park Superintendent as well as other OMNR staff, for permission to conduct the present field work on the islands and for logistical support in the form of boats and walkie-talkies.

Literature Cited

- Baillie, J.L. 1963. The 13 most recent Ontario nesting birds. Ontario Field Biologist 17:15-26.
- Cadman, M.D., P.F.J. Eagles and F.M. Helleiner. 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo.
- McRae, R.D. 1982. Birds of Presqu'ile, Ontario. Ontario Ministry of Natural Resources.
- Peck, G.K. and R.D. James. 1983. Breeding Birds of Ontario: Nidiology and Distribution. Vol.1: Nonpasserines. Life Sciences Miscellaneous Publications, Royal Ontario Museum, Toronto.

Note

Wing-tail Flicking as a Means of Distinguishing Crows from Ravens

Visitors to Haliburton County often ask me how to tell a Common Raven (*Corvus corax*) from an American Crow (*C. brachyrhynchos*). The field guides cover the differences, but experience with the two is necessary before most observers feel comfortable distinguishing them, particularly where their ranges overlap.

In the summer of 1985, while watching crows near my home in Minden, Haliburton County, Ontario, I noted a distinctive behaviour of crows which I later observed is not exhibited by ravens. This behavioural characteristic is a very useful criterion for identification.

Crows habitually flick their folded wings and fan their tails, especially just after perching, when this flicking is usually does one to three times. Kilham (1985a, 1985b) called this behaviour "wing-tail flicking." He reported that it was performed during most territorial encounters between crows. My observations of hundreds of crows over a three year period indicate that "wing-tail flicking" is a characteristic behaviour of crows that is given throughout the year, often without apparent territorial significance. While I observed large numbers of ravens during the same period, I observed no "wing-tail flicking" from them. R. Tozer (pers. comm., 1988) watched ravens and crows over the same period in Algonquin Provincial Park, Nipissing District, and did not observe "wing-tail flicking."

The presence of "wing-tail flicking" is particularly useful in separating crows from ravens that are perched at a distance when size and shape are difficult to judge. Often only the wing flicking is noticeable because of distance or angle of view. The absence of flicking is not diagnostic of ravens, but since crows do it frequently, its absence is a clue to the species' identity.

Practice watching for "wing-tail flicking" in crows. It is usually given one to three times immediately after landing. Next time you are in an area where crows and ravens occur together, you will have developed another useful technique for distinguishing the two species.

Acknowledgements

I wish to thank Ron Tozer for field testing "wing-tail flicking" and for his literature suggestions and helpful comments in the preparation of this note.

Literature Cited

Kilham, L. 1985a. Territorial behavior of American Crows. Wilson Bulletin 97:389-390.

Ron Pittaway, Box 619, Minden, Ontario K0M 2K0

Book Reviews

Ornithology in Laboratory and Field (5th edition). 1985. By Olin Sewall Pettingill, Jr. Academic Press, Orlando, Florida. xi + 403 pp., illus. \$32.40 (U.S.).

This volume, which is intended primarily as both a laboratory manual and a textbook for a college course in ornithology, has had a long and distinguished history from its first published version in 1939. The fourth edition, published in 1970, was widely adopted by universities and colleges throughout North America; however, it was starting to become dated. Fortunately, this new and thoroughly updated edition is now available, and Pettingill's book seems destined to maintain its unique place in the ornithological literature.

The basic outline of the book has changed little from the fourth edition, except for the inclusion of a brief chapter entitled "Flight." There are 22 chapters covering topics ranging from anatomy and physiology through behaviour, ecology, and identification in the laboratory and field. The book is generally strong in its coverage of anatomy, especially external characteristics used in classifying birds, and weak in its coverage of ecology. This is a deliberate plan, understandable in view of the book's main intended audience, and Pettingill makes no

pretence that it is a complete textbook of ornithology. However, every chapter concludes with a detailed and well-chosen list of references, and one of the book's strongest points is its value as an introduction to ornithological literature for the beginning student. Several chapters include specific suggestions for student projects, and every effort is made to encourage the reader to undertake independent studies on birds.

Kilham, L. 1985b. Behavior of American Crows

in the early part of the breeding cycle.

Florida Field Naturalist 13:25-31.

The thoroughness and authority which characterize all of Pettingill's books are once again apparent here. Sidney Gauthreaux, Jr., who wrote the chapter on migration, and Jack Hailman, who wrote the chapter on behaviour, are acknowledged by Pettingill, as are several others who reviewed or contributed to specific chapters. However, Pettingill himself deserves most of the credit for the success which Ornithology in Laboratory and Field has enjoyed and should continue to enjoy.

One major disappointment in this new edition is the elimination of several of the extremely useful appendices found in the fourth edition — a change perhaps dictated by the book's new publisher, Academic Press. While the valuable appendices on "Ornithological Field Methods", "Preparation of a Paper", "Current Ornithological Journals", and "Books for General Information" are still present, the "Bibliography of Life History Studies", "Selected Bibliography of Regional Works", and "Clutch Sizes, Incubation Periods and Ages at Fledging" are gone, detracting considerably from the book's status as a one-volume gold mine of source

material for the budding ornithologist. Despite this, the lists of references in the individual chapters still provide an excellent introduction to the scientific literature on birds.

Although the book is aimed mainly at college students, any amateur ornithologist with an interest in birds that goes beyond merely listing will find much useful and interesting material here. I would strongly urge any member of OFO who does not already have a copy of *Ornithology in Laboratory and Field* to purchase one right away!

Wayne C. Weber, 303-9153 Saturna Drive, Burnaby, British Columbia V3J 7K1

Blackbirds of the Americas. 1985. By Gordon H. Orians. University of Washington Press, Seattle, Washington. 164 pp. \$24.95 (hardcover).

This is an informative and refreshingly readable book about blackbirds that are black, and blackbirds that aren't. With varying degrees of detail, 93 species of oropendolas, caciques, orioles, blackbirds, meadowlarks, marshbirds, grackles, cowbirds and bobolinks are discussed.

The book is divided into a series of chapters based on biological aspects of blackbirds as a whole, with appropriate examples drawn from within the group.

The first chapter explains how blackbirds differ from "black birds." There is a cursory discussion on historical and present day climate, and its effect on the group. The habit of "gaping" is thoroughly dealt with in the second chapter. This habit of using the beak to pry open objects to find food, although not restricted to the blackbirds, is exploited by most of their members. Orians claims that this single act may be responsible for the diversity, adaptability and the success of the blackbirds. Many species, in fact, have skeletal adaptations to meet this end.

The third chapter deals with food location, preference and choice behaviour. The next chapter expands on this matter, explaining how geographic distribution may be influenced by food availability.

Blackbirds are generally a flocking species, and the advantages of this behaviour are outlined in Chapter Five. Chapter Six addresses the subject of nests and nest sites.

Parasitism among blackbirds is a complex issue, poorly understood

by most researchers. Mechanisms of evolution, host species (including several species of blackbirds) and the impacts of five species of parasitic cowbirds are discussed. Interestingly, there is one species of cowbird, the Screaming Cowbird, which only parasitizes the Baywinged Cowbird. Thoughts on the evolution of this behaviour and the identity crises faced by young cowbirds are enlightening.

Chapter Eight discusses the roles of the sexes, while Chapter Nine deals with communication. Some intriguing theories on the importance of colour to the species are dealt with in Chapter Ten. The location of the colour patches offer some truly fascinating insights.

The last two chapters deal with the role of blackbird vocalizations and a philosophical study of blackbird biology, including interactions with man.

Two Appendices complete the book. The first is simply a list of species broken down by subgenus, while the second presents a good summary of habitat, diet, plumage and social status of all species.

For the most part, this book is well written, information, thorough and readable. With very few exceptions, Orians has expressed his keen understanding and exceptional knowledge of the blackbirds.

However, a few minor flaws should be noted. Why, for example, are "Baltimore" and "Bullock's" Orioles given full species status throughout the book? The author spends considerable time discussing projects worked on in the western United States, but has little to say about eastern populations. Perhaps a better compromise between his personal studies and those of others would give a broader picture of the species involved. A more thorough discussion on the trend of blackbirds (particularly Red-winged Blackbirds) to adopt new habitats for breeding would have been enlightening and may be necessary for a better understanding of the complexities of the entire group, as it once again demonstrates their adaptability. A brief discussion on the use of non-native materials for nest construction, although interesting, is abbreviated and poorly dealt with.

For the reader who wants to know more about birds, answers to some intriguing questions are provided. For example: why do some orioles build their nests on the west side of trees? Why do feeding blackbirds "roll" across a field? What species will use barbed wire to build its nest? Why do white birds sleep in the open? Why do understory birds sing with a low-pitched song? How do botflies and wasps affect cowbird success? Has a cowbird host ever rejected a young cowbird in the nest?

This book is recommended for anyone who wants to know more about blackbirds and, by inference, a wide range of other species.

Geoffrey Carpentier, 964 Weller St., Peterborough, Ontario K9J 4Y2

The Mountain and the Migration: A Guide to Hawk Mountain. 1986. By James J. Brett. Kutztown Publishing Company, Kutztown, Pennsylvania. 111 pp. Illustrated by Frederick W. Wetzel and Frank Fretz. Available from Hawk Mountain Sanctuary Association, Kempton, Pennsylvania.

Why review a book about Hawk Mountain for Ontario Birds? Because behind this somewhat deceptive title is the best-to-date guide to the identification of eastern hawks. Following four chapters about the mountain, its history and ecology, are 17 black and white plates illustrating all of the migrant species seen at the Sanctuary and they are excellent. Fred Wetzel. the artist, is to be congratulated for producing these detailed flight shots, posed at all angles to an observer. Together, they make up the best guide on the market for a hawkwatcher in the northeastern part of the continent, at least until Bill Clark's guide to North American raptors is published sometime this year.

The first chapter of this book covers the human history of Hawk Mountain, from early farmers and charcoal makers to the sandstone quarriers and, later, hawk-shooters. Then came a succession of nowfamous conservationists. First were **Richard Pough and Henry Collins** in 1933, who witnessed the fall hawk slaughter and reported it to the iron-willed Rosalie Edge. She ended it by buying the mountain! It was, however, her choice of Maurice Broun as custodian and guardian that made the mountain a true sanctuary and started the slow change of perspective from hawks

as vermin to integral parts of the natural world with a value of their own, independent of our own too self-centred ideas.

Chapters 2 and 3 deal with the geology and natural history of the area. Then, like a north-west breeze in late August, comes Chapter 4, "Out of the North", a good, if brief, discussion of hawk migration. weather and topography. Unfortunately, the map here mixes Ontario's spring and fall flights in a rather unusual way and leaves out our Lake Ontario/Lake Erie fall passage altogether. There is a nice time-and-abundance chart on page 62 which is interesting to compare to southern Ontario's fall passage. Hawk Mountain's Sharp-shinned Hawk, Merlin and Peregrine Falcon flights are later than ours, while the other species pass through during similar periods. Perhaps Hawk Mountain, being an inland location, brings more late-flying adult birds. Two fine drawings on page 64 show the parts of hawks in flight and perched.

Page 65, like a September front, brings the real flight in "Hawks Aloft", *the* chapter of this book. Eighteen species are shown from above and below, head on, sideways, tucked in a glide and fanned in a soaring position. Direct comparisons with two to four other species are illustrated and in some poses, both adults and immatures (where different) are shown. The number of illustrations per page varies from seven to 16.

Jim Brett's comments are quite detailed and helpful. I picked up a number of pointers on body shapes and flight styles of buteos and wing shapes of accipiters. The "tipped-up tail" of Sharp-shins is mentioned and illustrated, a flight characteristic I first heard of from Cape May Bird Observatory but haven't yet noticed. All these notes are placed on the page opposite the illustration (the only sensible place) and are organized as "Overall Impression", "In Flight", "Position Views", "Confusing Species" and "Lookout Tips." On occasion, I felt that some tips for separating similar species were missing, but after reading the second or third species concerned, found most of the omitted points.

The treatment is thorough, including Gyrfalcon, Swainson's Hawk and Black Vulture and does not suffer at all, in my opinion, from being only in black and white. As is true of all field guides, there are deficiencies, ones which in this case are, I think, the result of poor editing. Some incorrect labels have slipped by (on Plate XIV, the Golden Eagle is actually a Roughlegged Hawk and on Plate V, the Cooper's and Red-tail labels are reversed) in spite of an "Errata" slip in the back correcting two other instances. Unfortunately, Plate X on kestrels states that immatures of

both sexes are like adult females a real gaffe for such a good book. There are a couple of lesser mistakes that will not help separate Northern Goshawks and Cooper's Hawks or describe the colour phases of Rough-legged Hawks, but, in spite of these, the identification section, especially because of the pictures, is superb.

I do wish that Brett and Wetzel had included drawings of the immature light and adult intermediate phases of Swainson's Hawk to display some of the variability mentioned, but they chose not to.

They do warn all tyros that "Beginners ought not expect to identify each passing hawk. This guide will enable one to narrow the field of choice, but remember that it takes many seasons of observation to become an expert. Even then, many birds are recorded as 'unidents'." How true. The Mountain and the Migration is a giant step towards expertise, however, for anyone who puts it in a pocket on the way to a favourite hawk lookout. It's a bargain.

Bruce W. Duncan, 10 Chateau Court, Hamilton, Ontario L9C 5P2

OFO Announcements Field Trips

10-11 September 1988, Saturday & Sunday: CORNWALL DAM GULL OUT-ING. Leader Bruce DiLabio (613) 729-6267. This trip will be combined with a visit to Hoople Creek for shorebirds. Meet at the entrance to the Cornwall Power Dam by the Security Booth on 10 Sept. at 9:00 AM. Bring identification as the group will be going to the American side of the river for the best view. Other birding spots will be visited the following day.

24 September 1988, Saturday: OFO PELAGIC TRIP. Leader: Bob Curry (416) 648-6895. M. V. "Macassa Bay" leaves Hamilton Harbour at 8:00 AM. Meet at the dock at the foot of Bay Street North by 7:45 AM with a lunch and plenty of warm clothing. Return 4:4:30 PM. Less than 25 of 100 tickets are still available. Cost is \$40 per person. Don't miss this long-awaited revival of what was once a fall tradition in western Lake Ontario.

6-9 October 1988, Thursday-Sunday: MARATHON. Fall migration North of Superior. List of birding spots between Thunder Bay and Marathon will be available for those wishing to spend an entire week in the area. Ron Scovell will be along as a trip leader. Contact Coordinators Alan Wormington (519) 326-7122 or Nick Escott (807) 345-7122 for more details.

21 January 1989, Saturday: GANANOQUE for Wild Turkey. Possible owling side trip to Amherst or Wolfe Island. Details to follow.

Ontario Birds: Carolinian Issue

The next issue of *Ontario Birds* (Vol. 6 [3], December 1988) will be entirely devoted to the birdlife of the Carolinian Life Zone of Ontario — roughly that area of the province south of a line extending from Grand Bend on Lake Huron east to the Rouge River Valley of Scarborough on Lake Ontario.

Some interesting articles, notes and drawings have already been submitted for this special issue but more material is urgently needed. In particular, short notes and illustrations are required. Artists who work in pen-and-ink or pencil are invited to submit illustrations of Carolinian birds.

Send all material to Donald M. Fraser, Ontario Birds Editor, c/o Box 1204, Station B, Burlington, Ontario L7P 3S9, or to my home address, listed on the inside back cover. Deadline for submissions is 15 October 1988.

Donald M. Fraser, Editor

Ontario Field Ornithologists

Ontario Field Ornithologists is an organization dedicated to the study of birdlife in Ontario. It was formed to unify the ever-growing numbers of field ornithologists (birders/birdwatchers) across the province and to provide a forum for the exchange of ideas and information among its members. The Ontario Field Ornithologists officially oversees the activities of the Ontario Bird Records Committee (OBRC), publishes a newsletter and a journal, *Ontario Birds*, hosts field trips throughout Ontario and holds a Spring Field Meeting and an Annual General Meeting in the autumn.

All persons interested in bird study, regardless of their level of expertise, are invited to become members of the Ontario Field Ornithologists. Membership dues are \$17.00 Annual Member or \$340.00 Life Member. All members receive *Ontario Birds*, the official publication of the Ontario Field Ornithologists. Please send memberships to: Ontario Field Ornithologists, P.O. Box 1204, Station B, Burlington, Ontario L7P 3S9.

Board of Directors

President - Margaret Bain, 210 Byron St. N., Whitby, Ontario L1N 4N1

Vice-President - Reid J. Wilson, 1374 Tatra Drive, Pickering, Ontario L1W 1K6

Treasurer - Hugh Currie, 29 Helena Ave., Toronto, Ontario M6G 2H3

- Secretary J.R. Gerry Shemilt, 51 Montressor Drive, Willowdale, Ontario M2P 1Z3
- Journal Editor Donald M. Fraser, 694 Irwin Cres., Newmarket, Ontario L3Y 5A2
- Newsletter Editor Geoff Carpentier, 964 Weller St., Peterborough, Ontario K9J 4Y2
- OBRC Representative Glenn Coady, #1424-20 Carlton St., Toronto, Ontario M5B 2H5

Field Trips - T. Ron Scovell, 3 Sims Cres., Rexdale, Ontario M9V 2S9

Special Projects — Victoria Carley, 218 Humbercrest Blvd., Toronto, Ontario M6S 4L3

Birdathon Coordinator — Gail Mason, #1107 - 211 Queen's Quay West, Toronto, Ontario M5[2M6

Past President — D.V. Chip Weseloh, 1391 Mt. Pleasant Road, Toronto, Ontario M4N 2T7