chris Kerrigan 194

The Journal of the Ontario Field Ornithologists Volume 13 Number 2 August 1995

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 (OFO News) and a journal (Ontario Birds), hosts field trips throughout Ontario and holds an Annual General Meeting in the autumn. Current President: Gerry Shemilt, 51 Montressor Drive, North York, Ontario M2P 1Z3.

All persons interested in bird study, regardless of their level of expertise, are invited to become members of the Ontario Field Ornithologists. Membership rates can be obtained from the address below. All members receive *Ontario Birds* and *OFO News*. Please send membership inquiries to: Ontario Field Ornithologists, Box 62014, Burlington Mall Postal Outlet, Burlington, Ontario L7R 4K2.

Ontario Birds

Editors: Bill Crins, Ron Pittaway, Ron Tozer Editorial Assistance: Jean Iron, Mike Turner

Art Consultant: Chris Kerrigan

Design/Production: Centennial Printers (Peterborough) Ltd.

The aim of *Ontario Birds* is to provide a vehicle for documentation of the birds of Ontario. We encourage the submission of full length articles and short notes on the status, distribution, identification, and behaviour of birds in Ontario, as well as location guides to significant Ontario birdwatching areas, book reviews, and similar material of interest on Ontario birds.

If possible, material submitted for publication should be double-spaced and typewritten. All submissions are subject to review and editing. Please submit items for publication to the Editors at the address noted above.

Table of Contents

Letters to the Editors	45
Articles Ontario Bird Records Committee Report for 1994 Ron Pittaway	46
Recognizable Forms Morphs of the Eastern Screech-Owl Ron Pittaway	66
Notes Eastern Kingbird nesting in a tundra area Ross D. James and Mark K. Peck	72
Sharp-shinned Hawk and Common Crow migration along Georgian Bay Ken P. Morrison	74
Book Reviews A Bird-finding Guide to Ontario reviewed by Rob Dobos	77
A Birder's Guide to the Sault Ste. Marie Border Area reviewed by <i>Bill Crins</i>	83
A Photographic Guide to North American Raptors reviewed by Ron Pittaway	84
Photo Quiz Bob Curry	87

Cover Illustration: Eastern Screech-Owl by *Christine Kerrigan*

ISSN 0822-3890

Letters to the Editors

Gyrfalcons and Snowy Owls

Further to Don Shanahan's "Gyrfalcon harassing a Snowy Owl" (Ontario Birds 12: 80-81), I discovered the following reference in my bird literature. Heimo Mikkola (1983) in Owls of Europe reported that "a Gyrfalcon has once, at least, killed a Snowy Owl in Europe", citing the source as Meinertzhagen (1959) in Pirates and Predators: the Piratical and Predatory Habits of Birds.

Jim Forrest Barrie, Ontario

Thrush Quiz Opinion

I am writing to comment on the *Catharus* thrush pictured as the Quiz Bird in the April 1994 *Ontario Birds* (12: 40) and the solution in the next issue (12: 83-84). The identification was left as uncertain, between Hermit and Swainson's Thrush, and rightly so. The identification of *Catharus* thrushes is more problematic than most birders realize or acknowledge, particularly when one considers the range of geographical variation.

My experience with several forms of Veery, Swainson's and Hermit Thrush is that the facial markings are diagnostic and consistent. I won't talk about the Veery as Bob Curry convincingly eliminated that species. Swainson's Thrush has dark lores and a buff supraloral stripe, which connects with the similarly coloured eye ring. The Hermit Thrush has paler lores, and a buff or grey supraloral stripe which usually does not connect with the contrastingly

paler eye ring. As well, the eye ring on a Hermit Thrush is thinner and "crisper" than that of the Swainson's Thrush, particularly along the lower eye lid. The eye ring on the Swainson's is wider, but "fuzzier" at the edges than the neat eye ring of the Hermit.

The photo shows a bird with a crisp eye ring that is paler than the pale supraloral stripe. This stripe is also not fully connected to the eye ring. My opinion is that the quiz bird is a Hermit Thrush, not a Swainson's Thrush.

Alvaro Jaramillo Burnaby, British Columbia

Pileated Eating Dogwood

I was interested to read the note by Jean Iron and Ron Pittaway on a Pileated Woodpecker observed eating Red-osier Dogwood berries (*Ontario Birds* 13: 28-29), and wish to add three similar observations.

I received three different reports of Pileated Woodpeckers eating dogwood berries between 9 and 23 September 1990, in the Thunder Bay area. Several features of these sightings are similar, including the occurrence of this feeding activity in backyards and at cottages, rather than in the deep forest. As with the sighting described in the note, the birds appeared quite tame and preoccupied; one observer thought the bird appeared ''drunk''.

Nick Escott Thunder Bay, Ontario

Articles

Ontario Bird Records Committee Report for 1994

by Ron Pittaway

Introduction

Welcome to the 13th annual report of the Ontario Bird Records Committee (OBRC). Members of the Committee in 1994 were Bob Curry (chairperson), Ross James, Richard Knapton, Kevin McLaughlin, Ron Pittaway (secretary), Dennis Rupert, Ron Tozer, and Alan Wormington. Ross James also serves as Museum Liaison to the OBRC, a permanent position he holds even when not serving as a voting member.

Approximately 180 records were reviewed in 1994 with over 80 percent accepted; these included a number of older reports and specimens in the Royal Ontario Museum. Two new species, Blackbellied Whistling-Duck and Eurasian Tree Sparrow, are added to the Ontario list, bringing the provincial total to 460.

OBRC records are archived at the Royal Ontario Museum (ROM). Researchers and interested parties may examine filed reports and Committee decisions at the ROM by appointment. Contact Ross James, Department of Ornithology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, M5S 2C6 or call 416-586-5519.

Committee Meetings

Most of the Committee's work is

done by circulating reports by mail. However, the 1994 Committee held two meetings in Toronto. The first was a policy meeting held at Locke House on 26 November 1994. The second was held at the Royal Ontario Museum on 4 March 1995 to make the final decisions on the records in this report.

Historical Records

In 1993, the OBRC announced a policy for reviewing historical records that did not meet modern standards of documentation (Curry 1993). Two historical records were accepted in last year's report (Bain 1994). About 28 historical reports were circulated in 1994. It soon became clear that most of these reports were not going to be accepted. The policy of reviewing historical records was not working as expected. Historical records often lack details, and it is very difficult to judge an historical record that does not meet modern standards. At the November 1994 policy meeting, the Committee voted to repeal the historical records policy and to withdraw those historical reports that were in circulation. However, older records that appear to meet modern standards of documentation will continue to be reviewed by the OBRC.

Accepted Records

The format of this report follows that used in previous years. Accepted reports are listed by their English and scientific names following the American Ornithologists' Union Check-list (1983) and its supplements to date. Exceptions to AOU names listed in this report are Ross's Goose and Harris's Sparrow which follow Godfrey (1986) and James (1991). In its next check-list, the AOU will adopt the use of the apostrophe "s" for most species whose first names end in "s".

The OBRC Report for 1982 was the Committee's first report (James 1983). This began the "modern era" of documentation of rarities in the province. Our present numbering system is based on records before and after 1 January 1982. Each species is followed by two numbers: the first is the total of records occurring prior to 1982 that have been accepted by the OBRC: the second number is the total number of records occurring from 1982 to 1994 (inclusive) that have been accepted by the OBRC. An asterisk in place of the first number indicates that documentation was not required for the species prior to 1982. Date(s) of occurrence, number, sex, plumage, age, and location(s) are provided when known. Counties, Districts and Regional Municipalities are shown in italics. Observers who found a bird and submitted a report have their names underlined. Others who submitted reports are also listed. Finders of a bird who did not file a report are also listed when known.

Every attempt has been made to verify the data in this report. Sources used to check information included Audubon Field Notes, Birders Journal,

and the newsletters of Long Point Bird Observatory and Thunder Bay Field Naturalists. Please report corrections and omissions to the OBRC. Remarks, analysis and discussion follow many reports.

Not Accepted Records

All records that were not accepted because of uncertain identification are listed separately. One record whose identification was accepted was deferred because of uncertain origin. Submitters of all not accepted reports receive a letter from the chairperson explaining the reasons for the decision, including copies of the comments of the voting members. Although in place for several years, this policy was formally adopted at the November 1994 policy meeting. If you have not received comments. please contact the OBRC with a complete address and current phone number where you can be reached day or evening.

Hummingbird in Haliburton County

The record of a male Black-chinned Hummingbird (Archilochus alexandri) at Gooderham in Haliburton County in early July 1994 was not accepted by the OBRC. This was a controversial sighting. At the November 1994 meeting, the Committee decided to send the reports and video of the hummingbird to two experts for evaluation: Michel Gosselin of the Canadian Museum of Nature, and Jon Dunn of Ohio. In their written comments to the OBRC, both Michel and Jon said that the evidence in the reports and video was inconclusive. At the March 1995 meeting, the

Committee again reviewed the reports, video and two expert opinions, and voted not to accept the record.

1995 Reports

Many reports were received too late to be reviewed by the 1994 Committee. Reports received after 31 December are normally retained for the next year. A file of 15 to 20 reports circulated by mail to seven voting members often takes two to three months before the file and votes are returned to the secretary. To ensure that your sightings are included in the next report, be sure to submit reports as soon as possible to the OBRC. All submitters of reports are sent a postcard by the secretary acknowledging the receipt of their report. Please send reports to the new secretary, Rob Dobos, Secretary OBRC, 178 Cedarbrae Avenue, Waterloo, Ontario N2L 4S3.

Acknowledgements

The Committee would like to thank the many observers who submitted reports, sketches and photographs in 1994. We are grateful to Ion Dunn of Ohio and Michel Gosselin of the Canadian Museum of Nature who gave their expert opinions on the reports and video of the hummingbird in Haliburton County. Ron Tozer compiled the summary numbers accompanying the records. I am grateful to Jean Iron who helped me prepare reports for circulation and in the preparation of the report that follows. In addition, a number of enthusiastic observers were very helpful in soliciting reports, checking dates and providing additional information. They are Rob Dobos, Bruce Di Labio, Leo Heynes, Tom Hince, Jean Niskanen, Ron Ridout, Kayo Roy, Roy Smith and Marvin Smout. I hope you enjoy reading about the rare birds of 1994.

Accepted Records

Western Grebe Aechmophorus occidentalis (0/7)

1994 - one, 2 April, Hillman Marsh, Essex (John Lamey).

Northern Gannet Sula bassanus (2/12)

1994 - one juvenile, 6 November, Toronto, Metropolitan Toronto (Alfred Adamo).

There were other sightings of a gannet (probably the same bird) on the same day at the western end of Lake Ontario, but no reports were received by the OBRC.

American White Pelican Pelecanus erythrorhynchos (2/31)

1993 — one, late June, Morrisburg, Stormont, Dundas and Glengarry (Elizabeth Le Geyt, found by Sydney Smith) - photo on file.

Sightings after 1 January 1994 no longer require documentation by the OBRC.

Brown Pelican Pelecanus occidentalis (0/4)

1994 — one adult, 31 May - 3 June, Port Dover and Long Point Bay, Haldimand-Norfolk (Kayo Roy) - photos on file.

one adult, 2 - 6 July, Shebeshekong Bay, Parry Sound (Garry Donaldson, Gary Barager, Donald MacLeod, Hugh Clawson, Mike Gerhardt) - photos on file.

- one adult, 10 July, Algonquin Provincial Park (Opeongo Lake), Nipissing (finders Don Creighton and Larry Boyle).
- one adult, 20 July, Clear Lake, Leeds and Grenville (Paul Van Luit) photo on file.

Although reports are listed separately above, there is a strong possibility that they represent one bird that subsequently wandered into Quebec. This bird was widely observed in many locations in Ontario by birders and nonbirders, its picture appearing in magazines and local newspapers. According to information compiled by Alan Wormington, the bird was first sighted about 10 May 1994 in Hamilton harbour, *Hamilton-Wentworth*, and was last seen 18-24 July 1994 at Newboro Lake, *Leeds and Grenville*. The reports cited above are those on file with the OBRC.

Great Egret Casmerodius albus North Only (2/5)

1994 - one, 1 June, Jarvis River, Thunder Bay (Lynda Sisco).

Snowy Egret Egretta thula North Only Until 1991 (1/15)

- 1994 one adult, 29-30 April, Kate's Lake, Lanark (Lynda Bennett).
 - one adult, 15-21 May, Grassie, Niagara (Bob Curry).
 - one adult, 21 May, Long Point, Haldimand-Norfolk (Felix Jachmann).

Little Blue Heron Egretta caerulea (7/22)

- 1994 one adult, 20-23 April, Long Point Provincial Park, Haldimand-Norfolk (Robert Smalley, Gareth Watkins, Robert Fielding).
 - one juvenile, 19 July, Cambridge, Waterloo (William Wilson).
 - one juvenile, 24 July 1 August, Smithville, Niagara (<u>Bob Curry</u>, Alfred Adamo, Kayo Roy, also found by Jim Heslop, John Olmsted) photo on file.

Tricolored Heron Egretta tricolor (2/16)

1994 — one, 1 June, Tip of Long Point, Haldimand-Norfolk (Paul Prior).

Yellow-crowned Night-Heron Nyctanassa violacea (5/20)

- 1994 one adult in breeding plumage, 4-22 May, Rondeau Provincial Park, Kent (Keith Burk, finder Steve Charbonneau) photo on file.
 - one adult, 29 May, Kingsville, Essex (Alan Wormington).
 - one juvenile, 22 September 23 October, Hillman Marsh (22 September) and Marentette Beach (25 September 23 October), Essex (Alan Wormington, Jim Flynn) photos on file.

Glossy Ibis Plegadis falcinellus (2/17)

1991 - one adult, 16 May, Erieau, Kent (Keith Burk).

At approximately 18:35h, this bird flew southwest from Erieau over Lake Erie. What was probably the same bird was reported flying in off the lake over Hillman Marsh, *Essex*, at about 19:35h, but no documentation was received for the second sighting.

Ibis Plegadis sp. (3/16)

- 1994 one, 22 May, Minesing Swamp, Simcoe (Rob Copeland).
- 1993 three, 24 October, Holiday Beach Conservation Area, Essex (Robert Finklestein, Bob Hall-Brooks, Allen Chartier).
 - -two, 28 November, Holiday Beach Conservation Area, Essex (Bob Hall-Brooks).
- 1992 one, 28 August 1 September, Port Alma, Kent (Keith Burk).

Black-bellied Whistling-Duck Dendrocygna autumnalis (0/2)

- 1994 12, 16 May late May, Kingsville, Essex (Kay Beerthuis, Joyce Ellsworth, Molly Harrigan, George Hutchinson, John Nims, Thelma Nims).
- 1993 nine adults, 17 June 7 July, Rayside-Balfour, Sudbury (Fred Marshall, Nancy Barrett, John Lemon, Charles Whitelaw, Alan Wormington, co-finder Deborah Kuehnbaum) photos on file.

In last year's annual report (Bain 1994), the report of this species was placed in the Deferred Records category because its wild status was uncertain. However, this view has changed in one year. Alan Wormington comments on his voting slip: "During the past few years there have been numerous records (involving flocks of birds) in such places as Quebec, Pennsylvania, Iowa, Virginia, West Virginia, Missouri, Arkansas and Nevada''. Thus the 1993 record is removed from the Deferred category and becomes the first record for the province. The Black-bellied Whistling-Duck is now added to the official Ontario Checklist. Photographs of the 1993 birds indicate that they are of the expected northern nominate subspecies D.a. autumnalis (Ross James, pers. comm.).



Figure 1: Black-bellied Whistling-Ducks at Rayside-Balfour, Sudbury from 17 June to 7 July 1993. First record for Ontario. Photo by Kayo Roy.

Mute Swan Cygnus olor North Only (0/4)

1994 — one, 4 June, (<u>Lloyd Taman</u>), and 10-17 September, New Liskeard, *Timiskaming* (Bruce Di Labio) - photo on file.

1993 - one, 3-9 October, Wawa, Algoma (Alan Wormington).

The two reports from New Liskeard appear to be of the same bird.

Greater White-fronted Goose Anser albifrons South Only (2/34)

- 1994 11 frontalis (family groups of four and four and three), 7-10 March, Hillman Marsh, Essex (Alan Wormington).
 - four frontalis (family group), 18 March, Hillman Marsh, Essex (different from the above birds)
 (Alan Wormington).

- one immature frontalis, 19-22 March, Long Point, Haldimand-Norfolk (Doug McRae, finder Ron Ridout).
- one adult flavirostris, 26-27 March, Turkey Point Beach, Kano, Haldimand-Norfolk (Bob Curry, finder Ed Czerwinski).
- one, 2 April, Wildwood Lake, Oxford (James Holdsworth).
- one, 9 April, Hamilton, Hamilton-Wentworth (Robert Dawson).
- 1993 one, 23 November 8 December, Arkona, *Lambton* (21-25 November), and Strathroy, *Middlesex* (26 November 8 December) (Dennis Rupert).

Bill colour is often difficult to determine in this species (Kaufman 1994). Therefore, only well-described birds have been identified to subspecies. The Prairie subspecies (*frontalis*) is by far the commoner race in Ontario. The Greenland race (*flavirostris*) is much rarer but regular in Ontario; this subspecies should be identified with caution.

Ross's Goose Chen rossii South Only (0/5)

- 1994 one white morph, 7 March 11 April, Hillman Marsh and Point Pelee National Park, Essex (Alan Wormington) photos on file.
 - one white morph, 30 March 11 April, Hillman Marsh and Point Pelee National Park, Essex (different bird from above) (Alan Wormington) - photo on file.
 - one first year white morph, 13-24 March, Port Royal, Haldimand-Norfolk (Enver Domingo, Ron Ridout).
 - one adult white morph, 18 October, Point Pelee National Park, Essex (Alan Wormington).

Ross James comments that these reports "are in keeping with an expanding population".

Garganey Anas querquedula (0/2)

1993 — one male, 12-15 May, Fish Point Provincial Park Reserve, Pelee Island, Essex (Peggy Sprackland, Jim Flynn, Alan Wormington) - photos on file.

The bird was a male in breeding plumage. Richard Knapton comments on origin, "This record meets the kind of requirement necessary for acceptance of a wild vagrant - behaviour, timing, and flocking with appropriate species". This is the second record for Ontario and it occurred only three weeks following the first record.

Cinnamon Teal Anas cyanoptera (0/9)

1994 — one male in breeding plumage, 13-16 May, Rondeau Provincial Park, Kent (Keith Burk, Allen Woodliffe, finders B. and R. Edwards) - photos on file.

Eurasian Wigeon Anas penelope (3/59)

- 1994 one male, 3 June, Wawa, Algoma (C.J. Saunders).
- 1993 one male, 27-28 March, Wainfleet, Niagara (Richard Knapton, found by Blayne Farnan).
 - one male, 10 April, Hillman Marsh, Essex (Alan Wormington, finders Karl Overman, Jeffrey Goldsmith, James Lesser).
- 1992 one male, 15 March, Port Royal, Haldimand-Norfolk (Bob Curry).
 - one male, 15 March, Big Creek National Wildlife Area, Haldimand-Norfolk (Bob Curry).

Sightings in Southern Ontario after 1 January 1994 no longer require documentation by the OBRC. This is still a review species for Northern Ontario.

Tufted Duck Aythya fuligula (0/11)

- 1993 one female, 15-19 January, Hamilton Harbour, and 25-29 January, Windermere Basin, Hamilton, Hamilton-Wentworth (Bob Curry).
 - one male, 9-29 March, Burlington, Halton (Alan Wormington).
 - one adult male, 28 March, Point Pelee National Park, Essex (Alan Wormington, Steven Pike).

— one adult male, 5 December 1993 to 5 March 1994, Burlington, Halton, and 26 December, Hamilton Bay, Hamilton, Hamilton-Wentworth (Rob Dobos, Bob Curry, Alan Wormington).

1992 — one adult male, 31 December 1992 to 9 April and 22-29 May 1993, Windermere Basin and Hamilton Harbour, *Hamilton-Wentworth* (Alan Wormington).

Common Eider Somateria mollissima South Only (2/6)

1994 - one male, 19 and 25 March, Point Pelee National Park, Essex (Jerry DeMarco).

Harlequin Duck Histrionicus histrionicus North Only (0/10)

1994 - one, 26 October, Thunder Bay, Thunder Bay (George Williams).

1993 — one, 12-14 September, Thunder Cape, Thunder Bay (Robert Worona).

- one, 8 October, Thunder Cape, Thunder Bay (Mark Dugdale).

All three birds reported above were adult females, or immature males or females in first basic plumage. The source of migrant and wintering Harlequin Ducks in Ontario may be from the recently discovered breeding population in northwestern Quebec, east of Hudson Bay.

Black Vulture Coragyps atratus (2/14)

1994 - one, 31 May, Fifty Point Conservation Area, Hamilton-Wentworth (Bruce Mackenzie).

one, 17 August to early September, Pierre Lake Camp 34, Cochrane (Jeff Kaiser, Scott Virgo)
 photo on file.



Figure 2: Male Garganey at Pelee Island, *Essex* from 12 to 15 May 1993. Photo by *Jim Flynn*.

American Swallow-tailed Kite Elanoides forficatus (1/6)

1994 — one, 15 April, Beamer Memorial Conservation Area, Grimsby, Niagara (Paul Rose, Gordon Bellerby).

This is the earliest spring record accepted by the OBRC. The kite was seen by a large number of observers, too numerous to mention as co-finders.

Swainson's Hawk Buteo swainsoni (8/20)

- 1994 one juvenile light morph, 2 October, Hawk Cliff, Port Stanley, Elgin (Robert Hubert, D.E. Fowler) photos on file.
- 1993 one juvenile light morph, 7 September, Thunder Cape, Thunder Bay ($\underline{\text{Victor Fazio}}$).
 - one juvenile light morph, 16 September, Holiday Beach Conservation Area, Essex (Michael Kielb, David Stimac, Laurie York, Cecily Fritz).
 - one adult, 16 September, Holiday Beach Conservation Area, Essex Michael Kielb, David Stimac, Laurie York, Cecily Fritz).

Ferruginous Hawk Buteo regalis (0/3)

1992 - one juvenile (one year old), 18 May, Tavistock, Oxford (James Holdsworth).

This is the third accepted record for Ontario.

Crested Caracara Caracara plancus (1/1)

1994 - one, 6 July, Pelee Island, Essex (David Kraus, Gerald Waldron, Peter Chapman).

This is the second record for Ontario and the first for southern Ontario. The first occurrence involved a bird collected (specimen now missing) at Thunder Bay, 18 July 1892 (Wormington 1986, James 1991).

Gyrfalcon Falco rusticolus South Only (4/30)

- 1993 one dark morph, 18 November 1993 to 23 January 1994, Sault Ste. Marie, Algoma (Ed Czerwinski, finder Tom Marwood).
- 1992 one gray morph, 31 January 1 March, Woodstock and Beachville, Oxford (James Holdsworth, Bob Curry, co-finder Ian Platt).
 - one dark morph, 10 November 1992 to 21 March 1993, Sault Ste. Marie, Algoma (Ed Czerwinski) - photo on file.
- 1983 one gray morph juvenile, 4 December, Sudbury, Sudbury (John Lemon) photo on file.

The 1992 and 1993 Gyrfalcons at Sault Ste. Marie appear to be the same bird. Sightings in Southern Ontario after 1 January 1994 no longer require documentation by the OBRC.

Purple Gallinule Porphyrula martinica (4/3)

1993 - one first winter, 11 October, Stratford, Perth (Jeff Skevington, found dead by John Paul).

This specimen has not been deposited in the Royal Ontario Museum.

Piping Plover Charadrius melodus (1/30)

- 1994 one, 12 May, Tip of Long Point, Haldimand-Norfolk (Paul Prior).
- 1993 one adult male, 26-28 May, Tip of Long Point and Breakwater, Haldimand-Norfolk (Paul Prior).
- 1992 one adult, 18 September, Woodstock, Oxford (James Holdsworth).

American Oystercatcher Haematopus palliatus (1/2)

1994 - one, 17 May, Tip of Long Point, Haldimand-Norfolk (Paul Prior).

This is the third accepted record for Ontario.

Black-necked Stilt Himantopus mexicanus (2/5)

1991 — one female, 1-2 June, Grand Bend, *Huron/Lambton* (1 June), and Parkhill, *Middlesex* (2 June) (<u>Jeff Skevington</u>, co-finder Cathy Koot).

This may be one of three birds seen at the Mitchell Sewage Lagoons 19 May 1991 (Bain 1992).

American Avocet Recurvirostra americana (7/39)

- 1994 one adult female, 17 April, Long Point Causeway, Haldimand-Norfolk (Wayne Wright).
 - one adult, 19-26 July, Blenheim, Kent (Allen Woodliffe, Keith Burk, finder John Walty)
 photo on file.
 - one, 17 September, Holiday Beach Conservation Area, Essex (Tom Hince).
 - one female, 17 September, Point Pelee National Park, Essex (James Coyne, Alan Wormington).
 - two females, 11-19 November, Sturgeon Creek, Essex (Alan Wormington) photos on file.
- 1991 one, 20 July, Rondeau Provincial Park, Kent (John Thompson).

Willet Catoptrophorus semipalmatus North Only (2/7)

1994 - one adult, 4 May, Thunder Bay, Thunder Bay (Nick Escott, finders Stan Phippen, Barry Atkinson).

Curlew Sandpiper Calidris ferruginea (0/16)

- 1994 one adult female, 8-14 May, Harrow (8-10 May and 12-14 May) and Cottam (11 May), Essex (Jim Flynn, Alan Wormington) photos on file.
 - one female, 11-20 May, Grand Bend, Huron (<u>Jeff Skevington</u>, Terry Crabe, co-finder Gordon Vogg) - photos on file.
 - one adult male, 15-17 May, Grand Bend, Huron (Jeff Skevington) photo on file.

Pomarine Jaeger Stercorarius pomarinus (3/27)

1993 - two juveniles, 9 October, Sarnia, Lambton (Dennis Rupert, co-finder Roger Simms).

See Dennis Rupert's sketch in this report. Sightings in Southern Ontario after 1 January 1994 no longer require documentation by the OBRC.

Long-tailed Jaeger Stercorarius longicaudus (3/12)

1993 - one adult, 9 October, Sarnia, Lambton (Dennis Rupert).

See Dennis Rupert's sketch in this report.

Laughing Gull Larus atricilla (14/69)

1993 - one adult in breeding plumage, 9 July, Erieau, Kent (Keith Burk).

Sightings in Southern Ontario after 1 January 1994 no longer require documentation by the OBRC.

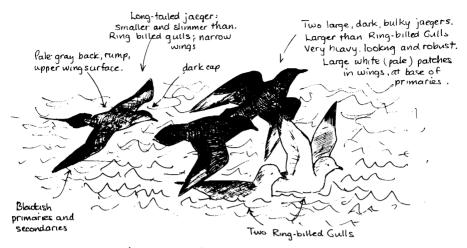
California Gull Larus californicus (0/14)

- 1994 one second winter, 3 December, Queenston, Niagara (Rob French, Nancy French, Robert Sundell, William D'Anna, Anthony Lang).
- 1993 one adult winter, 3-4 December, Brantford, Brant (Bill Lamond).
 - one adult winter, 5 December, Queenston, Niagara (Richard Knapton).

Least Tern Sterna antillarum (1/1)

1958 - one adult in breeding plumage, 26 June, Erie Beach, Niagara (Richard Brownstein).

This 1958 record, now accepted by the OBRC, becomes the first for Ontario. The Committee previously accepted a sighting at Wheatley Harbour, *Kent*, 9 June 1993 (Bain 1994).



Note: I did not notice any extension of the central retrices. I have shown it in the sketch since both Curt and Jonathan claimed to have seen it. I was concentrating on the cap and two-toned appearance of the wings.

Figure 3. Two juvenile Pomarine Jaegers and an adult Long-tailed Jaeger at Sarnia, *Lambton* on 9 October 1993. Drawing by *Dennis Rupert*.

Dovekie Alle alle (0/1)

1993 - one, 26 October, Glen Isle, Mississippi River, Lanark (Chris Traynor) - photos on file.

This specimen is in the Canadian Museum of Nature in Ottawa (#96684). Dovekie records in Ontario have been summarized by Bruce Di Labio (1995).

Ancient Murrelet Synthliboramphus antiquus (2/1)

1994 — one first winter, 13 November, Port Weller, Niagara (William D'Anna, Kayo Roy, Nancy Barrett) photos on file.

1908 — one adult male, 15 November, Crystal Beach, Niagara (found dead by Everrett Wheeler), wing, foot and head in the Royal Ontario Museum in Toronto (#39908).

1901 — one first winter female, 18 November, Toronto Island, Metropolitan Toronto (collected by Hector Macdonald) skin and sternum in the Royal Ontario Museum in Toronto (#27.5.2.319).

These are all the records for Ontario. All three records fall within six days in November, a remarkably narrow time period. The 1994 Port Weller bird was likely the same bird reported from Rochester, New York on 31 October to 4 November and later seen flying west past Hamlin Beach Park, New York on 11 November on Lake Ontario (D'Anna 1994). Rochester is about 135 kilometres, and Hamlin Beach Park is about 100 kilometres, east of Port Weller.

Atlantic Puffin Fratercula arctica (0/3)

1994 — one juvenile, 14-16 October, Moses-Saunders Power Dam, Cornwall, Stormont, Dundas and Glengarry (Bruce Di Labio) - photo on file.

This is the third record for Ontario accepted by the OBRC. The bird was easily captured in a weakened condition, and died on route to the Wild Bird Care Centre in Nepean (Bruce Di Labio, pers. comm.). Specimen is in the Canadian Museum of Nature (#96697).



Figure 4. Ancient Murrelet at Port Weller, *Niagara* on 13 November 1994. Photo by *Kayo Roy*.

Band-tailed Pigeon Columba fasciata (3/2)

1994 — one, 16-17 September, Dillon Cove, Parry Sound (<u>Jean Niskanen</u>, Kayo Roy, Wilf Yusek, co-finder Eric Niskanen) - photos on file.

This is the fifth accepted record by the OBRC. A large group of 40 to 50 lucky observers saw this bird on the morning of 17 September.

Chuck-will's-widow Caprimulgus carolinensis (*/4)

1994 - one male, mid to 25 May, Walsingham, Haldimand-Norfolk (Michael King).

Rufous Hummingbird Selasphorus rufus (2/8)

1994 — one adult male, 21-30 July, Lappe, *Thunder Bay* (Nick Escott, Don Graham, finder Ann Christianson) - photos on file.

Gray Flycatcher Empidonax wrightii (1/1)

1981 — one, 11 September, Toronto Islands, Metropolitan Toronto (Ross James, finder Dave Broughton) - photos and one tail feather on file.

Say's Phoebe Sayornis saya (1/5)

1994 - one, 12 May, Thunder Cape, Thunder Bay (Matt Holder, Don Graham).

Vermilion Flycatcher Pyrocephalus rubinus (1/1)

1994 — one first winter male, 3 November - 9 December, St. Clair National Wildlife Area, Kent (John Haggeman, Alan Wormington, Jim Flynn) - photos on file.

1949 — one first winter male *mexicanus*, 29 October - 1 November, Toronto, *Metropolitan Toronto* (collected by Cliff Hope, finders Thomas Swift, Dorothy Swift), specimen in the Royal Ontario Museum (#76565).

These are the only two accepted records for Ontario (Haggeman and Wormington 1995).

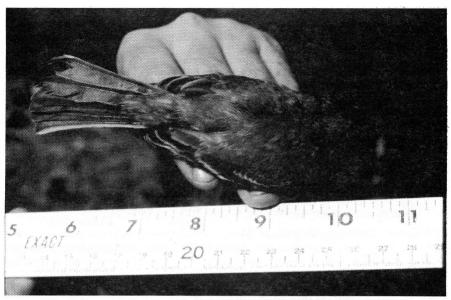


Figure 5. Gray Flycatcher at the Toronto Islands, *Metropolitan Toronto* on 11 September 1981. Note the pale outer webs of the outer tail feathers. Photo by *Ross James*.

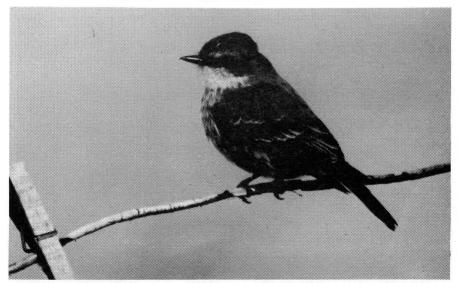


Figure 6. First winter male Vermilion Flycatcher at the St. Clair National Wildlife Area, *Kent* from 3 November to 9 December 1994. Photo by *Jim Flynn*.

Western Kingbird Tyrannus verticalis (8/49)

- 1994 one, 11 May, Point Pelee National Park, Essex (<u>Rob Dobos</u>, <u>Kevin McLaughlin</u>, co-finders Barbara Charlton, Bruce Kellett, Robert Waldhuber).
 - one, 2 June, Breakwater, Long Point, Haldimand-Norfolk (Nancy Elliot, finder Felix Jackmann).
- 1993 one, 12-25 October, Thunder Cape, Thunder Bay (Nick Escott) photo on file.
 - one immature, 11 November, Honey Harbour, Muskoka (Doug Tate).

Gray Kingbird Tyrannus dominicensis (1/3)

1994 — one, 4 October, Hawk Cliff, Port Stanley, Elgin (<u>Donald Fowler</u>, co-finder Jim Azawa) - photos and one left tail feather on file.

The bird was photographed, banded and released. This is the fourth record for Ontario.

Scissor-tailed Flycatcher Tyrannus forficatus (3/26)

1994 - one, 19 June, Point Pelee National Park, Essex (Alan Wormington).

 one, 10-20 November, Batchawana Bay, Algoma (Ed Czerwinski, Don Wilshere, finders Ruth Fletcher, Mary Pichard) - photo on file.

Fish Crow Corvus ossifragus (1/3)

1994-one, 5 May, Point Pelee National Park, Essex (<u>John Waud</u>, <u>Dennis Lewington</u>), <u>Gwen Lewington</u>). All four accepted Ontario records have been from Point Pelee, during the period from 21 April to 20 May.

Rock Wren Salpinctes obsoletus (0/2)

1993 — one, 1-6 May, Point Pelee National Park, Essex (Matt Baker, Alan Wormington, Jim Flynn) - photos on file.

This is the second record accepted by the OBRC.

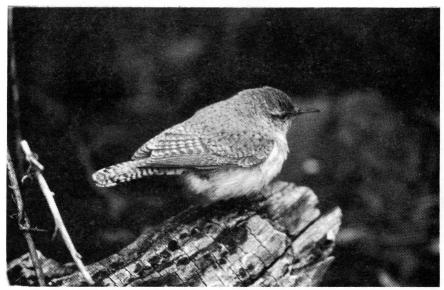


Figure 7. Rock Wren at Point Pelee National Park, Essex from 1 to 6 May 1993. Photo by Jim Flynn.

ONTARIO BIRDS AUGUST 1995

Blue-gray Gnatcatcher Polioptila caerulea North Only (2/6)

1993 - one, 15 October, Thunder Cape, Thunder Bay (Mark Dugdale).

Northern Wheatear Oenanthe oenanthe (7/13)

1994 - one, 4 September, Oshawa, Durham (Mike McEvoy).

 one, 7 September, Algonquin Provincial Park (West Rose Lake), Nipissing (Julie West, Gary Neuman) - video on file.

The first record for Algonquin Park.

Mountain Bluebird Sialia currucoides (2/10)

1993 - one adult male, 9 October, Wawa, Algoma (Alan Wormington).

Townsend's Solitaire Myadestes townsendi (4/22).

1994 - one, 1 January, Mountain Lake, Kenora (Lillian Anderson, Bruce Ranta).

Varied Thrush Ixoreus naevius (5/47)

1994 — one female, 29 December 1994 to 19 February 1995, Atikokan, Rainy River (<u>Dave Elder</u>, Don Graham).

1993 — one male, 5-31 January, Point Pelee National Park, Essex (<u>James Dowall</u>, co-finder William Smith). Sightings in Southern Ontario after 1 January 1994 no longer require documentation by the OBRC.

Loggerhead Shrike Lanius ludovicianus North Only (0/6)

1994 — one, 30 April - 2 May, Silver Islet, *Thunder Bay* (Nick Escott, co-finder Barry Atkinson) - photos on file.

"Lawrence's" Warbler Vermivora chrysoptera x Vermivora pinus (*/6)

1994 - one male, 18 May, Point Pelee National Park, Essex (Pamela Hickman).

— one male, 3 June - 17 July, Halton County Forest (Turner Tract), Halton (Alfred Adamo, Ron Pittaway).

Many observers saw this beautiful hybrid at both Point Pelee and the Turner Tract. The latter bird sang like a Blue-winged Warbler. It was a life bird for the writer, who as readers know is fascinated by recognizable forms.

Townsend's Warbler Dendroica townsendi (2/3)

1994 - one male, 8-9 May, Rondeau Provincial Park, Kent (Michael King, Allen Woodliffe).

Kirtland's Warbler Dendroica kirtlandii (7/7)

1994 - one, 18-20 May, Rondeau Provincial Park, Kent (Martin Taylor).

1993 — one first summer male, 9 May, Point Pelee National Park, Essex (Glen Peterson, Ellen Peterson, Jim Flynn, Alan Wormington) - photos on file.

Hooded Warbler Wilsonia citrina North Only (1/3)

1994 - one female, 23 May, Thunder Cape, Thunder Bay (Matt Holder, Andrea Kingsley).

- one male, 16 July, McKenzie Station, Thunder Bay (Jack Adderley).

— one first year male, 15 October, Thunder Cape, Thunder Bay (Dave Boyle, finder Julie Cappleman)

Summer Tanager Piranga rubra North Only (1/9)

1994 - one female, 20 May, Thunder Cape, Thunder Bay (Dave Boyle, David Shepherd) - photo on file.

- one first year male, 22 May, Thunder Cape, Thunder Bay (Dave Boyle).
- one adult male, 22 May, Thunder Cape, Thunder Bay (Dave Boyle).
- one female, 23 May, Thunder Cape, Thunder Bay (Dave Boyle, David Shepherd) photo on file.

Northern Cardinal Cardinalis cardinalis North Only (1/15)

1994 — one female, 26 December, Thunder Bay, Thunder Bay (David Ellingwood).

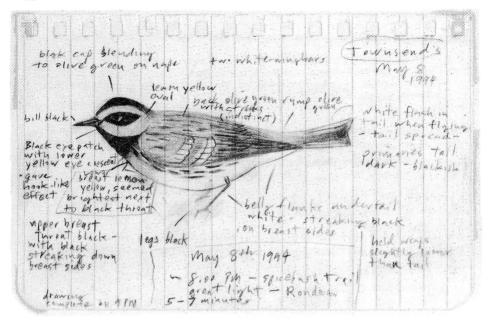


Figure 8: Male Townsend's Warbler at Rondeau Provincial Park, *Kent* from 8 to 9 May 1994. Drawing by *Mike King*.



Figure 9: Kirtland's Warbler at Point Pelee National Park, Essex on 9 May 1993. Photo by Jim Flynn.

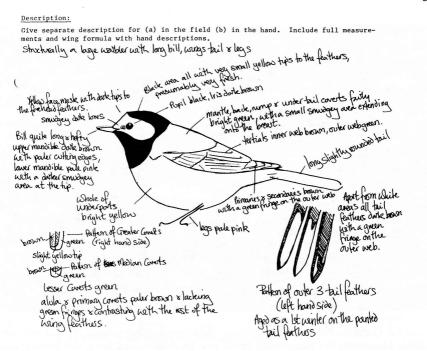


Figure 10: Hooded Warbler at Thunder Cape, *Thunder Bay* on 15 October 1994. Drawing by *Dave Boyle*.

Blue Grosbeak Guiraca caerulea (7/21)

- 1994 one first year male, 18-21 May, Point Pelee National Park, Essex (Ross Murphy, Jean Nichols, Larry Boyce).
- 1993 one female, 13-20 May, Point Pelee National Park, Essex (Alan Wormington, Jim Flynn, finder Gustave Yaki) photos on file.
 - one female, 20-22 May, Point Pelee National Park, Essex (different from above bird)
 (Jim Flynn) photos on file.

Dickcissel Spiza americana North Only (1/6)

1992 — one first year male, 27 September, Thunder Cape, *Thunder Bay* (Peter Burke, finder Mark Dugdale) - photos on file.

Lark Sparrow Chondestes grammacus (4/32)

- 1994 one, 27 April, Long Point Provincial Park, Haldimand-Norfolk (Stephen Soule).
 - one, 20 May, Pinery Provincial Park, Lambton (Jeff Skevington) photo on file.

Harris's Sparrow Zonotrichia querula South Only (3/23)

- 1994 one, 10-11 May, Etobicoke, Metropolitan Toronto (Dennis Duckworth).
 - one first winter, 22 October, Long Point Provincial Park, Haldimand-Norfolk (Alfred Adamo).
- 1993 one first winter, 27 October, Tip of Long Point, *Haldimand-Norfolk* (<u>Graeme Gibson</u>, co-finders Paul Prior, Pascale Guillotte, Sylvia Wood).
- 1987 one first winter, 19 December 1987 to February 1988, Huntingford, Oxford (Jeff Skevington, Bob Curry, Kayo Roy).

Orchard Oriole Icterus spurius North Only (0/2)

1994 — one adult male, 20 May, Crooks Township, Thunder Bay (Sharon Illingworth).

Brambling Fringilla montifringilla (1/4)

1994 - one male, 18-20 April, Black River, Kenora (Gerhard Gehrmann).

This is the fifth accepted record by the OBRC.

Gray-crowned Rosy-Finch Leucosticte arctoa (1/3)

1994 — one tephrocotis, 28 December 1994 to 11 January 1995, Gorham Township, Thunder Bay (Nick Escott, finder Gene Kideres) - photos on file.

Cassin's Finch Carpodacus cassinii (0/2)

1994 - one adult male, 1 June, Point Pelee National Park, Essex (Tom Hince).

This is the second record for Ontario.

House Finch Carpodacus mexicanus North Only (0/5)

1994 — four (two males and two females), 14 July (one male to 15 July), Rainy River, Rainy River (Bob Curry, Alan Wormington).

- one male, 15 July, Fort Frances, Rainy River (Bob Curry).

House Finch was dropped from the review list for Northern Ontario, effective 1 January 1995.

Eurasian Tree Sparrow Passer montanus (0/1)

1994 — one, 16-18 February, Eastnor Township, Bruce (Russell Ferguson, Timothy Soper, co-finder Katherine Ferguson) - photos on file.

A first for Ontario! Photographs indicate the identification is unequivocal and not a hybrid. However, the subspecies could not be determined from the photographs (Ross James, pers comm.). The species is expanding its range in North America and the Committee had no serious concerns that it might be an escapee.

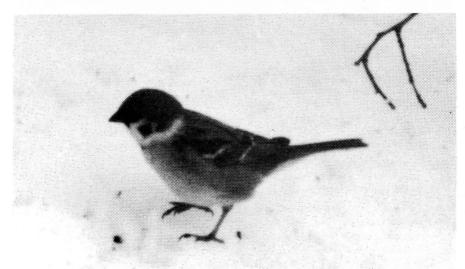


Figure 11: Eurasian Tree Sparrow at Eastnor Township, *Bruce* from 16 to 18 February 1994. First record for Ontario. Photo by *Timothy Soper*.



Figure 12: Eurasian Tree Sparrow at Eastnor Township, *Bruce* from 16 to 18 February 1994. Photo by Timothy Soper.

Deferred Record

Identification accepted, wild status deferred

Records in this category are those where wild status is currently debatable, and a decision has therefore been deferred until more information can be assembled.

Eurasian Collared Dove Streptopelia decaocto

1993 - one, 25 July and 4 September, Pittock Lake, Oxford (James Holdsworth).

Not Accepted Records Identification Uncertain

In most reports listed below, the written description was found to be insufficient to establish the identity of the species claimed. Any of these reports may be resubmitted for further review if new supporting evidence is provided.

1994 — Yellow-crowned Night-Heron, 16 October, Big Creek National Wildlife Area, Haldimand-Norfolk.

- Black Vulture, three, 14 May, Point Pelee National Park, Essex.
- Black Vulture, 19 May, Point Pelee National Park, Essex.

- Swainson's Hawk, 15 April, Beamer Memorial Conservation Area, Niagara.
- Black-chinned Hummingbird, early July, Gooderham, Haliburton video on file.
- Bell's Vireo (Vireo bellii), 6 May, Point Pelee National Park, Essex.
- Bell's Vireo, 6-7 May, Point Pelee National Park, Essex.
- Bell's Vireo, 9 May, Stoney Point, Essex.
- Bell's Vireo, 16 May, Point Pelee National Park, Essex.
- 1993 Little Blue Heron, two, 6 May, Point Pelee National Park, Essex.
 - Glossy Ibis, four-five, 13 May, Point Pelee National Park, Essex.
 - Swainson's Hawk, 8 May, Point Pelee National Park, Essex.
 - Swainson's Hawk, 17 September, Holiday Beach Conservation Area, Essex.
 - Razorbill (Alca torda), seven, 1 May, Long Point Provincial Park, Haldimand-Norfolk.
 - Vermilion Flycatcher, 18 May, Point Pelee National Park, Essex.
 - Western Kingbird, 4 June, Nils Bay, Algoma.
 - Bell's Vireo, 13 May, Point Pelee National Park, Essex.
 - Virginia's Warbler (Vermivora virginiae), 30 May, Rondeau Provincial Park, Kent.
 - Yellow-throated Warbler (Dendroica dominica), 22 May, Point Pelee National Park, Essex.
 - Kirtland's Warbler, 12 May, Point Pelee National Park, Essex.
 - Kirtland's Warbler, 16 May, Point Pelee National Park, Essex.
 - Blue Grosbeak, 11 May, Point Pelee National Park, Essex.
 - Blue Grosbeak, four, 11 May, Point Pelee National Park, Essex.
 - Blue Grosbeak, 15 May, Point Pelee National Park, Essex.
 - Blue Grosbeak, three, 15 May, Point Pelee National Park, Essex.
- 1992 "Black" Brant (Branta bernicla nigricans), 7 May, Point Pelee National Park, Essex.
 - Swainson's Hawk, 4 September, Point Pelee National Park, Essex.
 - Arctic Tern (Sterna paradisaea), two, 14 May, Erieau, Kent.
 - Black-whiskered Vireo (Vireo altiloguus), 20 May, Point Pelee National Park, Essex.
 - Bell's Vireo, 27 May, Dundas Marsh, Hamilton, Hamilton-Wentworth.
- 1991 Black-headed Grosbeak (Pheucticus melanocephalus), 12-14 May, 8 Mile Point, Orillia Township, Simcoe - photo on file.
- 1982 Virginia's Warbler, 6 May, Point Pelee National Park, Essex.
- 1972 Vermilion Flycatcher, 25 July, Brougham Township, Renfrew.

Corrections/Updates to Previous OBRC Reports

1993 Report (Ontario Birds 12: 41-58)

- under Unaccepted Records, Ash-throated Flycatcher (1989), change Peel to Metropolitan Toronto.

Literature cited

American Ornithologists' Union. 1983. Check-list of North American Birds.

6th Edition. American Ornithologists' Union. Washington, D.C.

Bain, M. 1992. Ontario Bird Records Committee report for 1991. Ontario Birds 10: 43-63.

Bain, M. 1994. Ontario Bird Records Committee report for 1993. Ontario Birds 12: 41-58. Curry, R. 1993. OBRC Announcement. Historical records: a call for submissions. Ontario Birds 11: 36-37.

D'Anna, W. 1994. Ancient Murrelet in Ontario. Birders Journal 3: 263-266.

Di Labio, B.M. 1995. Another Dovekie from eastern Ontario. Ontario Birds 13: 31-34.

Godfrey, W.E. 1986. The Birds of Canada. Revised Edition. National Museum of Canada, Ottawa.

ONTARIO BIRDS AUGUST 1995

Haggeman, J.G. and A. Wormington. 1995.Vermilion Flycatcher: second record for Ontario and Canada. Birders Journal 4: 92-96.

James, R.D. 1983. Ontario Bird Records Committee report for 1982. Ontario Birds 1: 1-15.

James, R.D. 1991. Annotated Checklist of the Birds of Ontario. Second Edition. Life Sciences Miscellaneous Publications. Royal Ontario Museum. Toronto. Kaufman, K. 1994. Greenland White-fronted Geese. Birding 26: 380-382.

Wormington, A. 1986. Ontario Bird Records Committee report for 1985. Ontario Birds 4: 3-21.

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

ONTARIO FIELD ORNITHOLOGISTS Directors and Officers

President:

Gerry Shemilt

51 Montressor Drive, North York, Ontario M2P 1Z3

Past-President:

Geoff Carpentier

1945 Denmar Rd., Unit 108, Pickering, Ontario L1V 3E2

Vice-President:

George Bryant (AGM Co-ordinator)

58 Fairmeadow Ave., North York, Ontario M2P 1W7

Secretary:

Jim Coey

2409 Speyside Dr., Mississauga, Ontario L5K 1X5

Treasurer:

Alec Dobson

129 Dunington Dr., Scarborough, Ontario M1N 3E5

Director:

Jerry Guild (Field Trips)

2147 Jenner Ct., Mississauga, Ontario L4K 1N3

Director:

Sid Hadlington (Membership Secretary)

R.R. 1, Box 27, Bramhall Park, Midland, Ontario L4R 4K3

Director:

Jean Iron (Newsletter Editor and Birdathon Co-ordinator)
9 Lichen Place, Don Mills, Ontario M3A 1X3

9 Lichen Place, Don Willis, Ontario M3A 1A3

Director:

Mike King (Publicity and FON Representative)

250 Jones St., Oakville, Ontario L6L 3G4

Director:

Doug McRae

Box 3010, Brighton, Ontario K0K 1H0

Archivist:

Russell Munro

270 West Pike Creek Rd., Tecumseh, Ontario N8N 2L9

Mailing Co-ordinator: Valerie Brown

302-77 Coe Hill Dr., Toronto, Ontario M6S 3E2

Mail Pick-up:

Sheldon MacGregor

4212 Trapper Cres., Mississauga, Ontario L5L 3A9

Ontario Birds Editors:

Bill Crins

R.R. 1, South Waseosa Rd., Huntsville, Ontario POA 1KO

Ron Pittaway

Box 619, Minden, Ontario K0M 2K0.

Ron Tozer

R.R. 1, Dwight, Ontario P0A 1H0

Recognizable Forms

Morphs of the Eastern Screech-Owl

by Ron Pittaway

Introduction

The Eastern Screech-Owl (Otus asio) is a widespread resident in southern Ontario south of the Canadian Shield (James 1991). It prefers small deciduous or mixed woodlots with mature trees and snags for roosting and nesting. The Eastern Screech-Owl is strictly nocturnal. During the day it usually perches close to the trunk of a thick evergreen or roosts in a natural cavity or old flicker hole, rarely more than 10 metres up. On winter days it often sits in the entrance of a south-facing hole, absorbing the warm sunlight. If disturbed, it retreats down the hole. Many birders are familiar with its two common calls: a short horse-like whinny in the fall and winter, and a toad-like trilling in the spring and nesting season.

Field guides illustrate and describe two colour morphs (phases), gray and red, of the Eastern Screech-Owl. Both the gray and red morphs are illustrated in the Peterson's Guide (1980), the Golden Guide (Robbins et al. 1983) and the National Geographic Guide (Scott 1987). In addition, there is a little-known brown or intermediate morph. In this account I discuss the identification. frequency, genetics, and some ecological differences of the three morphs of the Eastern Screech-Owl in Ontario. The three morphs are illustrated in Voous (1988) and by Peter Burke in Figure 1.

Taxonomy

Godfrey (1986) and James (1991) list O.a. naevius as the only subspecies (race) of the Eastern Screech-Owl in Ontario. A much paler subspecies swenki breeds in western Manitoba. intergrading with eastern naevius at Winnipeg and Whitemouth. These locations are shown on the map on the inside cover of The Birds of Canada (Godfrey 1986). Other subspecies in North America are listed in the American Ornithologists' Union Check-list (1957). This treatment of subspecies is in need of revision. I agree with DeBenedictis (1977) that the most sensible treatment of subspecies is by Marshall (1967) who lists five subspecies: nominate O.a. asio (includes naevius of the AOU 1957 and Godfrey 1986) of the East, O.a. maxwelliae (includes swenki of the AOU 1957 and Godfrey 1986) of the Great Plains, O.a. floridanus of Florida west to Mississippi, O.a. hasbrouchi of Texas, and O.a. mccallii of the Rio Grande Valley.

Morphs vary in hue depending on whether the subspecies is dark or pale. For example, compare the eastern gray morph with the paler western gray morph maxwelliae (includes swenki) on page 243 of the National Geographic Guide (Scott 1987). Similarly, the red morph of the western maxwelliae is paler than the eastern red morph.



Figure 1: Gray Morph (top), Brown Morph (middle), and Red Morph (bottom). Note differences in feather markings. Drawing by *Peter Burke*.

Why are the three morphs of the Eastern Screech-Owl not considered subspecies? Subspecies are forms having separate breeding ranges, interbreeding where their ranges meet. Morphs are forms occurring in the same breeding range, with different morphs even occurring in the same brood. The third part of the scientific name is the name of the subspecies, for example, Otus asio naevius is the subspecies in Ontario (A.O.U. 1957). It has three morphs. Morphs do not have scientific names. In screech-owls, the morphs are more recognizable than the subspecies!

Plumages, Molts, Aging and Sexing

The sexes are similar in all ages and plumages. Juveniles (juvenals) in summer are narrowly barred all over, except on the wings and tail which are much like the adult. Grav and red morph juveniles usually are distinguishable in the field. See the illustration of the gray morph juvenile on page 243 in the National Geographic Guide (Scott 1987). In late summer and early fall, juveniles undergo a partial molt to first year (first basic) plumage, retaining the juvenile wings, scapulars and tail. First year birds and adults (definitive basic) are similar in appearance. First year birds (when they are one year old) and adults undergo a complete molt from late July to mid-November to fresh adult plumage. Colours become faded and dull on worn birds by the next spring and summer. See Bent (1938) for excellent descriptions of plumages and molts in juveniles, first year birds and adults. Partial and total albinos are known in this species (Holt et al. 1995).

Morph Genetics

The three morphs vary in colour and in the extent and pattern of the dark markings on their feathers. See Figure 1. Out of a total of 1320 specimens examined by Owen (1963) from throughout the range, 54 percent were gray, 38 percent red and 8 percent intermediate (brown). In his study. Owen divided 833 screechowls from selected areas into six colour types, grading from gray to red: two gray, two intermediate (brown), and two red. Figure 2 shows the strong bimodal (gray and red) distribution of the morphs and the continuous variation between the morphs.

The gray, brown and red morphs are not linked to age, sex or subspecies. A bird is born a certain morph and remains that colour all its life. All three morphs have been observed in the same brood (Hrubant 1955, Smith 1993). There are two main theories for the three morphs: (1) the gray and red morphs are due to one gene having two alleles (forms) with red dominant over gray, with the brown morph due to other modifying genes; (2) the morphs are due to one gene having three alleles with a graded order of dominance, red over brown over gray (Hrubant 1955, Owen 1967, VanCamp and Henny 1975, DeBenedictis 1977). There is no clear resolution of which hypothesis is correct. Perhaps the variation observed in the morphs is under the control of more than one gene.

Gray Morph

The gray morph is the most common morph in Ontario and throughout the northern part of the Eastern Screech-

Frequency of Eastern Screech-Owl Morphs

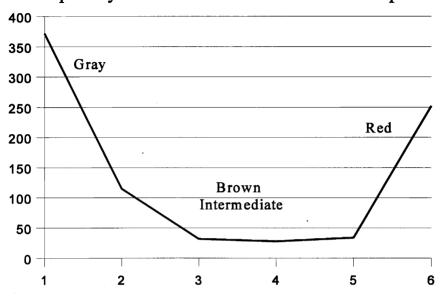


Figure 2: Data from Table 1 in Owen (1963).

Owl's range. See Figure 1. Based on specimens in the Royal Ontario Museum, Martin (1950) reported that 81 percent of the population in Ontario was of the gray morph. Martin did not recognize a brown morph, apparently lumping gray and brown birds in his study. Gray morph birds in fresh plumage in fall are a clear gray, becoming tinged with brown on worn and faded birds in spring and summer (Kaufman 1990). Typical brown morphs are a richer cinnamon-brown colour, including the facial disc.

Red Morph

Red morph screech-owls are bright, "a gorgeous rufous like a red fox" (Marshall 1967). Red morphs comprise about 19 percent of the Ontario population, based on

specimens in the Royal Ontario Museum (Martin 1950).

Red birds are uncommon in the northern parts of the screech-owl's range. Why? The reason may be that red morph birds have a lower survival rate than gray birds during unusually cold and severe winters. Plumage colour is correlated with thermal adaptation. Mosher and Henny (1976) found under laboratory conditions at -5° C and -10° C that red birds had significantly higher metabolic requirements than gray birds. Differential mortality was observed in an Ohio study by VanCamp and Henny (1975). They report that 44 percent more red birds died than gray birds during the particularly severe winter of 1951-1952. Perhaps the percentage of red birds declined in southern

Ontario during the winter of 1993-1994, one of the snowiest and coldest winters on record! Similarly, Gullion and Marshall (1968) in Minnesota found a differential mortality between red and gray morph Ruffed Grouse (Bonasa umbellus) related to winter survival. Why red coloration is linked to winter survival in these two species is unknown.

There are two additional differences between gray and red morph birds that are noteworthy. First, Kay McKeever (pers. comm.) reports that "the feathering on the legs of red birds appears to be less dense than on grays". Second, red birds spend more time in cavities during cold winter days, 80 percent (red) versus 38 percent (gray) (Voous 1988). Bruce Di Labio (pers. comm.) reported that the red bird of a mixed pair he observed for many years in Ottawa often was more difficult to find in winter than the gray bird.

Brown Morph

The brown or intermediate morph is by far the least common form in screech-owl populations, except in Florida where intermediates make up to 40 percent of the population (Owen 1963). Based on 247 screech-owls from Ontario admitted to The Owl Foundation in Vineland, only six or 2.43 percent were classifed as brown morphs by Kay McKeever (Penak 1986). Bull (1974) examined 144 New York specimens in eight state museums; only four or 2.78 percent were brown morph birds!

Peter Burke (pers. comm) and Tim Dyson banded an intermediate morph screech-owl on 4 March 1995 near Peterborough. Peter described it

as "very beautiful indeed. The overall coloration was dry gray-brown, with highlights of bright rufous-reddish areas on the scapulars and breast feathers". Kay McKeever (pers. comm.) of The Owl Foundation in Vineland describes the brown morph as a "warm brown like a saw-whet owl". Ross James (in litt.) of the Royal Ontario Museum says "there is considerable variation in the brown coloration depending on whether it tends towards reddish or grayish. In general, the brown is more of a cinnamon or tawny brown as opposed to a dark chocolate. reflecting a mix of reddish tones on one side and lighter or whiter gray on the other". In New England the brown morph is described as being chocolate brown in colour (Smith 1993), but intermediate birds from Ontario in the ROM are not chocolate brown (Ross James, pers. comm.). Similarly, Kay McKeever (pers. comm.) has never seen a chocolate brown Eastern Screech-Owl.

Be aware that brown morph screech-owls could be overlooked as gray birds given only a frontal (ventral) view. The rich brown coloration is most apparent on the upperparts (dorsum), the side least often viewed! When identifying a brown morph, keep in mind that recently molted gray morphs in fall in fresh plumage are clear gray above, but become tinged with brown on worn and faded birds by spring and summer (Kaufman 1990).

Summary

Three recognizable forms of the Eastern Screech-Owl occur in Ontario: gray, brown and red morphs. The gray morph is the most

common, comprising about 80 percent of the Ontario population; the red morph is less than 20 percent; and the brown morph is the rarest, comprising less than three percent. Typical (most) individuals of each morph are easily recognizable, but note that there is continuous variation between red and gray birds.

Acknowledgements

For advice and assistance in the preparation of this article, I thank Peter Burke, Bill Crins, Bruce Di Labio, Tim Dyson, Earl Godfrey, Michel Gosselin, Mary Ellen Hebb, Jean Iron, Alvaro Jaramillo, Ross James, Kay McKeever, Dwight Smith, Ron Tozer and Mike Turner. Peter Burke's illustration of the three morphs is a masterpiece that greatly enhances the text.

Literature cited

- American Ornithologists' Union. 1957.
 Check-list of North American Birds, 5th
 Edition. American Ornithologists' Union,
 Washington, D.C.
- Bent, A.C. 1938. Life Histories of North American Birds of Prey. Part 2. United States National Museum Bulletin 170. Washington, D.C.
- Bull, J. 1974. Birds of New York State. Doubleday/Natural History Press, Garden City, New York.
- DeBenedictis, P. 1977. Gleanings from the technical literature. Birding 9: 238-241.
- Godfrey, W.E. 1986. The Birds of Canada. Revised Edition. National Museum of Canada, Ottawa.
- Gullion, G. and W.H. Marshall. 1968.Survival of the Ruffed Grouse in a boreal forest. Living Bird 7: 117-167.
- Holt, D.W., M.W. Robertson and J.H. Ricks.
 Albino Eastern Screech-Owl, Otus asio.
 Canadian Field-Naturalist 109: 121-122.

- Hrubant, H.E. 1955. An analysis of the color phases of the Eastern Screech Owl, Otus asio, by the gene frequency method. American Naturalist 89: 223-230.
- James, R.D. 1991. Annotated Checklist of the Birds of Ontario. Second Edition. Life Sciences Miscellaneous Publications. Royal Ontario Museum, Toronto.
- Kaufman, K. 1990. A Field Guide to Advanced Birding. Houghton Mifflin Company, Boston.
- Marshall, J. T. 1967. Parallel variation in the screech owls of North and Middle America. Western Foundation of Vertebrate Zoology Monograph 1: 1-72.
- Martin, N.D. 1950. Color phase investigations on the Screech Owl in Ontario. Canadian Field-Naturalist 64: 208-211.
- Mosher, J.A. and C.J. Henny. 1976. Thermal adaptiveness of plumage colors in Screech Owls. Auk 93: 614-619.
- Owen, D.F. 1963. Polymorphism in the Screech Owl in eastern North America. Wilson Bulletin 75: 183-190.
- Penak, B.L. 1986. Status Report on the Eastern Screech Owl in Canada. Committee on the Status of Endangered Wildlife in Canada, Ottawa.
- Peterson, R.T. 1980. A Field Guide to Eastern Birds. Houghton Mifflin Company, Boston.
- Robbins, C.S., B. Bruun and H.S. Zim. 1983. Birds of North America. Golden Press, New York.
- Scott, S.L. (ed.) 1987. Field Guide to the Birds of North America. National Geographic Society, Washington, D.C.
- Smith, D.G. 1993. Eastern Screech Owls. Bird Watcher's Digest 16 (1): 32-39.
- VanCamp, L.F. and C.J. Henny. 1975.
 The Screech Owl: Its Life History and Population Ecology in Northern Ohio. North American Fauna, Number 71. United States Department of the Interior, Fish and Wildlife Service. 65 pages.
- Voous, K.H. 1988. Owls of the Northern Hemisphere. Collins, London.

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

Notes

Eastern Kingbird nesting in a tundra area

by Ross D. James and Mark K. Peck

The Eastern Kingbird (Tyrannus tyrannus) as a nesting bird, is most characteristically associated with various types of open habitats, with scattered trees and shrubs, often near or over water. It is thus most commonly found in southern agricultural areas across Canada. It becomes much rarer in more forested regions farther north, where it is associated with beaver ponds and meadows or cutover and cleared land. It can be expected to nest fairly regularly at scattered locations through the Boreal Forest region north to western central Mackenzie District, northern Saskatchewan. southern James Bay and the Gaspé Peninsula (Godfrey 1986). The usual northern extent of breeding, however, is well within the northern limits of the boreal forest. In Ontario prior to 1984, the northernmost nesting reports had come from Pickle Lake and Moosonee (Peck and James 1987).

For a species that is searching rather vast stretches of forest for small patches of open area suitable for nesting, and for a mate within this expanse, it is probably reasonable to think that it might wander rather widely. In Ontario, it has been seen north to the Hudson Bay coast (James 1991), as it has in Manitoba (Jehl and Smith 1970), and to the east and west it has been taken well north of that, at Port Burwell at the northern extreme of the Labrador Peninsula

(Todd 1963), and on the west side of Bathurst Inlet in the Northwest Territories (Snyder 1957).

In the summer of 1984, we spent about three weeks in the Cape Henrietta Maria region in the northeastern corner of Ontario. We worked out of abandoned radar Site 415, located about 35 km south of the base of the Cape itself, within Polar Bear Provincial Park. This is an area of tundra (Peck 1972) with shrubs and very thinly scattered trees that manage to reach heights of more than 2 m in sheltered spots below the banks of lake edges and small ridges. This tundra is the most southerly in the world, maintained by the cold waters of Hudson Bay that retain floating ice cover through most of the summer.

We had seen single Eastern Kingbirds on two occasions in the Sutton Ridges in the summer of 1981, and so were not unduly surprised to see the species on the tundra in 1984. What was remarkable, however, was that we encountered two birds together when we first saw them on 1 July, and that they remained there. Then on 6 July they were observed in the early stages of nest building.

The site was located beside a tundra pond just west of the old airstrip about 2.5 km north of Site 415 (UTM - 17 ML 092681, map 43J; 55° 44′ N, 82° 25′ W). The pond was about 100 m long and 20 m wide.

Along the western side in the lee of an embankment, between open tundra and the pond, was a dense strip of willow shrubs reaching about 3 m high. The nest was right at the lake edge, about 1.5 m high saddled between and on two main horizontal branches adjacent to the main upright but leaning stem of a willow. The nest was open to the lake on the east side only, being rather well surrounded and canopied by shrub growth, somewhat less exposed than is typical of many Eastern Kingbird nests.

The nest itself was fairly typical, with a rough exterior of tiny twigs, coarse plant and grass stems, a few bits of moss, horsetail stems and fine rootlets. Some of the grass used was cotton-grass (Eriophorum sp.) with the downy heads still attached. The rim of the nest was more compacted and neat, of the same but finer materials. The nest walls were perhaps somewhat thicker than usual. There was very little lining beyond that of the other materials, but a few finer grasses, some willow fluff and a couple of white feathers completed the structure. There were two eggs in the nest on 12 July, and four on 14 July, when it was collected (ROM 12901). A few days later the pair was apparently building a second nest, but we were unable to remain to witness the outcome.

This is apparently the first record of an Eastern Kingbird nesting in a tundra area. It was some 400 km north of any previously reported nest in Ontario. However, given that these birds wander north to Hudson Bay with some regularity, and certainly nest much farther north in western Canada, on occasion at least, they may be expected to be found nesting virtually anywhere in northern Ontario.

Acknowledgements

Field work was undertaken partly in support of the Ontario Breeding Bird Atlas Program. We would like to thank the Ontario Ministry of Natural Resources for providing transportation to the Cape Henrietta Maria region from Moosonee, and for the use of a radio while there. The Royal Ontario Museum provided transportation to Moosonee and equipment and supplies for the trip.

Literature cited

- Godfrey, W.E. 1986. The Birds of Canada. National Museums of Canada, Ottawa.
- James, R.D. 1991. Annotated Checklist of the Birds of Ontario. Life Sciences Miscellaneous Publications, Royal Ontario Museum, Toronto.
- Jehl, J.R. and B.A. Smith 1970. Birds of the Churchill Region, Manitoba. Special Publication Number 1, Manitoba Museum of Man and Nature, Winnipeg.
- Peck, G.K. 1972. Birds of Cape Henrietta Maria region, Ontario. Canadian Field-Naturalist 86: 333-349.
- Peck, G.K. and R.D. James 1987. Breeding
 Birds of Ontario: nidiology and distribution.
 Volume 2: Passerines. Life Sciences
 Miscellaneous Publication, Royal Ontario
 Museum, Toronto.
- Snyder, L.L. 1957. Arctic Birds of Canada. University of Toronto Press, Toronto.
- Todd, W.E.C. 1963. Birds of the Labrador Peninsula. University of Toronto Press, Toronto.

Ross D. James and Mark K. Peck, Department of Ornithology,
Royal Ontario Museum,
100 Queen's Park, Toronto, Ontario M5S 2C6.

Sharp-shinned Hawk and Common Crow Migration Along Georgian Bay

by Ken P. Morrison

On 14 October 1994, weather conditions were suitable for southeasterly bird migration along the Georgian Bay shoreline of Lake Huron near the mouth of the Naiscoot River. This river empties into the bay approximately 60 km northwest of Parry Sound and five km northwest of Bayfield Inlet, Ontario. The topography near the river mouth is generally flat with numerous small islands and bays extending inland from Georgian Bay. Vegetation consists of scattered lack Pine, White Pine, and White Birch growing on thin soils with a considerable amount of exposed bedrock. Winds between 40 and 50 kph from the northeast were evident at 0530 h, and continued throughout the day. This was a reversal from the 25 to 35 kph winds that blew from the south and southwest the previous day. Skies were sunny with light scattered clouds and the temperature was mild at 10° to 15° C by noon.

The first movement of Sharpshinned Hawks (Accipiter striatus) began around 0700 h and by the time it was over at 1100 h, 80 to 90 had passed by within one kilometre of the Georgian Bay shoreline. These hawks flew five to 30 m over the tree tops without circling. There was a mixture of juveniles and adults based on plumage, with both sexes represented based on relative size difference.

Mills (1981) reported fall migrations of Sharp-shinned Hawks

closer to the south end of Georgian Bay. Fourteen were observed on 13 October 1974 at Go Home Bay, approximately 10 km southwest of Mactier. An unknown number were seen (no date) moving south from the Limestone Islands, located about 20 km west of Mactier. The largest daily movement reported was on 17 September 1976 when a loose flock of 160 Sharp-shinned Hawks was seen at Beausoleil Island approximately 10 km north of Midland.

In 15 years of observing fall migrations a few kilometres inland from the mouth of the Naiscoot River, Kubisz (pers. comm.) reported a maximum of 15 Sharp-shinned Hawks seen over a two-hour period near Highway 529.

Nicholson (1981) recorded a single-day maximum of 350 Sharpshinned Hawks on 22 September 1977 at Great Duck Island, 15 km south of Manitoulin Island in Lake Huron. That fall, Sharp-shinned Hawk numbers dropped steadily during seven visits to the island, to only one bird on 1 November. On 14 September 1979, he saw 290 Sharpshinned Hawks at that location. Nicholson (pers. comm.) observed 230 Sharp-shinned Hawks at Mississagi Light at the western end of Manitoulin Island on 17 September 1994, and an additional 152 at the same location the next day. By early October 1994, movement of these hawks had dropped to between 30

and 50 per day at Mississagi Light.

These impressive fall movements observed by Nicholson were always with either a north or northwesterly wind. The large flights to Great Duck Island in 1977 left that island early in the morning heading southeast, but by mid-morning the birds would usually re-track to the north toward Manitoulin Island (Nicholson 1981). Those birds that continued moving southeast could eventually reach the tip of the Bruce Peninsula by following the southern shore of Manitoulin Island and then "islandhopping" to the peninsula. The Mississagi Light Sharp-shinned Hawks all moved north and northwest during the fall 1994 flights, directly into light headwinds (Nicholson pers. comm.). If these birds continued in a northwesterly direction, they might have moved along the northern shore of Cockburn, Drummond and St. Joseph Islands and eventually ended up near Sault Ste. Marie. A northern movement across the North Channel of Lake Huron would land them somewhere between Thessalon and Blind River where they could have flown either east or west along the shore of the mainland.

In addition to the raptors seen on 14 October 1994, there was a large movement of Common Crows (Corvus brachyrhynchos). Between 0700 h and 1500 h, approximately 3000 crows flew southeasterly within a one kilometre distance of the shoreline. The majority moved by in loose flocks of up to 50 birds, 20 to 50 m above the tree tops. There was no obvious interaction with these crows by any of the Sharp-shinned Hawks, three Northern Harriers (Circus cyaneus), two Merlins (Falco

columbarius) and one Rough-legged Hawk (Buteo lagopus) which were also observed, perhaps because most of the raptor flight was farther inland from that of the crows.

Mills (1981) reported a heavy migration on 12 October 1974 of an estimated 1000 crows off Pointe Au Baril. This sighting was approximately 10 km southeast along the shoreline from the mouth of the Naiscoot River, On 30 October 1977. 53 crows were seen at Go Home Bay (Mills 1981). Nicholson (1981) considered the crow to be a "common migrant" in the Manitoulin Island area. He stated that large flocks gathered there during October and moved easterly in a fluid and illdefined manner along the south shore of the island. Great Duck Island also had reports of sizable flocks of crows migrating during October.

Discussion

The Sharp-shinned Hawk has the most prolonged and continuous migration of any raptor (Flood and Bortolotti 1986). Based on banding records of more than 15,500 Sharpshinned Hawks from Hawk Cliff near Port Stanley, Ontario, juveniles migrated earlier than adults, and males generally later than females (Duncan 1982). Along the Lake Erie shoreline, 79 per cent of these hawks were juveniles, and average peak migration dates were from 19 to 25 September for juveniles, and from 30 September to 9 October for adults (Flood and Bortolotti 1986). Sharpshinned Hawks have been aged on the wing since 1988 by observers at Holiday Beach, Ontario. During September, juveniles averaged 80 to 90 per cent of the Sharp-shinned

Hawks aged, but dropped to 25 to 65 per cent in October (Chartier 1994).

My observations were limited in scope from a fixed vantage point over a four-hour period. Sex identification was restricted to a relatively small sample of the total flight when birds were flying together and adequately close. Similarly, aging was limited to birds passing close by under good light conditions. The Hawk Cliff results omitted these potential sources of error as those birds were aged and sexed when banded. Mueller et al. (1981) speculated that differences in migration behaviour between the sexes and between the age classes could be the result of aerodynamic differences caused by age - and sex-specific body size and feather length. Perhaps the abnormally mild Ontario weather conditions from mid-September to mid-October 1994 may have influenced Sharp-shinned Hawk migration patterns along the eastern shore of Georgian Bay (Heintzelman 1975).

Acknowledgements

This note was stimulated by Bill Crins and improved with his valuable suggestions. Personal observations by John Nicholson and Mark Kubisz were also appreciated.

Literature cited

- Chartier, A. 1994. Sharp-shinned Hawk declines: an inland perspective. Ontario Birds 12: 7-11.
- Duncan, B. W. 1982. Sharp-shinned Hawks banded at Hawk Cliff, Ontario, 1971-1981: analysis of the data. Ontario Bird Banding 15: 24-38.
- Flood, N.J. and G.A. Bortolotti. 1986. Status Report on the Sharp-shinned Hawk in Canada, Accipiter striatus. Committee on the Status of Endangered Wildlife in Canada, Ottawa.
- Heintzelman, D.C. 1975. Autumn Hawk Flights. Rutgers University Press, Rutgers, New Jersey.
- Kubisz, M. 1995. Personal Communication. 31 January 1995.
- Mills, A. 1981. A Cottager's Guide to the Birds of Muskoka and Parry Sound. Published by the author.
- Mueller, H.C., D.D. Berger and G. Allez. 1981. Age and sex differences in wing loading and other aerodynamic characteristics of Sharpshinned Hawks. Wilson Bulletin 93: 491-499.
- Nicholson, J.C. 1981. The Birds of Manitoulin Island and Adjacent Islands Within Manitoulin District. Second Edition. Published by the author.
- Nicholson, J.C. 1995. Personal Communication. 31 January 1995.

Ken P. Morrison, 847 Riverlea Subdivision, R.R. 2, Huntsville, Ontario POA 1KO.

Book Reviews

A Bird-Finding Guide to Ontario. Revised Edition, 1995. By Clive E. Goodwin. University of Toronto Press, Toronto, Ontario. Softcover, xii + 477 pages, 41 maps, bar charts. \$24.95 Canadian.

This recent release is a much needed "completely revised and updated edition" to the very popular first edition of this book published by the same author in 1982. In a province as heavily populated and developed as Ontario, at least in the south, the status of birding areas may change fairly often, necessitating frequent updates to a bird-finding guide. I am sure that many other Ontario birders have used Goodwin's first edition as much as I have, especially as a beginning birder, to learn about interesting birding sites wherever I have travelled in Ontario. I always felt that there were a few problems with that guide that I wished could be improved upon, and so it was with some interest that I awaited the release of this revision. For my review, I have concentrated on the chapters dealing with the areas that I am most familiar with, primarily those in the Golden Horseshoe area and southwestern Ontario, and most of my comments which follow use examples from these areas.

This book is organized into 20 chapters dealing with: an introduction on how to use the book; an overview of Ontario and its avifauna; 16 chapters dealing with different regions of the province, which is the meat of this book; sundry information for visitors to Ontario; a systematic species list; an appendix of scientific names of plants, mammals and reptiles

mentioned in the text; and an index of bird species and place names referred to in the text.

The biggest change from the first edition is the size - this second edition has almost twice as many pages; therefore, a great deal more information has been added. The biggest improvement with this version is the organization of the areas of the province into more numerous smaller chapters. The first edition had only six areas, using boundaries which were confusing. Birding sites in these areas were listed in alphabetical order using the name of the nearest community. This had made it very hard to locate birding sites nearby in a larger vicinity for a birding trip to an area. The 16 area chapters used in this book are divided into groups of 1-5 adjacent counties/regional municipalities/districts. Within each chapter, birding sites are organized around major cities or towns, natural features or major highway routes. Sewage lagoons not already discussed are grouped together at the end of the chapter. The treatment of northern Ontario was rather weak in the first edition, and this has been beefed up with almost twice as many pages devoted to it (excluding the Rainy River area which has a separate chapter in both editions). Another big improvement over the first edition is the increase in the number of maps (41 vs. 12). A map of southern

Ontario showing all the counties/regional municipalities/districts was a necessary addition.

Despite the improvements over the first edition listed above, I have many problems with this book. First of all, the quality of the maps is very poor. With some of them it is difficult to distinguish roads from waterbodies and municipal borders, and not all of the major highways or even larger communities in any given area are shown.

The thickness of the book will be a concern for some birders, particularly visitors wishing to travel light. Surely, a concern of any birder travelling to a new distant area is that only a limited number of books can usually be carried, and the size and weight of this one may be a factor against it being useful in the field. Also, the paper and cover stock used for this book are not very durable, and it may not stand up well to the rigors of field travel. Many of the newer bird-finding guides (including the ABA Lane Series) use a coil ring binding which is very handy for allowing the book to be held open at the pages desired while on the go. Unfortunately, the standard glued binding was used here, but the thickness of the book may not have allowed for a coiled ring binding.

A book of this nature can be outof-date very quickly, and this one, unfortunately, already has a lot of out-of-date information. I understand that there were some delays in seeing this book to print; however, no updates appear to have been made during the lag period. Information provided on entrance fees, schedules or accessibility in some cases have changed over the past year, making some of the information provided here incorrect. Examples include the Pelee Island Ferry details, Point Pelee National Park fees, and the list of bird hotline phone numbers (e.g. over the past year the provincial/Long Point line has been cancelled, and the numbers have changed for the Durham and Ottawa lines).

The first edition had a number of mistakes, which I had hoped would have been corrected in this version. Of the ones I could readily remember, only one had been corrected (directions to Aylmer Wildlife Management Area). Some examples of the ones which were repeated again include the following: the Bruce Peninsula to Manitoulin Island ferry is incorrectly referred to as the "Tobermory to Little Current" ferry, which actually runs between Tobermory and South Baymouth; directions to Rankin Resource Management Unit on the Bruce Peninsula incorrectly state to take Albemarle Sideroad 25 east from Hwy. 6 to Isaac Lake, but Isaac Lake is in fact west of Hwy. 6; for Puslinch Lake in Wellington County, it incorrectly states that "Pinebush Road runs down the west of the lake": however, Townline Rd. runs down the west side of the lake from an exit off Hwy. 401; Woodland Cemetery in Hamilton is incorrectly called "Woodlawn Cemetery", an irritating error perpetuated by some people living east ot the Credit River - let's set the record straight here once and for all; it's Woodland Cemetery!

Despite the delays, the book appears to have been rushed to print, evidenced by the rather poor editing,

resulting in a large number of typographical errors and numerous mistakes in the information. Some examples of erroneous information (not in the first edition) include: directions to the Wilson Tract area in Haldimand-Norfolk incorrectly say to continue "east" 2.1 km on Regional Rd. 42 from Hahn Marsh to Regional Rd. 23 - this should be "west"; farther on in this paragraph, it incorrectly refers to Concession IV. which runs through the Wilson Tract area, as "Concession VI"; in the Table of Contents, the Index is listed as starting on page 453 when it actually starts on page 451; in my copy, chapter 18 dealing with Rainv River ends abruptly on page 343 in mid-sentence and page 344 is blank!

The treatment of the area chapters is quite variable. The author acknowledges input from a number of local birders for specific chapters or areas, or cites local bird-finding guides from which information was drawn. These chapters are typically the most thorough and well done. Other chapters would have benefited from the author seeking such contributions from other local people who know the areas well. Chapters which I think suffer from this neglect include those dealing with Hamilton, Essex/Kent, Niagara, Waterloo Region and sections of Haldimand-Norfolk, in particular. The chapter given the most thorough treatment is that dealing with the Greater Toronto area, even though the author refers the reader to his other publication dealing specifically with this area in much greater detail. I would like to have seen the same level of detail offered to other areas as well. However, a more detailed guide for a province the size of Ontario would

have resulted in the size of this book being enormous. Perhaps improvements in type size, exclusion of the systematic list (see below), and more economical treatment of the overview descriptions could have been employed to produce a more compact volume with more thorough information on good birding sites.

Despite the apparent increase in information on birding sites in this version, quite a few locations which were listed in the first edition do not appear in this book, including a surprising number of excellent sites, such as: Kingsville Sewage Lagoons; Selkirk Provincial Park; Woolwich (a.k.a. Floradale) Reservoir near Elmira; Short Hills Provincial Park in Niagara Region; Grimsby (a.k.a. Winona) Sewage Lagoons; and the town of Atikokan, which is not even shown on the map, yet it has been the site of many outstanding rarities, including several provincial firsts.

In addition to those mentioned above, there are quite a few good birding sites which are not mentioned in either edition, including: the Big "O" Woods at Comber (excellent for passerine migration in spring, even when Pelee farther south can seem to be quiet); Hullet Provincial Wildlife Area, a 2200 ha wetland area near Clinton in Huron County; the Hagersville/Fisherville/Cayuga area of Haldimand-Norfolk (excellent for winter birding, particularly raptors); the Grand River trail south from Cambridge to Paris (excellent access to the Grand River forests); Shoreacres Park, Burlington; Bronte/Burloak Woods, Oakville; and the Lake Ontario shoreline east of Hamilton to Grimsby, even though it can be just as productive as the lakeshore northeast from Burlington,

for which detailed information is given.

Dumps are rarely mentioned, despite the fact that many are excellent for gulls in particular, or other winter birds. Some examples of dumps not mentioned that are checked with some regularity and have produced interesting birds include those at Nepean, Thunder Bay, Niagara Falls, Brantford, Cambridge, Guelph, and Tobermory.

One of the major problems with the first edition, which has not been remedied in this version, is that while detailed directions to many sites are given, in too many cases little information on the interesting birds to look for at those sites is provided. Heavy reliance is given to the overview section of the province's birdlife, which lists typical species that occur in major habitat types, and attempts to highlight regional and seasonal differences. As a result, the birding potential of many excellent sites is not well described for my liking. Some notable examples follow. The Welland Canal piers at Port Weller are simply rated as "good for waterbirds", which hardly indicates the incredible vantage one gets for viewing Lake Ontario from the end of the piers, which can be very exciting during fall and early winter, and does not consider its function as a migrant passerine trap particularly during spring. Woodland Cemetery at Hamilton is written off as merely providing "good views of the west end of Hamilton Bay". This site is known as one of the best places around to view diurnal migration in both spring and fall of everything from waterfowl, loons (regular flights of Red-throateds), gulls, and, raptors

to passerines. The Lake Erie shoreline between Fort Erie and Port Dover can provide excellent shorebirding during the fall when lake levels are low, and incredible rarities have turned up over the years. This potential is barely alluded to under brief references for Rock Point Provincial Park and Morgan's Point. There are many other access points that are not mentioned.

When visiting any public birding site, it is useful to know of any specific information sources indicating what birds have recently occurred, such as sightings boards or log books maintained by nature centres, and a few are mentioned throughout this guide. However, a few important ones that were missed include the sightings board at the Long Point Bird Observatory's Old Cut Visitor's Centre, and the bird sightings book at the Crossroads Restaurant at Comber.

Directions to some sites are not very precise, or known access points are not mentioned. This may make it hard for visiting or beginning birders to find such sites. From the directions given, I doubt that one would find Schaefer's Woods in Waterloo, or Chippewa Landfill in Thunder Bay. Access from the west side of the Queenston Hydro Reservoir is not mentioned, nor is the access road to the bottom of the Sir Adam Beck Generating Station on the Niagara River.

Some statements or descriptions are misleading or incorrect. To say that Lee Brown's waterfowl area near Long Point is "no longer very productive" is ridiculous, as Eurasian Wigeon and Greater White-fronted Geese have turned up there almost

regularly in spring amongst the numerous waterfowl staging in the area. Regarding access to the Royal Botanical Gardens properties at Hamilton, the author states that "the present situation is rather ambiguous". It certainly isn't, and the information could easily have been found by contacting the RBG. Dundas Marsh is stated to have "a small colony of Black-crowned Night-Herons' implying that they nest. This species certainly feeds and roosts there, but I am not aware of any nesting ever occurring at Dundas Marsh. As for Hamilton, Goodwin finds it "easy to get lost here". Maybe that explains why this section is treated rather poorly.

Reference to specific occurrences of rarities is inconsistent throughout the text. Few are mentioned, although the author says in the introduction that more have been used than in the first edition, but the ones selected seem haphazard. I would have preferred more mention of specific rarities, especially for known migrant traps, since this would help to illustrate the birding potential of these areas, and might entice a visit to an otherwise dull-sounding location.

Over 90 pages of this book are devoted to the systematic list. This consists of an annotation for each species which has occurred in Ontario, interspersed with small bar charts for regularly occurring species (but also some rarities) showing status over the year. This system replaces the table from the first edition that listed the seasonal status for both southern and northern Ontario for each regular species, followed by a list of rarities that have

occurred. I much prefer the simpler approach used in the first edition to that used here, which I find to be of limited value to the birder. The author claims that the systematic list is 'intended as a guide for the birder, not as a definitive statement of status''. Fine, then I would expect more specific direction provided on how, when and where to locate and encounter birds, in particular species of interest to the visiting birder or hard to find species for Ontario birders.

The status designations used include eight categories: abundant, common, fairly common, uncommon, rare but regular in specific areas, rare, occasional, and exceptional, I find the differences between these categories difficult to understand as they are described. For example, "common" is defined as "usually widespread and normally easy to find on most field trips, but more localized and/or in smaller numbers than the preceeding (abundant)"; whereas "fairly common" is defined as "seen regularly in suitable areas, but localized or usually in small numbers, or moving through quickly". Sound confusing? The status designations are not applied consistently, in particular to rarities. Most species that I would consider to be vagrants are listed under the annotations as "exceptional", which is defined as "has occurred, but not to be expected". However, for species with only one record for the province, exceptional is not (usually) used. Instead, the annotation will say "one record" followed by the date (not including the year). Why bother? The location of the record is also not included, so why not just also list

these as "exceptional" as well. Just to be inconsistent, for some species with more than one record, it states "two records", followed by some dates (in some case with the year). What a mess! The species listed also include a few that are not on the provincial checklist maintained by the Ontario Bird Records Committee, such as Greater Flamingo, Barnacle Goose, Prairie Falcon, and Brewer's Sparrow, and are followed by some commentary about origin or validity. If this list is not meant to be a definitive statement of status, why mention these at all?

Getting back to the usefulness of this systematic list to the birder, let's use one species as an example. Louisiana Waterthrush would likely be a desirable species for visiting birders from the rest of Canada and to newer Ontario birders. The systematic list describes it as a rare and very localized summer resident, primarily in the Long Point, Rideau Lakes and Niagara Escarpment areas, but no specific locations are given here. Using the index, the references to this species in the text are all very general, with only three specific locations mentioned, but no detailed directions are provided to locate this species at any of the sites. This is

typical of this guide, and many birders will find this lack of detailed information frustrating.

There are essentially two groups of users of a bird-finding guide: visiting birders and resident birders. When considering buying this book one should decide how useful it is to them. For the visiting birder, this is the only book which deals with all of Ontario, therefore it will be a desired reference. However, more specific bird-finding information should be sought by the visitor for any given area, and a number of good local site guides are available, as well as many local site articles in publications such as Ontario Birds or in publications of local naturalists clubs. For Ontario birders, the beginning birder will find this book useful to help identify where to go birding in any given area. With more experience, you will rely less and less on such a source. For the experienced Ontario birder who has travelled the province to some degree, this book has very little to offer over the first edition, other than an improved organizational format to the site descriptions. The many deficiencies of this book are quite irritating, and the money can probably be better spent on other bird books.

Robert Z. Dobos, 178 Cedarbrae Ave, Waterloo, Ontario N2L 4S3.

LAST OF THE CURLEWS

The bestselling classic by OFO member Fred Bodsworth has been reissued by Counterpoint Books of Washington, D.C. This book is a "must read" for birders and all who care about endangered species. Ask for it at your favourite bookstore using ISBN 1-887178-00-7, 192 pages including illustrations, approximately \$20.00 Canadian.

A Birder's Guide to the Sault Ste. Marie Border Area. 1995. By Edward Czerwinski. The Sault Naturalists of Ontario and Michigan, P.O. Box 21035, 292 Northern Ave. East, Sault Ste. Marie, Ontario P6B 6H3. Softcover, 29 pp., \$6.75 Canadian.

This new bird-finding guide provides detailed information on where and when to find the characteristic birds and the specialties of the Sault Ste. Marie area. Ten areas on the Canadian side of the border, and six areas on the American side, are covered, with excellent maps, explicit directions, and comments on the species to be expected at various times of the year. In the area descriptions, emphasis is placed on species that would attract local and visiting birders, including Harlequin Duck, Bald Eagle, Gyrfalcon, Sharptailed Grouse, Sandhill Crane, Northern Hawk Owl, Great Gray Owl, and Connecticut Warbler. The author also comments on areas which he feels are under-birded, but that are potentially promising.

It is clear after reading this guide that the Sault Ste. Marie area is excellent for wintering raptors and for boreal species. However, during the breeding season, the area provides opportunities to see both northern and southern species in close proximity. A total of 288 species has been recorded in the area. Although the author characterizes the avifauna as predominantly boreal, the presence of extensive deciduous forests in the area leads to the occurrence of some southern species such as Red-shouldered Hawk (St. Joseph Island, Ontario and the Whitefish Point area, Michigan) and Red-bellied Woodpecker (St. Joseph Island and Gros Cap, Ontario), among others. Rarities are also mentioned in appropriate site

descriptions. Some of these include Yellow-billed Loon (Corbeil Point, Ontario), Lark Bunting (Sault Waterfront, Ontario), and Blackthroated Sparrow (Whitefish Point, Michigan).

The middle page of this guide contains a key map that guides the user to the more detailed site descriptions and maps. Logically, this map should have been at the beginning of the guide, before the site descriptions. However, once the user knows where it is, it's easy to use. The detailed maps do not have scales, but the text provides exact distances. road names, and other directions. There is only one area mentioned in the text that lacks a map. This is within Area 1 (St. Mary's River Rapids and the Canadian Sault locks), where River Road follows the river. In one other case (Area 6: Desbarats Sewage Lagoon and Gibboney Lake), the name of a road (Lake Huron Rd.) has been omitted from the map.

Other aspects of the production of this guide are quite good. There are a few typographical errors (Great Gray Owl is spelled as "Grey" and "Gray" in different places in the text). In one place, the text is split by an illustration, which doesn't work too well as far as lay-out is concerned. At the end of the guide, some species of special interest are cross-referenced with sites of occurrence. However, there are a few inconsistencies, such as a listing of Red-shouldered Hawk for Area 11 (Whitefish Point, Whitefish Harbour,

and Vermilion) which is not mentioned in the text. However, these are minor problems that do not detract from the usefulness of this guide.

Maps, directions to birding sites, and discussions of expected species are the keys to a good bird-finding guide. This guide succeeds on all counts. I have visited several of the sites in this guide (mostly before this guide was available), and I can attest to the fact that the Sault Ste. Marie area has much to offer to the visiting birder (and to naturalists in general). Had this guide been available then, it would have enhanced my appreciation of some of the sites, as well. I think that local birders will also find lots of useful information in this guide. It is well worth having.

Bill Crins, R.R. 1, South Waseosa Rd., Huntsville, Ontario POA 1KO.

A Photographic Guide to North American Raptors. 1995. By Brian K. Wheeler and William S. Clark. Academic Press, San Diego. Hardcover, 223 pages including 375 colour photographs. \$44.95 Canadian.

Hawkwatching has attracted a huge number of followers in recent years. This has resulted in two quite different specialty hawk identification guides in North America. In 1987, the Peterson series published Hawks (the best guide for diagnostic field marks) also by Clark and Wheeler. Then in 1988, Pete Dunne et al. published Hawks in Flight, the best guide for jizz identification. Most hawk identifications are usually a combination of the field marks and jizz. Just go to Cranberry Marsh, High Park, Beamer, Hawk Cliff or Holiday Beach to watch the experts identify hawks and you will be hooked. Now we have a colour photographic guide that complements the other two guides; it is absolutely the ultimate visual guide to all the vultures, kites, accipiters, buteos, eagles and falcons of North America.

The colour photographs and text emphasize the identification, plumages, ages, sexes, subspecies (races) and colour morphs (phases). The trend is to record more of this vital information at major hawk watches. Remember that this is a photographic guide so the text is concise with little new information not already found in the aforementioned guides. The text is organized in a consistent way for each species and is easy to follow and understand.

Starting at the beginning and working through the book, I comment on its many strengths and a few weaknesses. On page xiv the authors say they have adopted the Humphrey and Parkes plumage terminology, but use juvenile and adult where the equivalent H & P terms for hawks are juvenal and definitive basic. The term subadult is used in the guide and it is not a Humphrey and Parkes term. Basic is the only Humphrey and Parkes term in the guide and its use is restricted to describe plumages between

juvenile and adult of eagles, Swainson's Hawk and Crested Caracara. So why claim to use Humphrey and Parkes terminology when it is not used for most species?

The glossary defines specialized terms used in the book. Two terms not used in the guide are immature and colour phase. They are replaced by juvenile and colour morph, respectively, changes that are gaining acceptance because these terms are more precise. Interestingly, subspecies is not defined in the glossary. The definition of morph could have been expanded to say that morphs are not correlated with age, sex or subspecies. The concepts of subspecies and morph should have been fully defined and differentiated because they are used extensively throughout the book. I agree with the authors that Krider's Red-tailed Hawk (page 83) is a colour morph and not a subspecies as currently recognized, but they cite no reasons or authorities. For a discussion of Krider's, see Ontario Birds 11: 23-29. The definition of plumage on page xvi is missing and has been replaced by the definition for bib, a glitch of our word processing era!

Anatomical and descriptive terms used to identify hawks are clearly shown using arrows on photographs of hawks. Note that the arrows pointing to the axillaries and breast are reversed in Figure 1. Not all names of species follow the official American Ornithologists' Union Check-list. For example, with Peregrine (Falcon), and (American) Swallow-tailed Kite, the parts in brackets are omitted.

There is a layout problem that should have been corrected. The text

for at least 18 species starts on the right page with bold photographs of the previous species (often a very similar one) on the left page. For example, the text for Swainson's Hawk is on page 63, yet on the opposite page there are distracting photographs of Short-tailed Hawks. This awkward arrangement is not found in other field guides.

Detailed captions containing extremely valuable information accompany each of the 375 photographs and describe identifying marks, plumage and age, sex, morph, and subspecies. However, the photograph of the Northern Goshawk at the top of page 40 is a subadult, not an adult, because it clearly shows retained juvenile tail feathers and secondaries. The bird at the top left of page 140 labelled a juvenile male Taiga Merlin is an adult male. The Black Merlin on page 140 is probably a melanistic Taiga Merlin if photographed in Texas, or a location error. For a discussion of Black Merlins, see the August 1994 issue of Ontario Birds 12: 74-80. Captions on pages 153 and 195 say the juvenile Peale's Peregrine Falcon was photographed in New York State. I wonder if this is an error or a released bird or a very dark anatum, because Peale's is a West Coast subspecies.

The text on page 136 says that Merlins do not hover when in fact I have occasionally seen Taiga Merlins hovering on the breeding grounds. The behaviour of many species is often quite different on the nesting grounds than on migration. Page 82 says that typical Eastern Red-tailed Hawks have white throats. However, many northern Red-tails in the East

of the proposed subspecies abieticola have dark throats like Western Redtails. This form breeds across Canada from Nova Scotia to Alberta and is intermediate between typical Eastern and Western Red-tails. Heavily pigmented individuals of abieticola are often called Western Red-tailed Hawks in the East. See discussion of this form under Eastern Red-tailed Hawk in Ontario Birds 11: 23-29.

Does the Swainson's Hawk, unlike other North American buteos, have a distinct Basic I plumage as stated on page 63? The existence of a first basic plumage in this species is disputed by Palmer (1988) in the Handbook of North American Birds. Birds labelled as Basic I on pages 66, 71 and 190 may represent juveniles undergoing a delayed or protracted molt to adult plumage. Some molt cycles are individually variable.

The last quarter of the book consists of two sections. The first section (14 pages) treats nine vagrants like the White-tailed Eagle, but also includes the Hawaiian Hawk which is unique to the islands but never a vagrant to the mainland. The second section (28 pages) effectively treats 14 "Raptor Identification Problems" like Cooper's versus Sharp-shinned Hawk, and Golden versus non-adult Bald Eagle, reusing selected photographs from the main species' accounts with different captions.

If you are a hawkwatcher you probably already own this guide. Once again, Brian Wheeler and Bill Clark have collaborated to produce their second superb hawk guide, the finest pictorial guide ever on diurnal raptors.

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

PUBLICATION NOTICE

The Canadian Wildlife Federation (CWF), a nonprofit organization not to be confused with the federal Canadian Wildlife Service (CWS) agency, has recently published eight national recovery plans for eight species of birds: Whooping Crane, Harlequin Duck, Ferruginous Hawk, Roseate Tern, Marbled Murrelet, Greater Prairie-Chicken, Loggerhead Shrike and Baird's Sparrow.

These reports contain invaluable information such as range, breeding details and causes of decline, as well as government policy and recovery plans to save each species from extirpation in Canada. Artwork in each Recovery Plan is by Christine Kerrigan, OFO member and art consultant to *Ontario Birds*.

Recovery Plans are available free of charge by writing to the Canadian Wildlife Federation, 2740 Queensview Drive, Ottawa, Ontario K2B 1A2.

Photo Quiz

by Bob Curry



The bird overhead is certainly a diurnal raptor as can be determined by the long wings and tail, and the hooked bill. Moreover, the long, comparatively slender wings, and the extremely long narrow tail eliminate most potential hawk species.

While this is clearly not a buteo shape, the underwing pattern of light wing linings and darker remiges is reminiscent of Swainson's Hawk. Finer differences in plumage details aside, Swainson's is the slimmest of our buteos but it just does not have such a long narrow tail, and the bend at the wrist is not nearly so exaggerated as on this bird.

Immature Mississippi Kite is somewhat like this in plumage but the wings are slimmer throughout and the tail, while almost but definitely not as proportionately long as this, is squared at the corners.

The combination of shape and flight behaviour even in a migrating Northern Harrier, which this bird would appear to be undertaking, render it virtually unmistakable. Migratory flight is most often a series of languid, effortless flaps followed by a long glide. Of course, the camera has frozen our bird in the middle of a glide so we are forced to examine plumage more carefully. The extent of dark mottling, spotting and barring, and the lack of "dipped-inink" primary tips, indicates that this is not the ghostly beautiful adult male harrier. Juvenile Northern Harriers have a very distinctive and attractive

plumage seen from about mid July through the fall. The breast and belly are a lovely clear orange, and the greater coverts and secondaries are blackish. It's a little difficult to determine the extent with certainty from the photo but the bird has some streaking on the throat, and blotches or streaks on the sides of the breast. Especially on the better illuminated

left underwing, the secondaries are barred rather than being blackish. All these features point to this as an adult female Northern Harrier.

Both for the intellectual challenge and to gather more information about migration and populations it is important to identify and record the ages and sexes of birds.

Bob Curry, 92 Hostein Drive, Ancaster, Ontario L9G 2S7.

PUBLICATION NOTICE

A Review of the Environmental Impacts of Lead Shotshell Ammunition and Lead Fishing Weights in Canada. 1995. By A.M. Scheuhammer and S.L. Norris. Occasional Paper Number 88. Canadian Wildlife Service. Environment Canada, Ottawa, Ontario K1A 0H3. No charge.

Ontario birders may find this report, which reviews the available information, from Canada and elsewhere, on the use, environmental fate, and toxicity of spent lead shot and lost lead fishing weights and discusses options for managing the negative impacts of these products, of particular interest. It notes that lead shot ingestion is probably the primary source of elevated lead exposure and poisoning in Canadian waterfowl and most other bird species. For some species (e.g. Common Loons), lead sinker ingestion is a more frequent cause of lead poisoning. Because the United States has banned the use of lead shot for waterfowl hunting nationwide since 1991, Canada is now responsible for an increasingly large proportion of the lead poisoning problem in North America and may be the major continental source of migrating waterfowl that carry embedded lead shot. Lead shot ingestion also occurs in a wide variety of non-waterfowl species, including upland game birds, shorebirds, raptors, and scavengers. Where it has been explicitly studied in Canada and the United States, lead poisoning mortality of Bald and Golden eagles from eating prey animals with lead shot embedded in their tissues or the gizzards of birds with ingested lead shot accounts for an estimated 10-15% of the post-fledging mortality in these raptorial species.

In Canada, several provinces and territories are committed to phasing out the use of lead shot for waterfowl hunting throughout their jurisdictions, and there will be a national ban on the use of lead shot for all migratory game bird hunting beginning in 1997. Sport anglers have been increasingly encouraged by federal and provincial/territorial environment departments and by several nongovernmental organizations to voluntarily use nontoxic fishing sinkers.