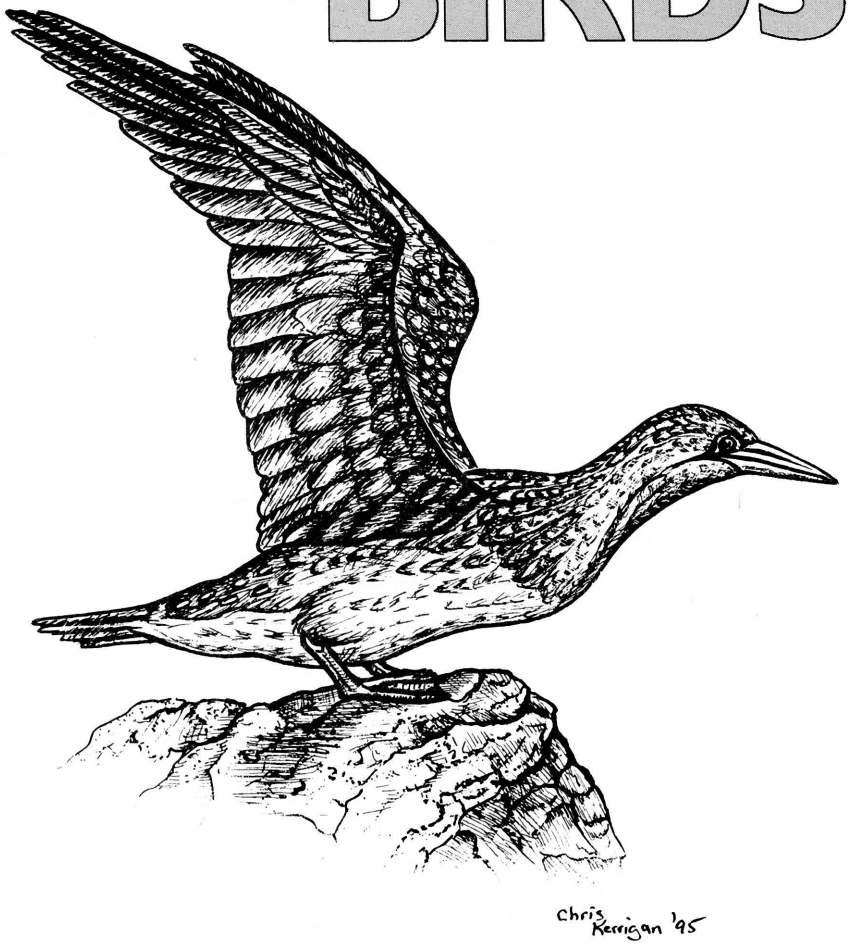
ONTARIO BIRDS



The Journal of the Ontario Field Ornithologists

Volume 13 Number 1 April 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: Phill Holder, 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.

Ontario Birds
Volume 13 Number 1 April 1995 Pages 1-44

Table of Contents

Cover Illustration: Juvenile Northern Gannet
by *Christine Kerrigan*

ISSN 0822-3890

Articles

Changes in the Status of the Summer Birds of the Western Rainy River District

by
David H. Elder

Introduction

In 1929, L.L. Snyder (Snyder 1938), in association with the Royal Ontario Museum, carried out a faunal investigation of the western part of the Rainy River District. During the summer of 1929, from 31 May to 10 August, camps were established at Emo, Off Lake, the mouth of the La Vallee Creek on the Rainy River, and near the town of Rainy River. From these camps, observations and collections of birds and animals were made.

Sixty-five years have passed since Snyder carried out his work and current information reflects a significant change in the avifauna of the area. During this period, land use activities have changed the character of the landscape. There has been increased land clearing for agricultural purposes and a system of drainage ditches has changed the water table throughout large areas. Formerly wet meadows and coniferous peatlands have dried out and have been converted to agricultural use. On the other hand, abandoned farmlands have grown up into willow thickets and aspen woods, creating habitat used by a wide number of bird species.

In addition, the area has come to the attention of birders and during the past 20 years in particular, increased observation has contributed to a better understanding of the bird species currently present in the area. (see James 1991).

The following annotated lists reflect the observed changes in the birds of the Rainy River area. The first list details species not recorded by Snyder. It does not include those species that can be considered accidental, having been recorded only as vagrants one or two times. The second list details species noted by Snyder that appear to have changed in population or distributional status.

Species Present Now But Not Recorded by Snyder

American White Pelican - *Pelecanus erythrorhynchos*
A common summer resident of the Lake of the Woods. Now seen regularly east to Rainy Lake. The population is estimated at about 15,000 birds (Austen et al. 1994). Often seen inland circling high overhead in varying-sized flocks.

Canada Goose - *Branta canadensis*
A common summer resident throughout the area. The species is present due to local introductions and emigration from other areas.

Northern Shoveler - *Anas clypeata*
A scarce summer resident, most frequently seen on the Rainy River sewage lagoons. Usually moulting males are seen but females with downy young have been observed.

Ruddy Duck - *Oxyura jamaicensis*
An occasional breeder on the Rainy River sewage lagoons. Not recorded every year.

Merlin - *Falco columbarius*
An uncommon summer resident. Pairs tend to return to the same general locations for breeding.

Yellow Rail - *Coturnicops noveboracensis*
An uncommon summer resident of grassy marshes and wet meadows. The species appears to be declining as habitat is lost as the wet meadows are dried out by ditching for agricultural use.

Sandhill Crane - *Grus canadensis*
One of the characteristic summer birds of the area, commonly seen and heard. Breeding has been confirmed by the observation of downy young with adults.

Upland Sandpiper - *Bartramia longicauda*
An uncommon summer resident, tending to use rough, grazed pastures with exposed rocks and an occasional willow shrub. In June of 1994, four pairs were noted in a heavily grazed pasture.

Marbled Godwit - *Limosa fedoa*
An uncommon summer resident. Breeding was confirmed in June, 1994 when a pair of adults was observed with four downy young on Worthington Road #3 (Elder 1994). Fifteen adults were noted on the Rainy River sewage lagoons also in June of 1994, and appeared to be flying in from the surrounding fields to feed in the lagoons.

Franklin's Gull - *Larus pipixcan*
An irregular summer visitor to the area. May be present in the thousands one year and totally absent the next. Weather conditions on the prairies to the west seem to have an influence on the numbers that visit the Rainy River area. When the prairies have a hot and dry spring and summer, the species is likely to be seen eastward in greater numbers.

Ring-billed Gull - *Larus delawarensis*
A common breeding summer resident of the area, often seen in fields being ploughed. Nests in large numbers on rocky islands in the Lake of the Woods and has increased significantly in the past 20 years.

Long-eared Owl - *Asio otus*
A rare summer resident that is usually seen just at dusk flying the edges of fields and brushy meadows. The one breeding record for the area was a pair that used an abandoned Black-billed Magpie (*Pica pica*) nest in a bushy willow, 27 May 1983.

Western Kingbird - *Tyrannus verticalis*
A rare and sporadic breeding summer resident. Four nestings (three consecutively at the same site) have been recorded and individual birds are seen in the area every year.

Black-billed Magpie - *Pica pica*
A fairly common year-round resident. Its large, barrel-shaped nests are often placed in thick willow bushes and abandoned nests are used by Long-eared Owls and Merlins. Magpie pairs tend to be faithful to a particular breeding location.

Common Raven - *Corvus corax*
Strangely enough, Snyder did not record this species, which today is a common permanent resident of the area.

Marsh Wren - *Cistothorus palustris*
A scarce summer resident of the cattail and *Phragmites* marshes.

Wood Thrush - *Hylocichla mustelina*
A rare summer resident. Found in the aspen and oak woods near the Lake of the Woods.

Yellow-throated Vireo - *Vireo flavifrons*
An uncommon summer resident of the aspen and oak forests. Most frequently found near the Lake of the Woods. Its burry song is usually the first indication of its presence.

Connecticut Warbler - *Oporornis agilis*
An uncommon summer resident found in stands of second growth trembling aspen and balsam poplar. The habitat requirement for this species seems to be quite specific and is limited to aspen and poplar woods that are fairly open with a low ground cover of grasses and a few scattered dogwood, willow and alder shrubs (Elder 1991).

Le Conte's Sparrow - *Ammodramus leconteii*
A common summer resident frequenting grassy wet meadows and hay fields.

Yellow-headed Blackbird - *Xanthocephalus xanthocephalus*
A common breeding summer resident of the cattail and *Phragmites* stands along the Rainy River and the shores of the Lake of the Woods. A large colony co-exists with Red-winged Blackbirds (*Agelaius phoeniceus*) on Windy Point.

Brewer's Blackbird - *Euphagus cyanocephalus*
The common blackbird of the area. Found throughout the area, seemingly in every field.

Species Recorded By Snyder That Appear To Have Changed In Status

Double-crested Cormorant - *Phalacrocorax auritus*
Apparently this species was present on the Lake of the Woods at the time of Snyder's visit but was uncommon. Today it is a very common summer resident, seen mainly on the Lake of the Woods and the Rainy River.

Turkey Vulture - *Cathartes aura*
Rare at the time of Snyder's study, it is an uncommon summer resident of the area.

Bald Eagle - *Haliaeetus leucocephalus*
Snyder did not record this species although local residents indicated eagles were in the area. Today it is a common spring and fall migrant through the area and an uncommon summer resident with several active nests along the Lake of the Woods shoreline.

Piping Plover - *Charadrius melodus*
Seen by Snyder on Sable Island. It still occurs in very small numbers annually on Sable Island and Windy Point. These birds may represent the last breeding population in Ontario and their presence can be described as tenuous at best.

Mourning Dove - *Zenaida macroura*
This species was apparently just moving into the area at the time of Snyder's study and he did not see it, relying on observations of local residents to include it in his list. Today it is a common summer resident throughout the area.

Eastern Screech Owl - *Otus asio*
Snyder includes this species in his list on the reports of small, eared owls submitted to him by local residents. There have been no other reports of this species from the area.

Whip-poor-will - *Caprimulgus vociferus*
This species was considered scarce by Snyder. It is presently a common bird of the area.

Red-headed Woodpecker - *Melanerpes erythrocephalus*
Considered a relatively common species by Snyder, it appears to have declined and is continuing to decline to the point where it can be described as scarce.

White-breasted Nuthatch - *Sitta carolinensis*
This nuthatch is fairly common now, particularly in the oak and aspen woods along the shores of the Rainy River and the Lake of the Woods. Snyder considered it rare.

Sedge Wren - *Cistothorus platensis*
Found commonly throughout the area in wet meadows and hay fields today; Snyder considered the species uncommon.

Loggerhead Shrike - *Lanius ludovicianus*
Uncommon according to Snyder, it is at best rare today. A pair was reported to have nested at the south end of Sable Island in 1992.

European Starling - *Sturnus vulgaris*
The starling apparently arrived in the Rainy River area just after Snyder carried out his study. It is now a common species found throughout the area.

Vesper Sparrow - *Pooecetes gramineus*
A common species, according to Snyder. Today it is a scarce bird and is difficult to find. Land use changes have adversely affected it.

Bobolink - *Dolichonyx oryzivorus*
Snyder made only one possible record of this species, near Emo. It is a common bird today found throughout the area in meadows, pastures and croplands.

Acknowledgements
Nick Escott of Thunder Bay kindly reviewed the paper in preparation and provided comments.

Literature cited

Austen, M.J.W., M.D. Cadman and R.D. James. 1994. Ontario Birds at Risk: Status and Conservation Needs. Federation of Ontario Naturalists, Toronto and Long Point Bird Observatory, Port Rowan, Ontario.

Elder, D.H. 1991. Breeding habitat of the Connecticut Warbler in the Rainy River District. Ontario Birds 9: 84-86.

Elder, D. 1994. Marbled Godwit breeding record at Rainy River, Ontario. Birders Journal 3: 154.

James, R.D. 1991. Annotated Checklist of the Birds of Ontario. Second Edition. Life Sciences Miscellaneous Publications. Royal Ontario Museum, Toronto.

Snyder, L.L. 1938. A faunal investigation of western Rainy River District, Ontario. Transactions of the Royal Canadian Institute 47: 157-213.

David H. Elder, 23 Birch Road, Box 252, Atikokan, Ontario P0T 1C0.

Banding, movements and adult biometrics of Ontario Ospreys

by
Peter J. Ewins

Introduction

There have been few studies of Ospreys (*Pandion haliaetus*) in Ontario. Previous work has focused mainly on the declines during the DDT era, and levels of contaminants in eggs (Grier et al. 1977: Postupalsky 1971, 1977). One reason for this scarcity of information on such a widespread and large, visible bird is the inaccessibility of many nests, at the top of large, dead trees, often in swamps (Poole 1989; pers. obs.). However, in some parts of Ontario, Ospreys now breed in more accessible sites, on low stumps in flooded lakes, artificial nesting platforms, hydro poles, navigation aids and other towers (Ewins, in press).

In 1991 the Canadian Wildlife Service, in conjunction with the Ontario Ministry of Natural Resources, Michigan Department of Natural Resources, and the Georgian Bay Osprey Society, began a study to investigate the suitability of Ospreys as sensitive indicators of contaminant-related biological effects in the Great Lakes aquatic ecosystem. This paper presents up-to-date information (as of April 1994) on bandings and recoveries of Ospreys banded as nestlings in Ontario. Biometrics are presented for adults trapped at nests (the first published for Ontario or the Great Lakes basin), and these will assist anyone wishing to determine the sex of adult Ospreys.

Study area and methods

Recovery details presented here are of birds banded in Ontario. The detailed studies from 1991 to 1993 were completed in five different study areas. The three main areas were: the Kawartha Lakes (Lindsay area mostly), southeastern Georgian Bay, and the St. Marys River. Less intensive studies were carried out at Ogoki Reservoir (north of Lake Nipigon), and the St. Lawrence River near Mallorytown.

Chicks were banded when about 5-6 weeks old, in early-mid July (early August at Ogoki Reservoir). Young Ospreys usually take their first flight when 7-8 weeks old (Poole 1989). Each chick was fitted with a USFWS band on one leg, and a single plastic colour band on the opposite leg, signifying the year. The same colour is used for most young Ospreys banded in the Great Lakes drainage basin each year.

Adult Ospreys were trapped at the nest during late incubation (dates ranged from 21 to 30 May), using a dome-shaped noose-mat made of reinforced chicken wire placed over the nest, and tied firmly beneath the entire nest structure. This technique has been used successfully, and safely, during long-term studies of Ospreys in Michigan (Postupalsky 1989). Sex was determined mostly on the basis of plumage details and body size, either by direct observation of copulation attempts, or by a combination of parameters, especially when banded adults were seen together at the nest (Henny 1986; Poole 1989).

Details of Ontario bandings and band recoveries up to 31 December 1989, were obtained from the CWS Banding office in Ottawa. Subsequent data are those generated by these CWS studies (1991-93). Methods used in analyses of band recoveries follow those given in Ewins and Houston (1993).

Results and Discussion

Banding

At least 85 Ospreys (82 nestlings, two hatching year birds, and one older Osprey) had been banded in Ontario up to the end of 1989 (Ewins and Houston 1993). The present study has increased dramatically the banding totals of Ospreys in Ontario, by 187 (40 chicks in 1991, 63 chicks and 21 adults in 1992, 61 chicks and two adults in 1993), to at least 272 birds by the end of 1993.

Recoveries and sightings

Up to the end of 1989, there had been six recoveries of Ospreys banded in Ontario, a recovery rate of 7.1%, which was the highest for any part of Canada (Ewins and Houston 1993), and similar to that for U.S. Ospreys (Poole and Agler 1987). The two reported recoveries from 1991-93 bandings are presented, along with details of the six previous ones, in Table 1. These data indicate that Ontario Ospreys migrate along the Mississippi flyway, and that by mid-late September, young fledged from Ontario nests have moved hundreds or thousands of kilometres south into the U.S.

In addition to the two recoveries from the 1991-93 bandings, regular nest checks detected a further ten chicks which died before migrating southwards. Of these ten chicks, two (in the same 2-chick brood) were

Table 1: Band recoveries of Ospreys banded as chicks in Ontario, as reported up to 14 April 1994.

Banding details			Recovery details			
Date [a]	Lat. / Long.	Location	Date [a]	Lat. / Long.	Location	Cause [b]
19.6.51	44°20' N 79°00' W	nr. L. Scugog	1951	44°30' N 76°20' W	nr. Kingston	Shot
19.6.51	44°10' N 79° 00' W	nr. L. Scugog	9.63	44°20' N 76° 20' W	nr. Kingston	F.D.
14.7.67	49°20' N 94°06' W	L. of the Woods	27.9.67	39°25' N 94°30' W	W. Missouri	injured
25.7.67	49°20' N 94°12' W	L. of the Woods	30.9.67	30°06' N 89°12' W	S. Mississippi	F.D.
22.7.71	49°30' N 94°20' W	L. of the Woods	9.6.87	48°50' N 94°50' W	L. of the Woods	unknown
12.7.78	46°06' N 84°00' W	St. Joseph's Island	8.87	45°30' N 80°20' W	E. Georgian Bay	injured
5.8.92	50°30' N 88°20' W	Ogoki Reservoir	6.11.92	34°406 N 87°50' W	NW Alabama	Wires
7.7.93	44°20' N 78°20' W	Kawartha Lakes	19.9.93	39°59' N 79°35' W	SW Pennsylvania	caught

Notes: [a] day:month:year; [b] Cause of reported death / finding circumstances; F.D. = found dead.

killed and eaten by a Great Horned Owl (*Bubo virginianus*) shortly after they fledged (their mother had also been killed by a Great Horned Owl early in the nestling period, so the male raised both chicks on his own). Four large chicks died before leaving the nest area, probably from starvation, and four chicks vanished from the nest before fledging, probably either due to Great Horned Owl predation, or to natural brood reduction caused by food shortages.

In 1993, at least 16 of the 21 adults banded with alpha-numeric bands in 1992 could be accounted for, a survival rate of at least 76.1%. The five which were not located in 1993 were ones which failed in their breeding attempt in 1992. Ospreys are more likely to move site and/or change mate in the year following reproductive failure (Poole 1989). One of the colour-banded adults was seen flying west at the Cranberry Marsh Hawk Watch Station (east of Toronto) in late August 1993 (M.J.R. Miller, pers. comm.), presumably one of the Kawartha Lakes adults. Average annual survival rates of adult Ospreys vary little in the published accounts: 82-84% after the first year of life (Henny and Wight 1969); 85% after the third year (Postupalsky 1989); and 83-90% for adults (Poole 1989).

More thorough searches, and further banding of adults is planned for future seasons in the Great Lakes study. Adult survival, site fidelity, and recruitment are key parameters, which need to be quantified before concluding that these populations are reasonably "healthy" in the early 1990s.

Adult biometrics

In May 1992, 21 adult Ospreys (three males and 18 females) were trapped in the St. Marys River, Georgian Bay and Kawartha Lakes study areas. In May 1993 an additional male and a female were trapped in the Kawartha Lakes. There was no significant difference in female wing length, bill length, or weight among the three areas (One-Way ANOVA, $p > 0.3$), so data were pooled. Adult females averaged significantly larger than males, for wing length (by 7%, $t_{21} = 4.9$, $p = 0.0001$), bill length (by 10%, $t_{18} = 4.2$, $p = 0.0005$), and weight (by 30%, $t_{21} = 7.0$, $p = 0.0001$) (Table 2). Only wing length overlapped slightly between the sexes. Body weight appeared to be the best biometric on which to segregate the sexes (at least for the late incubation period), although a combination of bill length and weight, or even wing length and weight, would also do (Figure 1). An adult Osprey in Ontario with a weight of at least 1600 g, and a bill (to cere) 32 mm or longer, is almost certainly a female. Similar biometric differences between the sexes have been found in U.S. studies, but often with greater overlap than we found in Ontario (Macnamara 1977; Prevost 1983; Poole 1989; Postupalsky 1989; Johnsgard 1990).

Summary

Between 1991 and 1993 a CWS-led study of Great Lakes Ospreys has banded 187 birds, trebling the provincial total banded from 85 to at least 272. Ospreys raised in Ontario appear to migrate down the Mississippi flyway in autumn. In Ontario, adult females average up to

Table 2: Biometrics of breeding adult Ospreys trapped at Ontario nests, 1992-93.

Sex		Wing (mm)	Bill length (mm)	Weight (g)
Male	mean	485	30.9	1383
	s.d.	10	0.9	72
	range	476 - 495	29.9 - 31.6	1303 - 1475
	n	4	3	4
Female	mean	517	34.0	1804
	s.d.	12	1.2	115
	range	490 - 542	31.9 - 36.4	1540 - 1946
	n	19	17	19

30% heavier than males and have longer wings and bills. Any breeding adult Osprey heavier than 1600 g, and with a bill (to cere) longer than 32 mm in Ontario is almost certainly a female. Adults breeding in Ontario appear to have similar biometrics to those measured in the northeastern U.S.

Acknowledgements

I thank Mike Barker, Mark Bacro, Larry Benner, Mike Miller, Sergej Postupalsky and many volunteers and colleagues for help with various parts of the fieldwork. Funding for much of the work was provided by Environment Canada's Great Lakes Action Plan. Chip Weseloh kindly improved an earlier version of this paper.

Literature cited

Ewins, P.J. In press. The use of artificial nest-sites by an increasing population of Ospreys in the Canadian Great Lakes basin. Journal of Raptor Research.

Ewins, P.J. and C.S. Houston. 1993. Recovery patterns of Ospreys, *Pandion haliaetus*, banded in Canada up to 1989. Canadian Field-Naturalist 106: 361-365.

Grier, J.W., C.R. Sindelar Jr. and D.L. Evans. 1977. Reproduction and toxicants in Lake of the Woods Ospreys. Pp. 181-192 *in* J.C. Ogden (ed.). Transactions of the North American Osprey Research Conference. Transactions and Proceedings Series No. 2. National Park Service, United States Department of the Interior.

Henny, C.J. 1986. Osprey (*Pandion haliaetus*). Section 4.3.1, United States Army Corps of Engineers Technical Report EL-86-5.

Henny, C.J. and H.M. Wright. 1969. An endangered Osprey population: estimates of mortality and production. Auk 86: 188-198.

Johnsgard, P.A. 1990. Eagles, Hawks and Falcons of the World. Volume 1. McGraw-Hill, New York.

Macnamara, M. 1977. Sexing the American Osprey using secondary sexual characteristics. Pp. 43-46 *in* J.C. Ogden (ed.). Transactions of the North American Osprey Research Conference. Transactions and Proceedings Series No. 2. National Park Service, United States Department of the Interior.

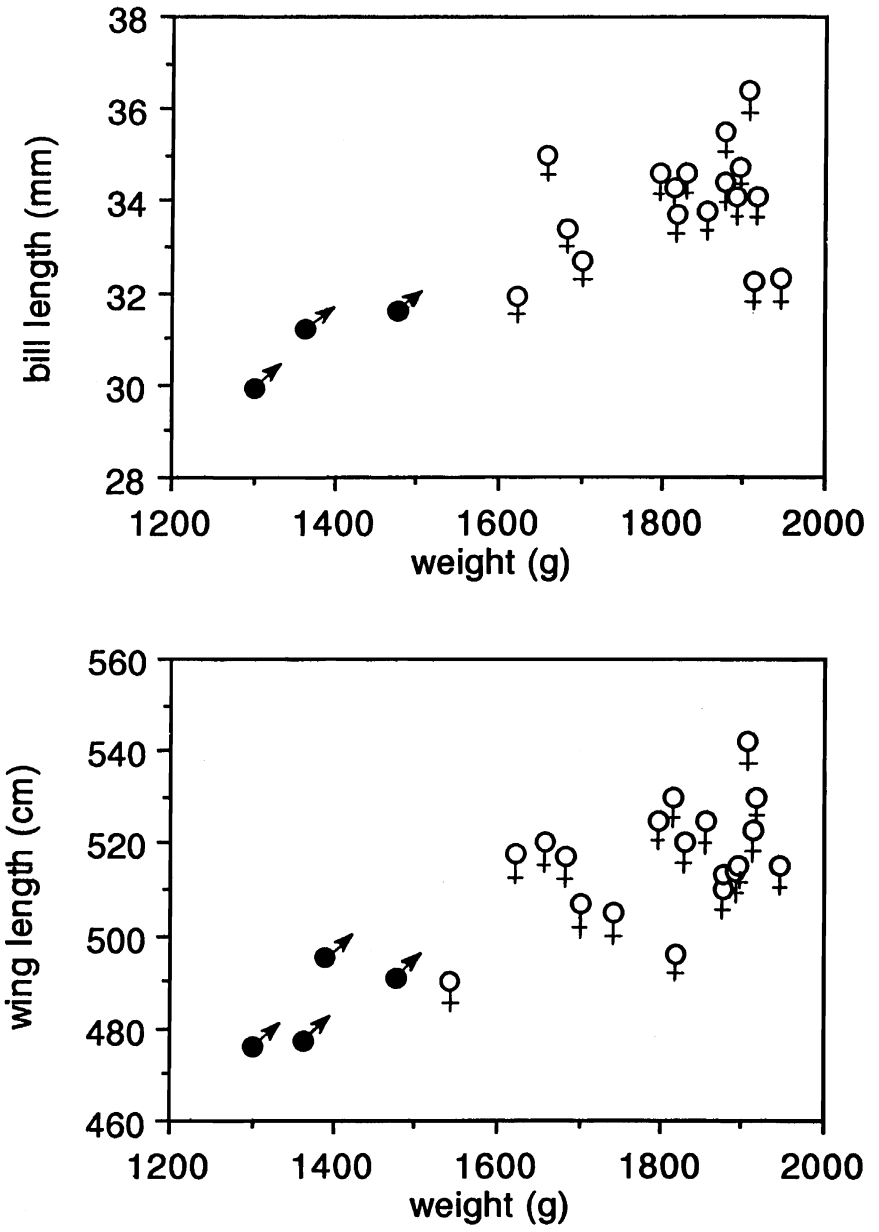


Figure 1: Bill length-weight and wing length-weight relationships for male and female Ospreys trapped in Ontario, 1992-93.

Poole, A.F. 1984. Reproductive limitation in coastal Ospreys: an ecological and evolutionary perspective. Ph.D. thesis, Boston University.

Poole, A.F. 1989. Ospreys: A Natural and Unnatural History. Cambridge University Press, Cambridge.

Poole, A.F. and B. Agler. 1987. Recoveries of Ospreys banded in the United States. Journal of Wildlife Management 51: 148-155.

Postupalsky, S. 1971. Toxic chemicals and declining Bald Eagles and Cormorants in Ontario. Ms. Report No. 20. Canadian Wildlife Service (Pesticide Section), Ottawa, Ontario.

Postupalsky, S. 1977. Osprey reproduction in the Lake Nipigon area. Pp. 193-198 *in* J.C. Ogden (ed.). Transactions of the North American Osprey Research Conference. Transactions and Proceedings Series No. 2. National Park Service, United States Department of the Interior.

Postupalsky, S. 1989. Osprey. Pp. 297-313 *in* I. Newton (ed.). Lifetime Reproduction in Birds. Academic Press, London.

Prevost, Y.A. 1983. Osprey distribution and subspecies taxonomy. Pp. 157-174 *in* D.M. Bird (ed.). Biology and Management of Bald Eagles and Ospreys. Proceedings of the First International Symposium on Bald Eagles and Ospreys. Raptor Research Foundation Inc., McGill University, Montreal.

Peter J. Ewins, Canadian Wildlife Service - Ontario Region,
Environment Canada, Canada Centre for Inland Waters,
Box 5050, Burlington, Ontario L7R 4A6.

PUBLICATION NOTICE

Bird Trends: A report on results of national and regional ornithological surveys in Canada. Number 4, Winter 1994/95. Migratory Birds Conservation Division, Canadian Wildlife Service, Ottawa, Ontario K1A 0H3. No charge.

The latest report in this series features an overview of population status and trends for the 35 birds of prey that breed in Canada, as estimated through data from migration counts, Christmas Bird Counts, and the Breeding Bird Survey. Other articles in this 32 page report are: "Raptor species at risk"; "Trends in Peregrine Falcon populations in Canada from 1965 to 1990"; "Recovery of Osprey populations in Canada"; "The Bald Eagle in Ontario's Great Lakes basin"; "Productivity declines in Swainson's Hawks and their significance to population trends"; "Burrowing Owl status and conservation programs"; "Recovery of the Ferruginous Hawk"; "Nocturnal owl surveys" (in Manitoba); "Protective legislation for raptors in Canada"; "Environmental contaminants in Canadian raptors"; "Raptor rehabilitation programs"; and "Disease diagnosis and surveillance in birds and other wildlife". There is a great deal of interesting material here for Ontario birders.

OFO Bird Finding Guide #4

A Birder's Guide to the Moses-Saunders Power Dam Area

by
Bruce and Laurie Di Labio

11 October 1993 - Marbled Murrelet!! A great flock of birders descended on the Moses-Saunders Power Dam (MSPD) to view this exciting vagrant which was new for Ontario and New York State. For many it was an introduction to a new birding destination.

Situated along the St. Lawrence River at Cornwall, Ontario, the MSPD (Figure 1) was completed as an Ontario-New York State joint hydro project in 1958, but was relatively unknown to Ontario birders prior to 1980. Since then, the few birders who have ventured here have uncovered a unique birding location for migrating and wintering water birds.

The uniqueness of the MSPD is due to its location on a major north-south flyway and on one of the largest bodies of water in the area. Also, the proximity of the Gulf of St. Lawrence to the east and the Great Lakes to the west attracts an exciting and diverse selection of birds - Ivory Gull, Razorbill, Atlantic Puffin are just a few of the notables that have made the area not only one of the best kept secrets but one of Ontario's most challenging and rewarding birding destinations.

In addition to the above, Ontario's first recorded Leach's Storm-Petrel was found in a weakened condition on 19 July 1939, two miles below Cornwall along the St. Lawrence River; and on 19 November 1963, a Dovekie was picked up near Cornwall.

General Information

Autumn and winter are the most interesting seasons to bird the power dam and surrounding area. Water along this section of the St. Lawrence remains open year-round, drawing many wintering and migrating species. But be forewarned, as with most birding areas situated near large bodies of water, foggy and misty conditions are a constant threat to visibility.

Successful birding depends greatly on knowledge of weather systems passing through the region. The most interesting birding follows storms or high winds originating from the Gulf of St. Lawrence, and during the fall and early winter, cold fronts from the northwest. Other productive times follow cold snaps during the months of December and January. As calm waters freeze, many undetected late lingerers and other wintering birds are forced to seek the open water at the power dam.

Although weather affects the birding in this area, regular coverage can yield interesting finds. For example, both the Marbled Murrelet and the Atlantic Puffin were found on relatively clear days with no

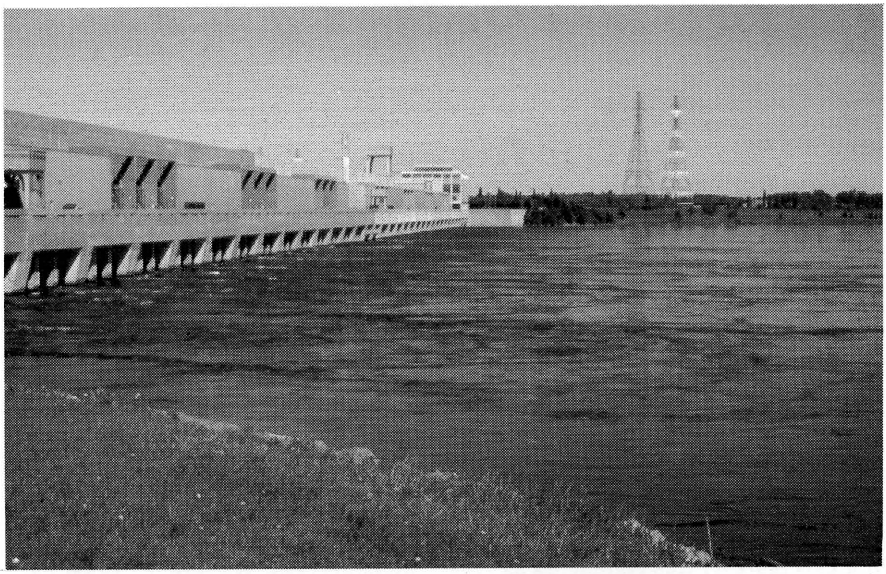


Figure 1: Moses/Saunders Power Dam. Photo by *B.M. Di Labio.*

significant previous weather changes.

Most roads in the area are paved and make birding locations easily accessible regardless of the season. Cornwall and Massena are the two largest towns in this region and offer a variety of accommodations, restaurants and gas stations.

Depending on the season and weather conditions, birding this area requires at least one full day and possibly a second day to do it justice. Keep in mind that during the winter some of these locations may be frozen and snow-covered and less time overall may be needed to bird these sites.

Just two reminders. Firstly, when crossing the international border be sure that all optical equipment is registered in advance with Canada Customs. Secondly, most of the areas in this region have public access but remember to obey no trespassing signs and other signs restricting public use.

Suggestions for Birding the Power Dam and Surrounding Area

The Robert Moses Power Dam (RMPD) and Hawkin's Point are the most important vantage points. If time is short, you should emphasize these two locations. Although the power dam can be birded from either side of the river, viewing is far superior from the American side. Afternoon lighting conditions should first be taken into consideration. From the American side, the sun is at your back whereas you must look into the sun on the Canadian side.

The most significant factor, however, is the availability of public access to the power dam facilities. On the Canadian side, viewing at the Robert H. Saunders Generating

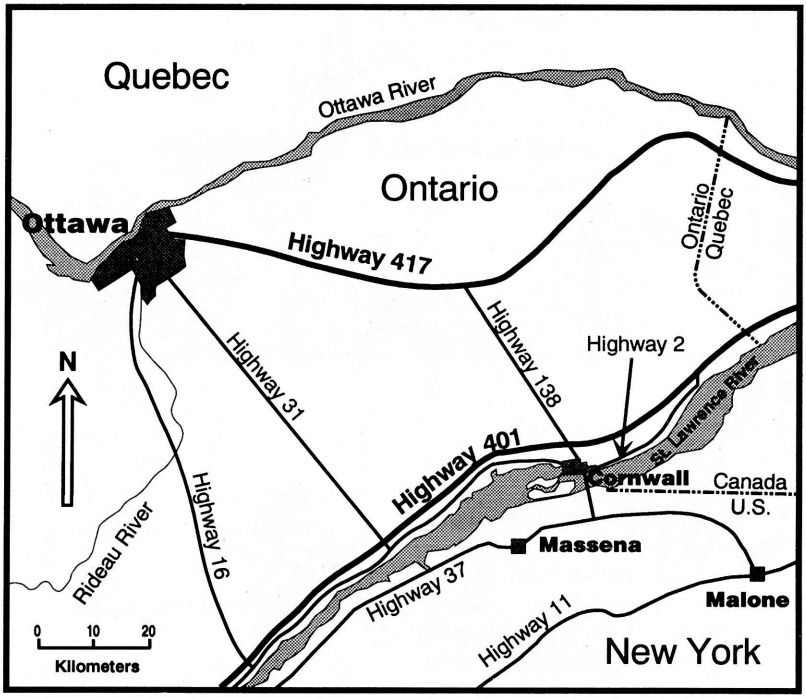


Figure 2.

Station (RSGS) is restricted to the months of June, July, and August. Because the centre's hours change during the year, you should first contact Ontario Hydro in Cornwall to gain permission to access the area. Ontario Hydro can be reached by phone at (613) 938-1518 or by mail at Ontario Hydro, R.H. Saunders Information Centre, P.O. Box 999, Cornwall, Ontario, K6H 5V1.

The RMPD on the American side is open year-round during the week from 9:00 am to 4:30 pm and on weekends from Victoria Day to the Canadian Thanksgiving. During the summer (June to September), public access hours are extended to 7:30 pm. However, for safety reasons, the observation deck is closed to the public during strong winds and heavy rain or snow. For further information, call the New York Power Authority at (315) 764-0226, or write to the St. Lawrence F.D.R. Power Project, Community Relations Division, PO Box 700, Massena, New York, 13622.

Birding the Ontario Side of the Moses-Saunders Power Dam

Birders from Kingston, Toronto and other southern Ontario locations, follow Highway 401 east to Cornwall and exit south on Power Dam Drive (Figure 2). Continue south on this road, crossing Vincent Massey Drive (Highway 2), to Saunders Road and

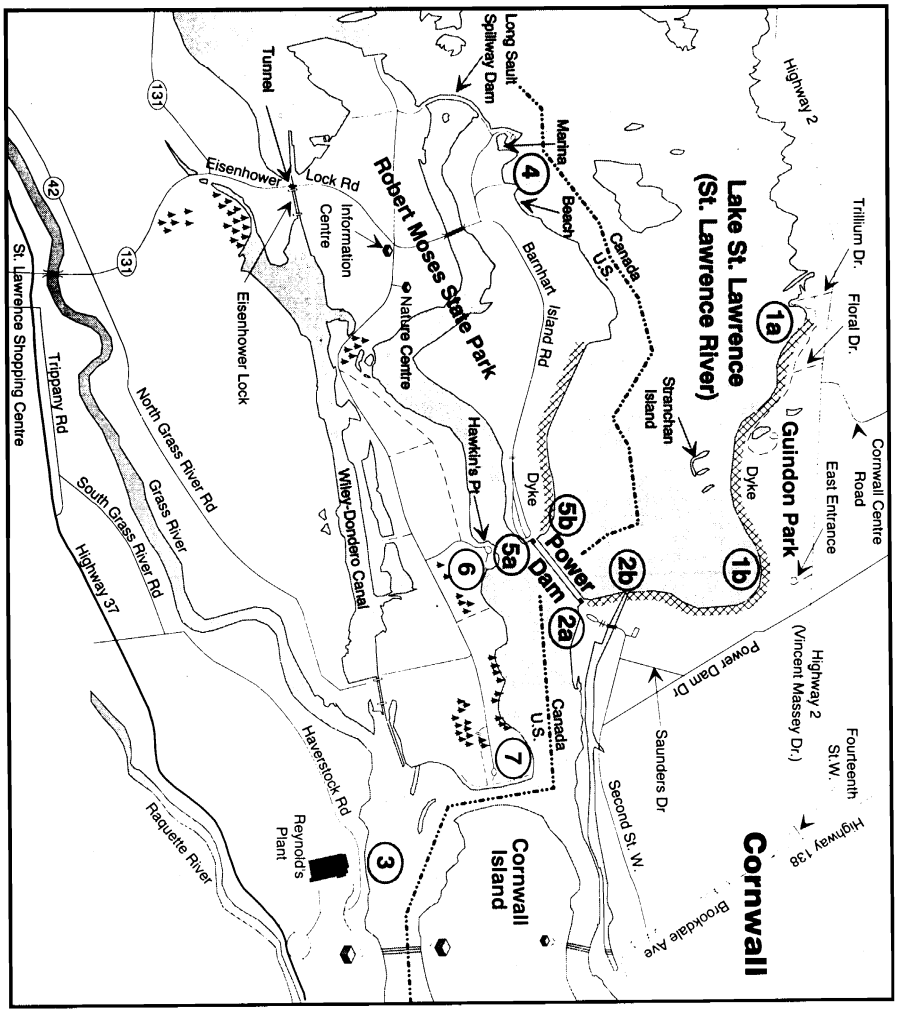


Figure 3.

turn right at the stop sign. This route leads to the entrance of the RSGS.

From Ottawa, take Highway 417 east for 60 kilometres. Exit at Highway 138 just east of Casselman. Continue south on 138 for 40 kilometres and turn right at the stop sign onto Cornwall Centre Road.

After 1 kilometre, turn left onto Brookdale Avenue and continue to Highway 2 west. Turn right onto Highway 2 (Vincent Massey Drive), then left onto Power Dam Drive to Saunders Road and right at the stop sign to the generating station (Figure 3).

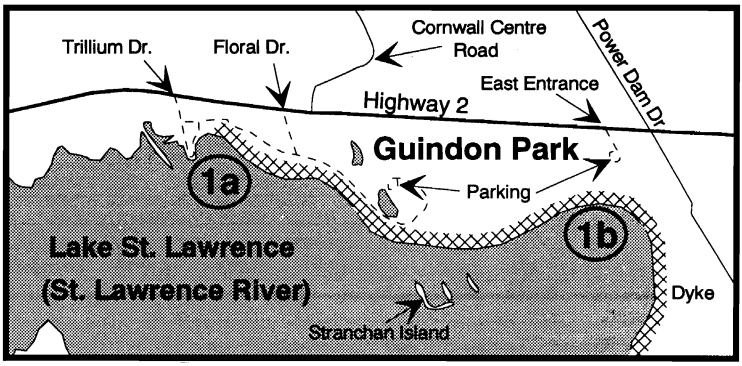


Figure 4.

Guindon Park
(Sites 1a and 1b)

Guindon Park is a large recreational area with many nature trails, cross-country ski trails, a boat launch, and picnic areas (Figure 4). From the generating station, retrace the route to Vincent Massey Drive (Highway 2). Turn left and drive to the sign at the western entrance of the park and turn left on Trillium Drive. Follow this road to the boat launch (Site 1a) which provides an excellent view of the headpond. Check for roosting gulls in the field. The most common ones will be Ring-billed, Herring, and Great Black-backed, but Iceland, Glaucous, and Thayer's are regular visitors during the fall and early winter. Also watch for Lesser Black-backed Gulls. Scan the open fields during the fall and along the gravel roads in winter for Gray Partridge.

If you have a lot of time and energy, follow the dyke along the water's edge, from site 1a to 1b, as there are many bays and inlets that cannot be seen from the boat launch. With the rocky shoreline along the dyke, this is a good area for Purple Sandpiper from mid-October to mid-November. Anything is possible! On the 1990 Massena-Cornwall C.B.C., a Northern Hawk Owl and a Gyrfalcon were observed. Stranchan Island should be checked for Ruddy Turnstone, Sanderling, Red-necked Phalarope and other shorebirds. During the breeding season, the island is occupied by nesting Ring-billed Gulls and Double-crested Cormorants. On 3 May 1991, an adult Great Cormorant was observed on the island with the other cormorants.

Continue by traveling east on Highway 2 to the east entrance of Guindon Park (Site 1b). From the parking lot you can see the dyke at a distance. Follow the trails to the dyke. (For a complete review of species, see Site 5b.)

Robert H. Saunders Generating Station
(Site 2a and 2b; Figure 5)

Proceed to the gate house and inquire whether access is permitted to the parking lot and observation deck. These are the best two vantage points to bird the dam. If access is denied, park in the western parking lot and walk up the embankment to view the headpond (Site 2b) or follow the fenceline on the east side of the

gatehouse to the edge of the river and view the base of the power dam (Site 2a). You can also walk along the bicycle path which runs parallel to the river and stop at various spots to scan for birds below the power dam. (See Site 5 for details about the birds).

Birding the American Side of the Moses-Saunders Power Dam

Birders from the Toronto and Kingston region, take 401 east to Cornwall and visitors coming from the Montreal area, take 401 west to Cornwall. Exit on Highway 138 (Brookdale Avenue) and proceed south through the town of Cornwall to the bridge to the United States. *The first bridge leads to the Akwesasne Indian Reservation on Cornwall Island, and a toll of $2.25 (either US or Canadian) is collected upon entry and return. The second bridge is the border into the United States. After U.S. customs, proceed south to the traffic circle and take the first right onto Haverstock Road which leads to the Reynold's Aluminum Plant, the first stop on the route.

Visitors from Ottawa head east on Highway 417 for 60 kilometres to Highway 138. Travel 45 kilometres south on 138 to Cornwall and continue south until you reach the signs for the bridge to the United States (then proceed as above *).

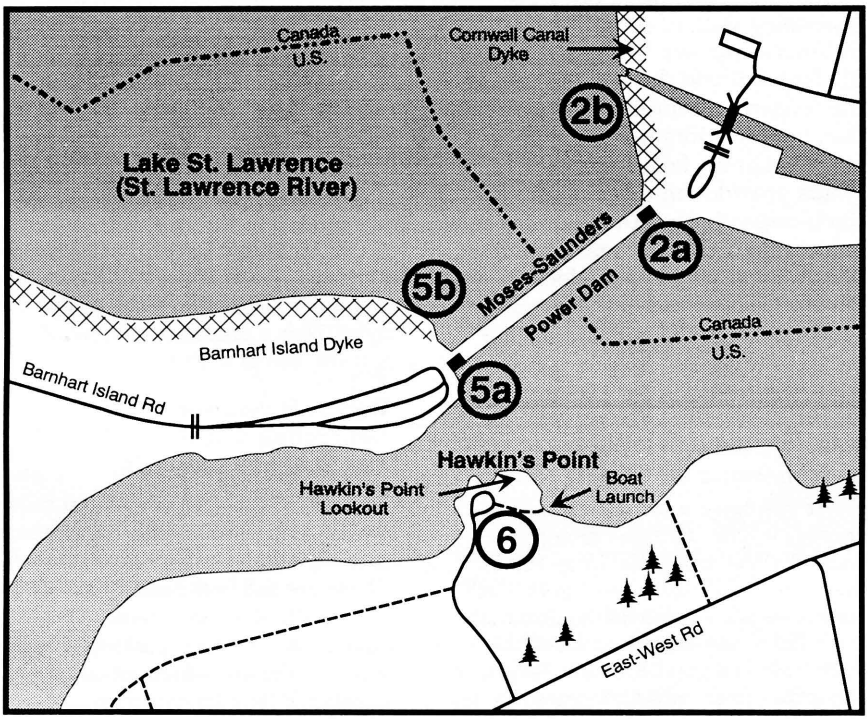


Figure 5.

Reynold's Aluminum Plant
(Site 3; Figure 6)

Follow Haverstock Road past the Reynold's Plant and over the railroad tracks. At this point the road curves to the left and you can park anywhere along the guard rail to view the channel and banks of Cornwall Island directly across the river. The best time to check this area is from November through March. Depending on ice conditions, December, January, and February are those with the highest concentrations of waterbirds (the more ice, the more birds but only up to a certain point -- too much drives them away). As this section of the river remains open during the winter, it provides a good location for roosting waterbirds. Common Goldeneyes and Common Mergansers are the most abundant winter ducks. However, carefully check for occasional wintering Barrow's Goldeneyes, Buffleheads, Greater Scaups, Canvasbacks, Oldsquaws, Red-breasted Mergansers, and Hooded Mergansers. During the winter of 1990-91, an immature male Harlequin Duck overwintered until 3 March 1991. On the Massena-Cornwall Christmas Bird Count of 23 December 1990, a female King Eider was observed at this location. Remember to watch along the breakwall for Snowy Owls in the winter and cormorants in the fall. During early fall, it is also worthwhile to check for Bonaparte's Gulls and Little Gulls that frequently feed along this channel.

Once you have checked this area, continue west along Haverstock Road. From late fall through winter, investigate the tangles of grape vines along the road for American Robins, Bohemian Waxwings and roosting Northern Saw-whet Owls. Upon entering the open fields and woodlots, look for Northern Shrikes, Snow Buntings and overwintering Northern Flickers as they frequent this area. Also watch for Red-tailed and Rough-legged Hawks, American Kestrels, Gray Partridge, Horned Larks, and occasional Lapland Longspurs, particularly if manure has been recently spread in the farm fields. After passing the farm, take the first right, and follow South Grass River Road. Don't forget to check the residential feeders. Watch for American Tree Sparrows, Common Redpolls, Evening Grosbeaks, Mourning Doves, and overwintering blackbirds, particularly Red-winged Blackbirds, Brown-headed Cowbirds, and Common Grackles.

At the stop sign, turn right onto Trippany Road and proceed to the dead-end sign where you turn left towards Highway 37 (Figure 3). At this junction, turn right onto 37 and continue to Route 131, located directly across from the St. Lawrence Shopping Centre. Turn right and continue on 131, the main road crossing over the Grass River. Watch for Bohemian Waxwings and Common Redpolls during the winter, and in the fall, check any pine plantations along this route for wintering owls.

Continue along Eisenhower Lock Road (formerly Route 131) passing beneath the Eisenhower Lock which is the boundary to Robert Moses State Park. Go past the Information Centre, cross over Barnhart Island Bridge, and take the first left. This is also a good area to listen for Eastern Screech Owl at dusk or dawn. Three were heard along this stretch on 18 December 1993 and 16 February 1995.

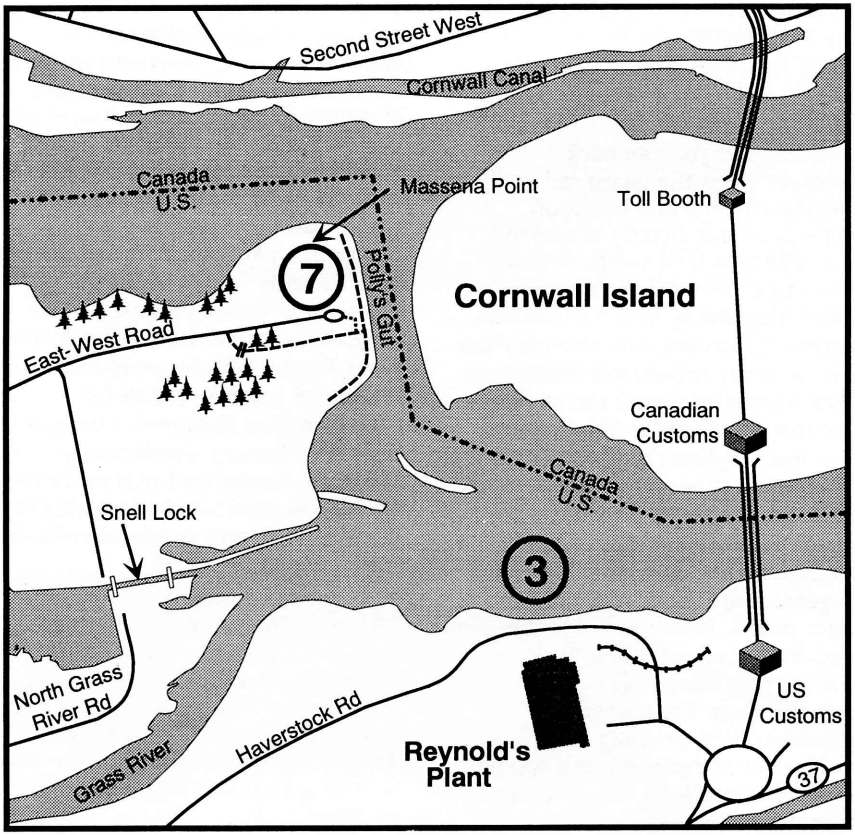


Figure 6.

The Marina/Beach
(Site 4; Figure 3)

Proceed north to the marina/boat launch area. From this vantage point, scan the open water for loons, grebes, cormorants, diving ducks, and gulls. As the water is frozen in the winter, the most advantageous time to bird this area is during the fall and early winter. Check the islands off the marina for Snowy Owls which can be found on exposed rocks. Also check the islands for roosting Bald Eagles. To exit this area, turn left onto Barnhart Island Road to RMPD. A variety of species, including Bohemian Waxwing, Pine Grosbeak, and American Robin can be found feeding on the oriental crabapple trees along this stretch of road. One of the few New York State recorded Sage Thrashers was found feeding in these trees at the entrance to the dam on 27 December 1971, the date of the first Massena-Cornwall Christmas Bird Count.

Robert Moses Power Dam
(Site 5a; Figure 5)

Once through the dam's main gate, proceed to the parking lot. You can view the river from the parking lot and from the observation deck on the top floor of the power dam. It is highly recommended that both viewing sites be checked.

Over the years, the RMPD has hosted an impressive total of 16 species of gulls and four species of terns. Gull and tern numbers begin to increase in mid-August, and consist mainly of Ring-billed and Bonaparte's Gulls and Common Terns. Carefully scan below the dam for Little Gulls which appear anytime from early August on. In September, there is a general increase in gull numbers as the first migrants move through the area. At this time, Bonaparte's Gull numbers can range anywhere from 100 to 1000. Although not a frequent visitor, the Sabine's Gull is a good possibility during the latter part of September, most often observed feeding below the dam. Little Gull numbers generally peak at the end of the month. Eight were observed on 30 September 1990 and six on 25 September 1991. Common Tern numbers peak in late September and early October. Usually numbering in the hundreds, this species can be found actively feeding below the dam or sitting on the dam structure itself. Also watch for Arctic Terns which have been observed twice during early October, feeding amongst the Common Terns. Black Terns are regular visitors in August to mid-September. Also watch for an occasional Caspian Tern migrating during the early fall.

October marks the increase in the numbers of larger gulls such as the Great Black-backed, Herring, and Ring-billed Gulls. Carefully check through the gulls as they feed on the water or rest on the power dam structure. With the influx of the larger gulls, an occasional Lesser Black-backed Gull may be found. Patience can be rewarded as the first New York State recorded Mew Gull was found feeding below the dam on 4 and 5 October 1986. Subsequent observations have been made on 27 December 1992 and 26 November 1994. The California Gull, another western rarity was also found feeding in this same area on 23 October 1990. Franklin's Gull has only been recorded once at this site with a first winter plumage bird present from 12 September to 24 October 1986. Black-legged Kittiwakes are rare but regular visitors to the dam in small numbers. Usually one to three birds can be found feeding below the dam during November and occasionally in late October. Carefully scan the large raft of Ring-billed Gulls resting on the water for first winter Black-legged Kittiwakes. The majority of Kittiwakes recorded are first-winter birds, but on 6 November 1986, two adult Black-legged Kittiwakes were observed feeding below the dam.

A significant fluctuation in gull numbers occurs during November and December, depending on weather conditions. If temperatures during late fall are cold, the Bonaparte's Gulls will as a rule have migrated out of the area. If the conditions are mild, this gull will remain though in reduced numbers. Carefully check the flocks of 'bonys" for Common Black-headed Gull as they have been recorded four times, three of which were in November. All birds were

adults in winter plumage feeding below the dam. Ring-billed Gulls follow a similar pattern to that of the Bonaparte's. They tend, however, to linger in the power dam area longer, sometimes into late December. Numbers in the fall usually range from 1000 to 5000 birds, whereas in December, if conditions are favourable a few hundred may remain. Early November also marks the arrival of the "white-winged gulls". Two northern species, the Glaucous and Iceland Gulls usually appear at the dam site at about the same time, in response to the freezing of lakes farther north. As the season progresses, their numbers increase. Record numbers are generally noted in January or February with a high count of 67 Iceland Gulls on 6 February 1991 and 53 Glaucous Gulls on 3 February 1992. It's interesting to note that no two years are the same. Data gathered over the past 10 years have shown that either species can outnumber the other, with no single factor controlling this fluctuation. Another "white-winged gull", the Thayer's Gull, is a rare but regular visitor, appearing anytime between early November and late February. With usually only one bird found each season, one must scrutinize the flocks of Herring Gulls to locate this elusive gull. Great Black-backed and Herring Gulls are regular winter residents at the power dam. Their numbers also vary with weather conditions, particularly when severe cold hits the area as this can reduce numbers of a few thousand to a few hundred overnight. There is only one record of the Ivory Gull, an immature found off Hawkin's Point on 8 December 1977 and 13 January 1978. More sightings of this species are definitely overdue!

Depending on weather conditions, by late February or early March the diversity of species decreases rapidly as wintering gulls move north or down to the Gulf of St. Lawrence and are replaced by thousands of Ring-billed Gulls which breed on numerous islands above the power dam.

Lake St. Lawrence/Headpond
(Site 5b; Figure 5)

From the observation platform at the RMPD, survey the headpond located above the dam. This area can be very rewarding from August through to early January. Two of the rarest birds have been a Marbled Murrelet (11-13 October 1993) and a juvenile Atlantic Puffin (14-16 October 1994). Lake St. Lawrence is usually frozen by January and occasionally as early as mid-December. This location can net a variety of species, most notable being the Red-throated Loon, Red-necked and Horned Grebes, Brant, White-winged, Surf and Black Scoters, all of which can be found during October and November. A Parasitic Jaeger was observed roosting on the water on 15 September 1991 and, on 11 November 1989, three immature Pomarine Jaegers spent the afternoon feeding and resting in this area. The observation deck is also a good location for hawk watching. Regular migrants included Red-tailed, Rough-legged, Red-shouldered, Cooper's and Sharp-shinned Hawks. Bald and Golden Eagles, Peregrine Falcon and Merlin are occasionally observed. From late December through mid-March, overwintering Bald Eagles from the Ivy Lea Bridge area, west of Brockville, wander

downriver to the open water at the dam in search of food. During late fall and winter watch for Snowy Owls resting on the power dam structure or sitting out on the ice.

Hawkin's Point Lookout
(Site 6; Figure 5)
Retrace the route taken to the power dam. After crossing Barnhart Island Bridge, turn left on East-West Road at the Information Centre. Follow east along this road checking the pine plantation on the left for owls, finches, Ruffed Grouse, Red-breasted Nuthatches and Golden-crowned Kinglets. At the transmission line towers, 3.8 kilometres from the turnoff, turn right onto the dirt road which leads to two ponds. A variety of waterfowl can be found here, but most notable were the 500 Redheads and 350 Ring-necked Ducks viewed on 3 November 1991. During the late fall and early winter the berry and fruit trees along this road are a haven for Bohemian Waxwings, wintering American Robins and Pine Grosbeaks. Carefully check any flock of robins because a male Varied Thrush was found feeding with a small group of 17 robins on 15 January 1991. Towards mid-winter and early spring, Ruffed Grouse can be observed just before dusk "budding" in nearby poplar or aspen trees. It is also during this time that Northern Shrikes can be found perched high in the deciduous trees. At the 4-kilometre point, turn left at the sign to the boat launch. During winters of heavy snowfall, the road leading to Hawkin's Point may be inaccessible. Under these conditions it is best to walk to the point, a distance of about one kilometre from the turnoff. Located directly across the channel from the dam, the lookout site provides one of the best vantage points for birding. From this location thoroughly check the base of the dam as well as down river towards the bridge. A few Red Phalaropes have been recorded here during October. All gulls and terns highlighted in the section under RMPD can be seen here as well. The sheltered bay, just east of the lookout, is a good spot for wintering ducks and gulls. Scan the roosting American Black Ducks and Mallards for other unusual visitors, such as an occasional Green-winged Teal, Gadwall, or Northern Pintail. Snowy Owls are sometimes found during the winter resting on the ice or along the shore. Viewing from Hawkin's Point is at its best during late fall and winter. Diving duck numbers begin to increase during early fall and by mid-November thousands and sometimes as many as 10,000 Common Mergansers may converge on the area below the dam and in the bay. The Harlequin Duck has overwintered here twice and Barrow's Goldeneye is a rare but regular winter visitor. Annually, since 1985, a few Barrow's have been found amongst the 500 to 2,500 overwintering Common Goldeneyes. Storms from the northeast from October to early December have produced a few rarities including an immature Razorbill on 27 November 1987, a juvenile Northern Gannet, that stayed from 22 November to 3 December 1986, and a second Northern Gannet on 3 November 1991.

Loop Road Area

(Site 7; Figure 6)

To reach the loop, exit Hawkin's Point and turn left onto East-West Road. Take the left side of the fork in the road and continue up the hill. From the road, check the bays and inlets for waterfowl and the open fields for Red-tailed and Rough-legged Hawks, American Kestrels and Northern Shrikes. At dusk, watch for Short-eared Owls. The spruce woodlot on the right, about 300 metres from the road, can also be rewarding. During the winter of 1987-88, at least five Northern Saw-whet Owls and one Long-eared Owl were seen roosting there. The dense protection of this sole coniferous lot in the area attracts a variety of finches such as the White-winged Crossbill, and Pine Siskin, as well as Northern Cardinals, Ruffed Grouse, Golden-crowned Kinglets, and the occasional Carolina Wren. The end of the loop marks the entrance to the woods that leads to a number of vantage points, the most accessible being Polly's Gut and Massena Point. Parking along the loop is permitted but do lock all valuables in car trunks as the vantage points are a distance from the road. Polly's Gut is located directly across from the Reynold's Plant, therefore the birds found at the plant can be seen here as well. The advantage of this site is that many of the birds can be observed more closely. From Massena Point on the other hand, you can see many bays and inlets that cannot be observed from other locations. To reach these locations, follow the trail and turn left at the service road. At the T-junction, turn left towards Massena Point or right towards Polly's Gut. Don't forget to walk through the woods to look for a variety of landbirds. Northern Flickers have been overwintering in this area for the past 10 years and up to five have been found there annually.

Conclusion

It is hoped that this site guide will generate further interest in this region, for much is yet to be learned about the frequency and diversity of species that pass through or winter in this area. For those who get the opportunity to bird the RMPD area, please forward a copy of your observations to the authors.

Acknowledgements

We would like to thank Ross Harris, Liz Stevenson, Chris Traynor and Norm Crookshank for their valuable comments on earlier versions of the manuscript. We are grateful to Norm Crookshank for the preparation of the maps and Lee Harper for the use of his boat on a number of occasions.

Editors' Note:
Since receiving the manuscript for the site guide, Bruce Di Labio found two Northern Fulmars and two juvenile Northern Gannets at the RMPD site 5b on 15 December 1994. One of the fulmars was found dead the following day. The other fulmar was again observed flying over the headpond during the Massena-Cornwall CBC 17 December 1994! What next?

Bruce and Laurie Di Labio, 44 Helmsdale Drive, Kanata, Ontario K2K 2S3.

Recognizable Forms

Subspecies of the Palm Warbler

by
Ron Pittaway

Introduction

W. Earl Godfrey (1986) in *The Birds of Canada* says about the Palm Warbler (*Dendroica palmarum*), "There are two subspecies, one eastern, one western, different enough to be recognizable in the field". The two subspecies (races) of the Palm Warbler are illustrated by Peter Burke in Figure 1. See also Plate 7 in Curson et al. (1994), page 369 in the National Geographic Guide (Scott 1987), pages 287 and 295 in the Golden Guide (Robbins et al. 1983) and page 239 in Peterson (1980). In the following account I discuss the identification, distribution, migration times and routes, winter ranges, and status of the two subspecies of the Palm Warbler in Ontario.

Taxonomy

The American Ornithologists' Union Check-list (1957) and Godfrey (1986) list two subspecies of the Palm Warbler: the nominate "Western" subspecies *D. p. palmarum* and the eastern "Yellow" subspecies *D. p. hypochrysea*. The two subspecies differ in so many ways that Todd (1963) stated "I strongly suspect that we are dealing with two closely allied but separate species". Todd's opinion (before intergradation was well-established) serves to demonstrate the distinctiveness of the two subspecies. See also discussion under Intergrades.

Plumages, Molts, Ageing and Sexing

The sexes are similar in all ages and plumages. The briefly held juvenile (juvenal) plumage is seen only on the breeding grounds. Juveniles undergo a partial molt to first winter (first basic) plumage before fall migration. First winter birds begin their partial molt in mid-winter to first summer (first alternate) plumage, and they breed in this plumage. Adult winter (definitive basic) birds also begin acquiring adult breeding (definitive alternate) plumage in mid-winter. First summer and adult breeding plumages are very similar in appearance. Because these birds usually cannot be aged in the field, it is best to refer to them collectively as being in breeding (alternate) plumage. After breeding but before fall migration, both first summer and adult breeding birds undergo a complete molt to adult winter plumage. Autumn migrants consist of birds in first winter and adult winter plumages. These plumages are often best treated collectively as winter or basic plumage.

Western Palm Warbler

(D. p. palmarum)

The Western Palm Warbler breeds in "western and central Canada east to Moosonee and Kapuskasing, Ontario" (Godfrey 1986). It is a common

migrant in southern Ontario (James 1991). For the Oshawa-Lake Scugog area, Tozer and Richards (1974) say the (Western) Palm Warbler is "A fairly common spring and fall transient (early May to mid-May: mid-September to early October) ... but in low numbers".

Most Western Palm Warblers in breeding (alternate) plumage are easily distinguished from Yellow Palm Warblers (with entire underparts yellow) by their whitish or only faintly yellowish bellies which contrast with the rest of the underparts (Figure 1). See also the photograph of a Western Palm in breeding plumage on page 155 in Volume 3 of the Master Guide (Farrand 1983). Western Palms in winter (basic) plumage are much duller than Yellow Palms; the yellow undertail coverts contrast with the whitish (or tinged yellow) underparts of adults or the buffy white underparts in fresh first winter birds. By learning the plumage variation in the Western Palm Warbler you will be prepared to find the much rarer Yellow Palm Warbler in Ontario.

Yellow Palm Warbler

(D. p. hypochrysea)

The subspecies name *hypochrysea* means "golden beneath" (Bent 1953). The Yellow Palm Warbler breeds in "eastern Canada west to Lake Mistassini, Quebec and Ottawa, Ontario" (Godfrey 1986). The Ottawa (Mer Bleue Bog) population is apparently extirpated (Earl Godfrey, pers. comm.). However, a few may still breed in other large bogs of eastern Ontario. Don Sutherland (pers. comm.) observed a singing male Yellow Palm Warbler in suitable breeding habitat in Stormont County on 23 June 1984. The Yellow Palm is a rare migrant in southern Ontario west to Point Pelee (James 1991). For example, they have been recorded at Ottawa, Kingston, Toronto, Hamilton and Long Point.

Yellow Palm Warblers tend to migrate earlier in spring and later in fall than Western Palms (Dunn 1994). A Palm Warbler in southern Ontario in mid to late April or after mid-October could be a Yellow Palm!

Typical Yellow Palm Warblers in breeding (alternate) plumage are easily told from Western Palms by their entirely yellow underparts (Figure 1). See also the excellent photograph on page 992 in Terres (1982). In addition, Yellow Palms have broad chestnut or reddish streaking on the underparts, whereas Western Palms have finer dark brown streaking. Yellow Palms also have more greenish-olive upperparts than Western Palms. In winter (basic) plumage, most Yellow Palms can be separated from Western Palms by their much yellower underparts (Godfrey 1986) and usually yellowish instead of whitish superciliary line (Bent 1953). See the illustration comparing both subspecies in basic plumage on page 295 in the Golden Guide (Robbins et al. 1983).

Intergrades

The zone of intergradation between the two subspecies of the Palm Warbler is relatively narrow. For example, the breeding birds from Moosonee and Kapuskasing, Ontario, are *palmarum* (Godfrey 1986); whereas birds from Lake Mistassini, Quebec, and eastern Ontario (Ottawa) are *hypochrysea* (Godfrey 1949, 1986). However, breeding birds (five specimens) from Amos, Quebec

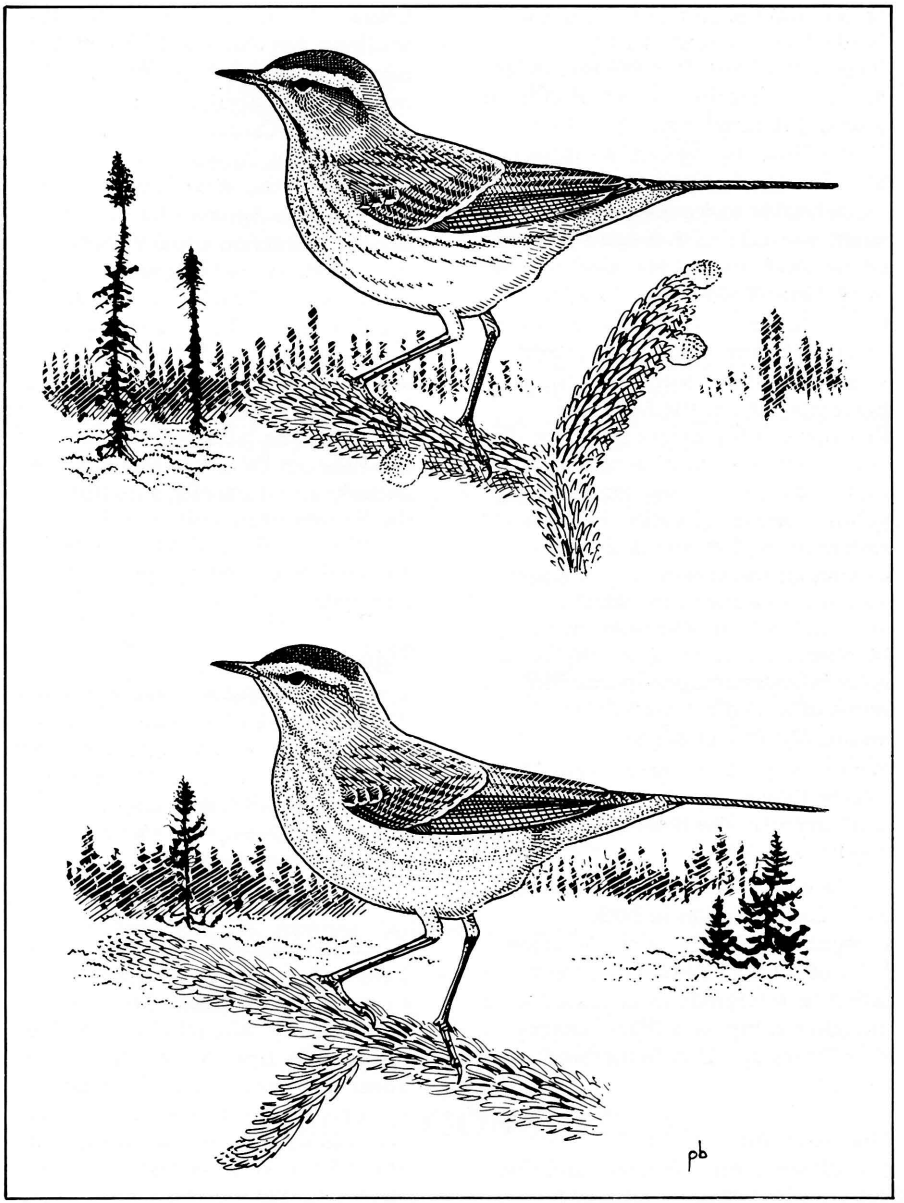


Figure 1: Top: Western Palm Warbler in breeding plumage (sexes similar). Bottom: Yellow Palm Warbler in breeding plumage (sexes similar). Drawing by *Peter Burke*.

(about 140 km east of the Ontario border) are "almost exactly intermediate between the two races and show that the Amos region is an area of intergradation" (Godfrey 1968). Note that specimens from Lake St. John, Quebec and Ottawa, Ontario are referable to *hypochrysea* but show slight intergradation toward *palmarum* (Rand 1944, Rand 1948, Godfrey and Wilk 1948, Todd 1963). In reference to six specimens from Lake St. John, Quebec, Godfrey and Wilk (1948) state they "differ somewhat from *hypochrysea* from the Maritime Provinces in the extent and intensity of the yellow coloration of the underparts. In the two females the yellow ventral coloration is dull and restricted, and in one is almost lacking on the abdomen and flanks. This specimen is practically inseparable from *palmarum* from Manitoba and Alberta, except for its more olivaceous upper parts. The series as a whole, however, is unquestionably closer to *hypochrysea*". The above locations are clearly shown on the map inside the hard cover of *The Birds of Canada* (Godfrey 1986).

As a final note, there is also some individual variation in both subspecies in that a bright Western Palm or a dull Yellow Palm might be called an intergrade or confused with the other subspecies (Earl Godfrey, Ross James and Don Sutherland, pers. comms.).

Migration and Winter

The Western Palm Warbler and the Yellow Palm Warbler winter in different areas and there is a curious crisscrossing of migration routes. The Yellow Palm spends the winter in the Gulf States mostly west of Florida to Louisiana, and in spring crosses the southern Appalachian Mountains to migrate northward east of the mountains to northern New England and eastern Canada. The Western Palm, leaving its winter home in Florida and the West Indies, crosses the southern Appalachians in the opposite direction usually south of the Carolinas, and migrates northward to Ontario and western Canada. In fall, both subspecies crisscross again en route to the wintering grounds. The Yellow Palm follows the reverse of its spring route. However, the fall migration route of the Western Palm Warbler is more easterly and it usually outnumbers the Yellow Palm along the Atlantic Coast at this time (Bent 1953, Bull 1974, Griscom and Sprunt 1979, Dunn 1994).

Summary

Typical individuals of Western Palm Warbler and Yellow Palm Warbler, particularly in breeding plumage, are easily distinguished in the field. The Western Palm Warbler is the common subspecies in Ontario. Intergrades are uncommon.

Acknowledgements

I am grateful to Peter Burke, Bill Crins, Bruce Di Labio, Jon Dunn, Earl Godfrey, Michel Gosselin, Ross James, Jean Iron, Mike Turner, Ron Tozer and Gerry Smith for much valuable advice and assistance. Jon Dunn kindly made available a draft of the Palm Warbler text from his upcoming book on warblers. Peter Burke is a wizard at being able to convey differences in coloration in a black-and-white medium.

Literature cited

American Ornithologists' Union. 1957. Check-list of North American Birds, 5th Edition. American Ornithologists' Union, Washington, D.C.

Bent, A.C. 1953. Life Histories of North American Wood Warblers. United States National Museum Bulletin 203. Washington, D.C.

Bull, J. 1974. Birds of New York State. Doubleday/Natural History Press.

Curson, J., D. Quinn and D. Beadle. 1994. Warblers of the Americas, an Identification Guide. Houghton Mifflin Company, Boston and New York.

Dunn, J.L. 1994. Comments on the 1992-1993 Holmes County wintering warblers. The Ohio Cardinal 16: 70-71.

Farrand, J.F. Jr. (Editor) 1983. The Audubon Society Master Guide to Birding. Volume 2. Alfred A. Knopf, New York.

Godfrey, W.E. 1949. Birds of Lake Mistassini and Lake Albanel, Quebec. Bulletin No. 114, National Museum of Canada, Ottawa.

Godfrey, W.E. 1968. Notes on Birds of the Amos Region, Quebec. Natural History Papers No. 44. National Museum of Canada, Ottawa.

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

Godfrey, W.E. and A.L. Wilk. 1948. Birds of the Lake St. John Region, Quebec. Bulletin No. 110, National Museum of Canada, Ottawa.

Griscom, L. and A. Sprunt, Jr. (Revised and Updated by E.M. Reilly). 1979. The Warblers of America. Doubleday, New York.

James, R.D. 1991. Annotated Checklist of the Birds of Ontario. Second Edition. Royal Ontario Museum, Toronto.

Peterson, R.T. 1980. A Field Guide to Eastern Birds. Houghton Mifflin Company, Boston.

Rand, A.L. 1944. Notes on the Palm Warbler, *Dendroica palmarum* (Gmelin), in Canada. Canadian Field-Naturalist, 58: 181-182.

Rand, A.L. 1948. Probability in subspecies identification of single specimens. Auk 65: 416-432.

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.

Terres, J.K. 1982. The Audubon Society Encyclopedia of North American Birds. Alfred A. Knopf, New York.

Todd, W.E.C. 1963. Birds of the Labrador Peninsula and Adjacent Areas. Carnegie Museum and University of Toronto Press.

Tozer, R.G. and J.M. Richards. 1974. Birds of the Oshawa-Lake Scugog Region, Ontario. Published by the Authors.

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

PUBLICATION NOTICE

Clive Goodwin has prepared a brief guide titled **"Where to Watch Birds Around Cobourg"**. It is available from the Chamber of Commerce, 212 King Street West, Cobourg, Ontario K9A 2N1, free on receipt of a stamped, addressed No. 10 envelope.

Notes

Pileated Woodpecker eating dogwood berries

by
Jean Iron and Ron Pittaway

On 3 September 1994, along with Heather Mackey and Bryan Bertie, we observed a Pileated Woodpecker (*Dryocopus pileatus*) near the Visitor Centre and Lighthouse at Presqu'ile Provincial Park, Northumberland County. It was unusually tame around people. The apparent attraction for the woodpecker was the Red-osier Dogwoods (*Cornus stolonifera*) growing around the Visitor Centre. Twice we observed the Pileated perch awkwardly near the top of two dogwoods and eat several berries from each shrub. Ryan (1978) states the fruit of the Red-osier Dogwood is "eagerly eaten by birds". We also learned from Robert Dawson (pers. comm.) that he saw a Pileated Woodpecker eating wild grapes (*Vitis* sp.) near Hamilton in the fall of 1994.

Neither of us could ever remember seeing or hearing about Pileated Woodpeckers eating fruit. A search of the literature revealed some insights into this behaviour. Bent (1939) reports that Pileated Woodpeckers eat mainly wood-boring insects, but supplement their diet with a variety of fruits and nuts including acorns, wild grapes, holly, poison ivy, sumac, hackberry and dogwood. Hoyt (1957) summarizes, "In the fall of the year the pileated woodpecker may be found feeding on many species of fruits as well as mast in the form of wild nuts". However, we could find only one reference to Pileated Woodpeckers eating dogwood berries in Ontario. Mills (1982) says that "It has twice been reported eating alternate-leafed dogwood berries in the Huntsville region".

We conclude that wild berries are an important part of the diet of Pileated Woodpeckers in Ontario, particularly in autumn.

Why have we not seen this behaviour before? It may be because most Pileated Woodpeckers in Ontario are rather secretive and difficult to observe in their favoured mature forest habitat. However, in recent years this "denizen of extensive forests" has become more visible as it adapts to urban areas and smaller woodlots. Therefore, we would expect more observations of berry-eating behaviour.

Acknowledgements
We are grateful to Ron Tozer for drawing our attention to several important references in the literature. We also thank Bill Crins and Heather Mackey for confirming the identification of the Red-osier Dogwood.

Literature cited

Bent, A.C. 1939. Life Histories of North American Woodpeckers. United States National Museum Bulletin 174. Washington, D.C.

Hoyt, S.F. 1957. The ecology of the Pileated Woodpecker. Ecology 38: 246-256.

Mills, A. 1982. A Cottager's Guide to the Birds of Muskoka and Parry Sound. Published by the author.

Ryan, G.A. 1978. Native Trees and Shrubs of Newfoundland and Labrador. Parks Division, Government of Newfoundland and Labrador, St. John's.

Jean Iron, 9 Lichen Place, Don Mills, Ontario M3A 1X3.

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

Downy Woodpecker eating elderberries

by
William J. Crins

Most species of woodpeckers make some use of plant material (berries, nuts, etc.) in their diets (Bent 1939, Cramp 1985). However, fruit is not usually a major component of the diets of most species. Woodpeckers tend to specialize on insects of various orders and families. There are some notable exceptions to specialized insectivory, however. Some species are quite opportunistic and omnivorous, or even have become specialized on certain plant foods. The Acorn Woodpecker (*Melanerpes formicivorus*) is one obvious example of a North American species that specializes on fruits (acorns of various western oaks (*Quercus* spp.)), at least in the winter. Sapsuckers (*Sphyrapicus* spp.) are noted for their use of sap, and will switch to "... a vegetarian diet ... " when other sources of food become scarce (Lawrence 1966; R.J. Pittaway, pers. comm.). In Eurasia, the Great Spotted Woodpecker (*Dendrocopos major*) frequently feeds on coniferous tree seeds in the winter, and searches for fruit and nuts on the ground. The Syrian Woodpecker (*Dendrocopos syriacus*) consumes significant amounts of fruit, including species of agricultural value, such as cherries, plums, apricots, almonds, apples, and pears. It is also unique among woodpeckers in feeding fruit to its young (Cramp 1985).

The food sources of North American woodpeckers appear to be less well documented than those of Eurasian species. Bent (1939) and Terres (1982) note examples of the use of fruits in some species, and Iron and Pittaway (1995) describe this behaviour in the Pileated Woodpecker (*Dryocopus pileatus*), in this issue of *Ontario Birds*. Several authors, including Jackson (1970), Kilham (1970), Lawrence (1966), and

Stokes and Stokes (1983), have focussed specifically on the feeding ecology of the Downy Woodpecker (*Picoides pubescens*), but have made no mention of it using plant food, and Bent (1939) and Terres (1982) commented only briefly on the use of plant foods by this species. Therefore, it seems it worthwhile to note an observation of fruit-eating behaviour by a Downy Woodpecker.

On 29 July 1993, the author and Scott Jones were examining a wetland by canoe at the mouth of Stobie Creek, where it enters Lake Huron at Desbarats, about 50 km east of Sault Ste. Marie, Algoma District, when a Downy Woodpecker was observed in a Red Elderberry (*Sambucus pubens*) along the shore. We observed it eating the ripe berries of this shrub for a few minutes, and then we proceeded on along the edge of the wetland. We do not know how long the woodpecker continued to feed on the berries.

Given the variety of plant foods used occasionally by various species of woodpeckers (Bent 1939, Cramp 1985, Terres 1982), it seems likely that any succulent, non-toxic fruit can be used when available. However, only one specific report of the use of elderberry has come to our attention. Cramp (1985) noted that the Grey-headed Woodpecker (*Picus canus*) has been known to feed on Black Elderberry (*Sambucus nigra*) in Europe.

Undoubtedly, Downy Woodpeckers and other species of woodpeckers feed on fruit more frequently than the literature suggests. This behaviour should be looked for, especially in late summer and autumn, when many shrubs and trees are bearing mature fruits.

Acknowledgements

I thank Ron Pittaway for comments regarding the use of fruits by sapsuckers, and Ron Tozer for reviewing this manuscript and providing several literature references.

Literature cited

Bent, A.C. 1939. Life Histories of North American Woodpeckers. United States National Museum Bulletin 174. Washington, D.C.

Cramp, S. (ed.). 1985. Handbook of the Birds of Europe, the Middle East, and North Africa: The Birds of the Western Palearctic. Volume 4. Terns to Woodpeckers. Oxford University Press, New York.

Iron, J. and R. Pittaway. 1995. Pileated Woodpecker eating dogwood berries. Ontario Birds 13: 28-29.

Jackson, J.A. 1970. A quantitative study of the foraging ecology of Downy Woodpeckers. Ecology 51: 318-323.

Kilham, L. 1970. Feeding behaviour of Downy Woodpeckers. I. Preference for paper birches and sexual differences. Auk 87: 544-556.

Lawrence, L. de K. 1966. A comparative life history study of four species of woodpeckers. Ornithological Monographs No. 5.

Stokes, D.W. and L.Q. Stokes. 1983. A Guide to Bird Behaviour. Volume 2. Little, Brown and Company, Boston.

Terres, J.K. 1982. The Audubon Society Encyclopedia of North American Birds. Alfred A. Knopf, Inc., New York.

William J. Crins, R.R. 1, South Waseosa Rd., Huntsville, Ontario P0A 1K0.

Another Dovekie Record from Eastern Ontario

by
Bruce M. Di Labio

At dusk on 26 October 1993, on the Mississippi River approximately 3 km east of Carleton Place, Lanark County (Figure 1), a small black and white bird was shot as it approached duck decoys. The hunter believed that he had just shot a "Butterball" or Bufflehead (*Bucephala albeola*). Upon retrieving the bird, however, he realized that it was something quite different. The specimen was brought to Ivan Perry, a local Carleton Place birder, who identified the bird as a winter-plumaged Dovekie (*Alle alle*). Aware that this was a very unusual record, Ivan then contacted Mike Jaques, another local birder, who donated the specimen to the Canadian Museum of Nature in Ottawa. The author prepared a study skin of the specimen.

The specimen was in excellent condition (Figure 2). A few pellets to the head had killed the bird, leaving

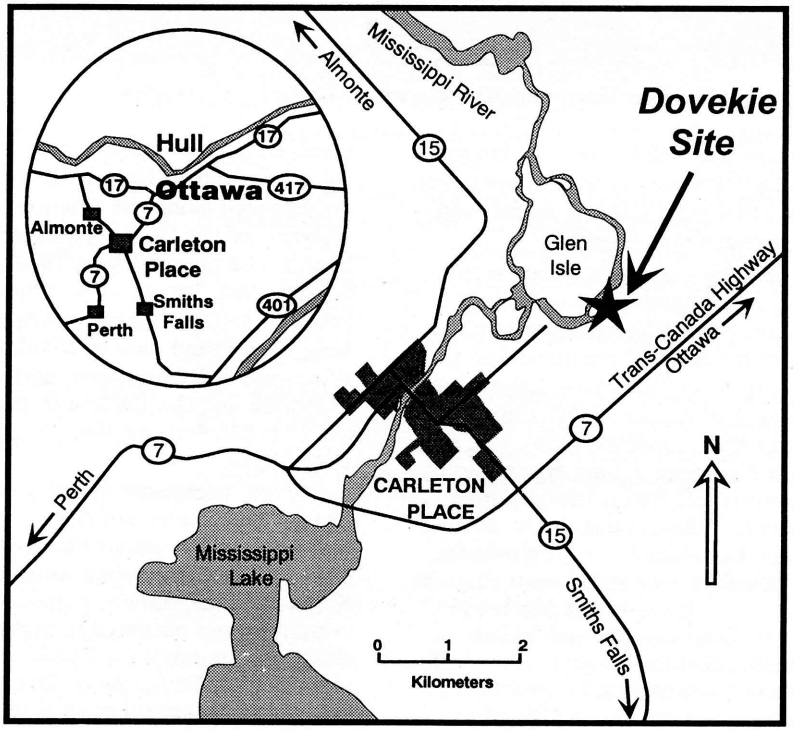


Figure 1: Location of 1993 Dovekie record.

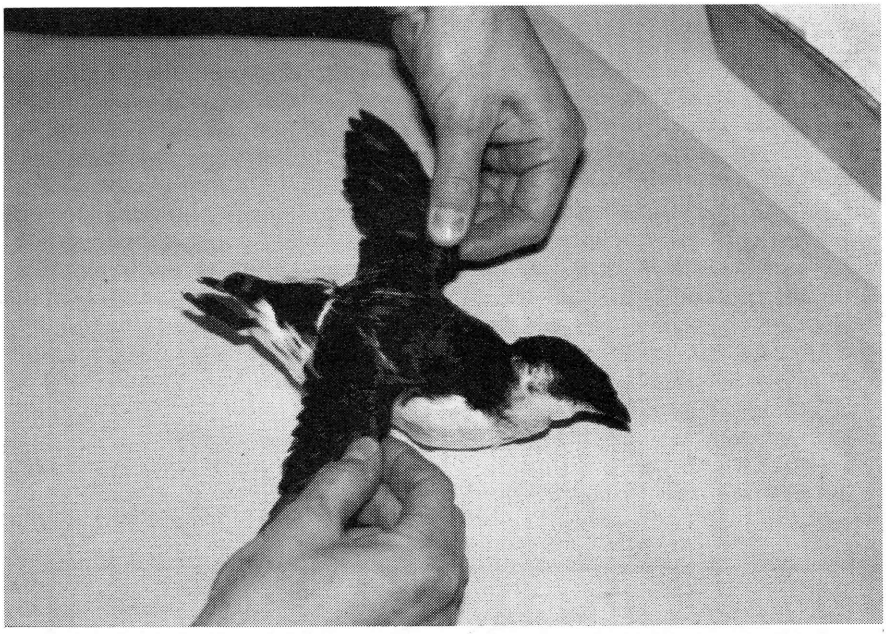


Figure 2: Carleton Place Dovekie specimen. Photo by *C. Traynor.*

all other parts of the bird undamaged. The Dovekie was very thin, weighing only 118.9 grams. It had no fat, and the stomach was empty.

Dovekies normally range across the North Atlantic Ocean. They breed colonially on cliffs from Greenland east to Iceland and northern Europe, and winter south to New Jersey, the Azores, and France (AOU 1983, Cramp 1985, Godfrey 1986). The first North American colony was recently discovered off Baffin Island (Finley and Evans 1984). Outside the nesting period, Dovekies are highly pelagic. Nevertheless, like some other migrant alcids (e.g., Thick-billed Murre, *Uria lomvia*), Dovekies are also known to occur in inland areas and areas well south of their normal range on occasion. Sometimes, in "invasion years", large numbers of birds are involved in these inland "wrecks". Such occurrences have been well documented along the Atlantic seaboard of the United States and inland (Murphy and Vogt 1932, Snyder 1953, Sprunt 1936, Veit and Petersen 1993). Vagrant Dovekies have been found west to Manitoba, Wisconsin and Minnesota, and south to Florida and the Caribbean Islands (AOU 1983, Godfrey 1986, Robbins 1991, Janssen 1987).

Severe northeasterly gales in the late fall and winter are cited frequently as the major cause of large inland Dovekie "wrecks" in eastern North America. Similar patterns of vagrancy have occurred in other alcids also, notably the Thick-billed Murre (Tuck 1960). While Dovekies are able to withstand most storms at sea, it has been suggested that

Table 1: Dovekie Records in Ontario

1.	Late Oct. 1924:	One killed by Mr. McDiarmid on Mississippi Lake near Carleton Place, Lanark County. Mounted specimen was brought to P.A. Taverner by Ted White. Specimen missing. (Fleming 1930)
2.	25 Nov. 1950:	One at Toronto. (Baillie 1951) Sight record.
3.	28 Nov. 1950:	Cpl. R.E. Brown reported a Dovekie in the taxidermy establishment of Mr. Ron Cameron, St. Elmo, Roxborough Township, Glengarry County. It had been found dead in Mr. Cameron's yard. At the time of discovery, there had been very high winds. Record on file at Canadian Museum of Nature (W.E. Godfrey, pers. comm.). Specimen missing.
4.	14 Jan. 1951:	One at Toronto (Baillie 1951) Sight record.
5.	8 Feb. 1955:	One found swimming in an apparent weakened condition by G.A. Scott at the Oshawa Harbour. Sight record (Baillie 1955).
6.	11 Nov. 1959:	One shot by hunters Whitmarsh and Pollard as it came into duck decoy on Mississippi Lake, near Lake Park. Record on file at C.M.N. Specimen missing (W.E. Godfrey, pers. comm.).
7.	19 Nov. 1963:	One found emaciated and dying at Lot 29, Concession 7, Cornwall Township, Stormont County. The specimen was donated to the Royal Ontario Museum. Specimen #93840. It was an immature male, weighing 92 grams.
8.	23 Oct. 1988:	One found dying along the shoreline between Port Weller and Port Dalhousie, Niagara Regional Municipality. It was an adult female weighing 87 grams, with no fat and empty stomach. R.O.M. specimen #154509 (Brad Millen, pers. comm.).
9.	26 Oct. 1993:	One shot by a hunter on Mississippi River, approximately 3 kms. east of Carleton Place, Lanark County. Specimen donated to the C.M.N. Ottawa. Specimen #96684. Accepted by the Ontario Bird Records Committee.

prolonged gales may cause their main food source, planktonic crustaceans, to move to greater depths - beyond the diving depth of Dovekies (Cramp 1985). Dovekies weakened by such storm-induced food shortages could be blown inshore and inland. Nevertheless, all large incursions have not been linked exclusively to severe storm conditions (Veit and Petersen 1993).

The available data suggest that the 26 October 1993 Dovekie record was an unexplained single occurrence. The weather in eastern Ontario between 21 and 25 October

was not unusual (Environment Canada, Atmospheric Environment Service). If there had been severe weather at an earlier date in the North Atlantic, however, it may have blown this bird off course and led to it wandering subsequently to eastern Ontario. No other Dovekie records, or inland records of other North American alcids, during autumn 1993 were mentioned in *American Birds* for eastern North America. Consequently, this Dovekie record does not appear to have been part of a larger "wreck".

All known Ontario records of the Dovekie are summarized in Table 1. (The first eight occurrences have not yet been reviewed by the Ontario Bird Records Committee.) Most records have occurred between late October and late November. Though some records suggest Dovekie occurrences can be directly linked to weather conditions, the remaining records lack sufficient data to determine the exact cause. A number of the Ontario Dovekies have been found dead or in weakened condition. It appears that Dovekies, by the time they reach inland locations, cannot survive in waters such as the Great Lakes, possibly due to the absence of appropriate food or being too weak to feed.

This is the ninth record of the Dovekie in Ontario and surprisingly, the fifth for eastern Ontario. It also represents the first record for the Ottawa recording district (within 50 km of Parliament Hill).

Acknowledgements

I would like to thank Ross E. Harris and Paul R. Martin for their valuable input in earlier versions of the manuscript, Brad Millen from the Royal Ontario Museum for specimen information, Norman Crookshank for preparing the map, Chris Traynor for the photograph and my wife, Laurie, who edited and typed the final copy.

Literature cited

American Ornithologists' Union. 1983. Check-list of North American Birds. 6th Edition. American Ornithologists' Union, Washington, D.C.

Baillie, J.L. 1951. Winter Season. Ontario-western New York region. Audubon Field Notes 5: 201-203.

Baillie, J.L. 1955. Winter Season. Ontario-western New York region. Audubon Field Notes 9: 254-256.

Cramp, S. (ed.) 1985. Handbook of the Birds of Europe and the Middle East and North Africa: The Birds of the Western Palearctic. Vol. IV. Oxford University Press. New York.

Finley, K.J. and C.R. Evans. 1984. First Canadian breeding record of the Dovekie (*Alle alle*) Arctic 37: 289.

Fleming, J.H. 1930. Ontario bird notes. Auk 47: 64-71.

Godfrey, W.E. 1986. The Birds of Canada. Second edition. National Museums of of Canada, Ottawa.

Janssen, R.B. 1987. Birds in Minnesota. The University of Minnesota Press, Minneapolis.

Murphy, R.C. and W. Vogt. 1932. The Dovekie influx of 1932. Auk 50: 325-349.

Robbins, S.D. 1991. Wisconsin Birdlife: Population and Distribution Past and Present. The University of Wisconsin Press, Madison.

Snyder, D.E. 1953. A great flight of Dovekie (*Plautus alle*). Auk 70: 87-88.

Sprunt, A. 1936. The southern Dovekie flight of 1936. Auk 55: 85-88.

Tuck, L.M. 1960. The Murres. Wildlife Series I, Canadian Wildlife Service, Ottawa.

Veit, R.R. and W.R. Petersen. 1993. Birds of Massachusetts. Massachusetts Audubon Society.

Bruce M. Di Labio, 44 Helmsdale Drive, Kanata, Ontario K2K 2S3.

Pomarine Jaeger: a reviewable species in southern Ontario?

by
Brian Henshaw

Introduction

The Pomarine Jaeger (*Stercorarius pomarinus*) is an annual vagrant in southern Ontario, usually occurring from September through November. In 1994, the Ontario Bird Records Committee announced that along with six other species, the Pomarine Jaeger was no longer on the list of species for which documentation is required in southern Ontario (Bain 1994). The criterion used for this decision was at least 30 southern Ontario reports published in *American Birds* during the five year period from 1988 to 1992 (M. Bain, pers. comm.). This five year review found 35 reports (M. Bain, pers. comm.), but the designated time period included two record years (1988 and 1991) which together provided 23 (40%) of all reports for the decade from 1984 to 1993. (An additional three reports for these two years were reviewed by the committee and found to be unacceptable). This note reviews reports and records of this species for the decade 1984 to 1993 inclusive, and comments on the recent decision by the OBRC to remove Pomarine Jaeger from the review list.

Reports for the period 1984 to 1993 were gleaned from *American Birds* and/or *Birders Journal*. These data were used as an estimate of the maximum possible occurrences of Pomarine Jaegers in southern Ontario during that period. It was assumed that the few observations not appearing in these publications, with one or two exceptions, were unlikely to amount to substantive records. Records accepted and rejected by the OBRC, and itemized in the annual reports of that committee, were also tabulated. Reports and records (a record being a report accepted by the OBRC) were tabulated by date and locality. Reports submitted to the OBRC but rejected were not used in this summary.

Results

There have been 57 reports of Pomarine Jaeger in southern Ontario (and two in northern Ontario) during the period, for an annual average of 5.7 . (A report is considered to be any number of birds seen together; the average number of birds reported at any one time is about 1.7). The OBRC received documentation for 31 reports during this period (only 48% of a total 64, including the seven rejected). This 23% rejection rate is in line with recent annual rejection rates for all species of 25% to 10% (Bain 1993, Bain 1994, Curry 1991). There have been 24 accepted records for southern Ontario during this period, for an average of only 2.4 records per year.

The fall months were divided into thirds, and reports were tabulated on that basis. The peak period of occurrence for all reports (but not individuals) is extended. There was a fairly even spread of *reports* from 15 September to 15 November, with

fewer in early September and late November. A small peak is evident from 19 October to 11 November, when over one-third of all reports occurred. When individual birds were tabulated they showed a strong peak in early November (strengthened in part by a report of 12 off Van Wagner's Beach, Hamilton, on 1 November 1993; this report has not been submitted to the OBRC).

When localities were reckoned, 38% emanated from the western end of Lake Ontario, with 16% from Lambton County (mainly the Sarnia area), and the remaining 46% from about 13 locales. The vast majority of reports and records concerned juveniles or un-aged birds, and only five reports (8%) concerned adult birds.

Discussion

High numbers of juvenile Pomarines were often reported in years when Parasitic Jaegers (*S. parasiticus*) were plentiful. The main food source for breeding Pomarines is tundra rodents; this species does not breed when lemming numbers are depressed (Maher 1974). Breeding Parasitics feed mainly on passerines, birds' eggs, berries and insects, and also by kleptoparasitism (Maher 1974, Furness 1987). Although bad weather during the northern summer, and weather patterns during migration, may affect numbers of both species reaching southern Ontario, it seems paradoxical that numbers of juveniles of both species would be synchronous.

The reported dates of arrival for Pomarines in southern Ontario also closely follow those for Parasitics. Furness (1987) quotes several sources in arriving at the conclusion that Pomarine Jaegers arrive at latitude 40-60 degrees North on average three weeks later than Parasitics. Even allowing for a differential in behaviour when reaching Lake Ontario, this indicates that early jaegers are more likely to be Parasitics. These early birds would also arrive at a time when observers are most unfamiliar with their "jizz", making positive identification even more difficult. Early Pomarines do occur in southern Ontario (see OBRC Annual Reports), but misidentifications are likely to be more frequent at that time.

The identification of jaegers is frought with difficulties. Adults are usually straightforward (although all three are misidentified occasionally!). Juveniles, however, provide one of the most challenging regular identification problems for southern Ontario birders. Observers need to rely heavily on structure and size, the latter often being entirely subjective and the former being much more difficult when the observer does not have comparative experience, but positive identifications should always include plumage detail as well. Large, juvenile, female Parasitics occurring in early September, are prime candidates for misidentification as Pomarines. Observers familiar with Pomarine Jaeger may well wonder what all the fuss is about. Pomarines often impart a jizz more like that of a skua (*Catharacta* sp.) than a jaeger. Pomarine Jaegers are much more likely to catch and kill a seabird, very rarely, if ever, engaging in the energetic acrobatics of Parasitic Jaegers. I have watched Pomarine Jaegers killing or attempting to catch

Sooty Shearwaters (*Puffinus griseus*), Black-legged Kittiwakes (*Rissa tridactyla*), and various alcids. Usually Pomarines will attack these birds while they are resting on the surface of the water, soon giving up the chase once the intended victim becomes airborne.

The total number of Pomarine reports per year (less than six) may translate to less than four reliable records, but even if all 57 had been documented, extrapolation of the rejection rate of 23% would still amount to less than five records per year.

Another factor further obscures the situation in southern Ontario. The high percentage of reports (38%) from the western end of Lake Ontario undoubtedly includes at least some duplication of individuals (cf. the accepted records in the 1993 OBRC report). Certain individual birds are known to have lingered for extended periods in the western basin area, e.g. the "chip" bird of 1990 (Curry 1991).

Conclusion

These comments have been made to demonstrate that undocumented reports appearing in birding publications (not those reports submitted to the OBRC) may include a number of unidentifiable birds. For Pomarine Jaeger especially, these reports are not a good guide to ascertain whether or not the species should be dropped from the review list. Given the average annual total of accepted records of 2.4, the average annual total of about 5.7 reports, the difficulty of identification of juvenile jaegers, and the possible anomalies in the occurrence patterns of reports, this species may merit reinstating as reviewable by the OBRC.

Literature cited

Bain, M. 1993. Ontario Bird Records Committee Report for 1992. Ontario Birds 11: 46-63.

Bain, M. 1994. Ontario Bird Records Committee Report for 1993. Ontario Birds 12: 41-58.

Curry, R. 1991. Ontario Bird Records Committee Report for 1990. Ontario Birds 9: 18-44.

Furness, R.W. 1987. The Skuas. T. & A.D. Poyser, Staffs., England.

Maher, W.J. 1974. Ecology of Pomarine, Parasitic and Long-tailed Jaegers in northern Alaska. Pacific Coast Avifauna 37: 1-148.

Brian Henshaw, Box 86, Brooklin, Ontario L0B 1C0.

Book Reviews

Kingfishers, Bee-eaters, and Rollers: A Handbook. 1992. By *C. Hilary Fry* and *Kathie Fry,* illustrated by *Alan Harris.* Princeton University Press, Princeton, New Jersey. Hardcover, 324 pages, 40 coloured plates plus line drawings and 114 range maps. $49.50 U.S.

This book is another in the Identification Guide Series of comprehensive monographs including *Seabirds, Shorebirds, Waterfowl, Swallows and Martins, Finches and Sparrows,* and *Warblers* published variously by Princeton University Press and Houghton Mifflin. The present volume covers the world's 12 rollers (Coraciidae), 24 bee-eaters (Meropidae), and 87 kingfishers. The latter, following Sibley and Ahlquist, are considered here to be comprised of three separate families: the Dacelonidae (56 species of kookaburras and halcyon kingfishers centred in Australasia and the far east), the Alcedinidae (22 small blue and rufous species mainly found in the African and Oriental tropics), and the Cerylidae (the 9-member, largely American green and giant kingfisher group which includes our Belted Kingfisher).

The book begins with a concise overview of current ideas on the taxonomic status of the five families plus that of the remaining, otherwise untreated groups (motmots, todies, ground-rollers, and Cuckoo-roller) in the order Coraciiformes. Succeeding chapters deal with the food and foraging of kingfishers, bee-eaters, and rollers, their nesting, social and breeding behaviour, their distribution and derivation, and a short section on the precarious status of several island rarities. The treatments are authoritative - which is to be expected since Hilary Fry has been publishing on all three groups since the 1960s - and pleasingly well written. The authors draw on the works of others whenever appropriate (particularly a huge, privately published monograph on kingfishers by J. Forshaw) but their vast personal experience with these birds is also captivatingly evident throughout these overviews.

The same flavour is carried over into the individual species accounts. Each bird is usually discussed under the general headings of *Field Identification, Voice, Geographical Variation, Habitat and Range, Food, Habits* (including *Nesting* and *Laying Months*), *Description,* and *References* but Fry and Fry don't hesitate to expand their treatments when they see fit to include extra knowledge, special insights, interesting anecdotes, or unanswered questions about a particular species.

The species accounts are enhanced here and there with line drawings that illustrate various displays, postures or fine points of identification but it is the coloured plates near the front of the book that make the greatest visual impact.

Here, on page after page, are illustrated some of the world's most stunning birds (the Carmine Bee-eater gets my vote as **the** most beautiful bird on Earth). Since your

reviewer has seen only two rollers, two bee-eaters and seven kingfishers - and most of them longer ago than he cares to tell you - I am hardly qualified to comment on the fidelity of Alan Harris' paintings. The ones I know are very good but all I can say about the others is that, to me, they look like convincingly real, live birds and are truly beautiful. All 123 species are shown in this book but so many well-marked subspecies are also illustrated that the 40 plates include no fewer than 350 different portraits. The Mangrove Kingfisher alone is given 17 different treatments in an attempt to capture the range of plumages exhibited by the 50 (!) different races of this one species.

This last example may be the most extreme case of island to island variation shown in this book but it is far from the only one. Indeed, I found that Harris' depiction of so many races, not to mention of so many other similar forms now judged to be full species, was as fine an illustration as one could ever hope to see of the power of geographic isolation to produce new forms of life.

The same wealth of illustrations also leads, however, to the one criticism I have of this book and of this series. Someone decided that, rather than identifying each bird right beside its image, it would somehow be better to put a number and letter combination there instead. The reader can then look for the same number above one of the range maps on the facing page and thence to the English and Latin names of the species beside it. After that, you can look for the letter part of the combination in a list of abbreviated Latin names of the different forms illustrated for that species (i.e. subspecies or age-specific plumage) appearing on the right of the range map. After that, if you can still remember what you are doing - not a facetious remark after going through 5 or 6 plates of totally unfamiliar species - you will at last find out, after four steps, that the pretty little bee-eater on plate 33 marked 103f, for example, is the subspecies *cyanophrys* of the Little Green Bee-eater (*Merops orientalis*). Then, if you care to go through the same four steps all over again, you can find out what the bird beside it is. I found this process so annoying that I took a couple of hours to do in pencil what the book designers should have done in type in the first place - namely write the name of every bird beside its portrait, so that the four step learning process is reduced to a one step process (x 350 illustrations = big savings in time and exasperation). At the same time, because I often found it difficult to know, when looking at many illustrations on a plate, where the forms of one species stopped and those of a new, similar species began, I drew solid lines between the species clusters and then, within such groupings, dashed lines between subspecies where appropriate. In a way it was a shame to mark up such a beautiful book but that's what it took to make it user-friendly.*

Considering that just one of the 123 species covered in this book occurs in Canada, and only six (all kingfishers) in the western hemisphere, many readers may choose to pass on this steeply priced book. Then again, if you want to explore vicariously incredible avian riches of Africa or the Far East - or be inspired to see them for yourself -

then this book should be high on your list. Let me leave you with the following twitch-provoking passage ...

"Carmine Bee-eaters (the most beautiful bird in the world after all!) *follow people, tractors and grazing animals, catching insects disturbed from the grass, and they have the engaging habit of riding on the back of an Ostrich, bustard, stork, Secretary-bird, goat, camel, antelope, zebra or warthog, dashing away every few moments to catch an insect put to flight, and returning to incapacitate it by beating it against the antelope's horns or the Ostrich's back."*

*The journal editors have pointed out to me that at least one other title in this series, namely *Shorebirds,* has plates that are so crowded that it would be rather more difficult to put in names beside all the illustrations. Even in this work, however, and even if it meant using undersize type, it would still be preferable to name each form beside the appropriate illustration. Any book or series calling itself an "identification guide" should **help** the reader to identify rather than using a design that positively hinders that process.

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

The Birds of Quetico Park and the Atikokan Area. 1994. By *David H. Elder,* illustrated by *Gisela Ewald.* Friends of Quetico Park, P.O. Box 1959, Atikokan, Ontario, P0T 1C0. Paperback. 247 + v pages, black and white photographs, line drawings, and location map. $14.75 + 8% PST (Ontario Residents) + $3.50 shipping charges + 7% GST (Canadian Residents) or $2.50 (U.S. Residents).

As a long-time collector of bird checklists and books that describe the status of species in various areas, particularly Ontario, I was delighted to acquire the latest regional bird book of that sort. Elder's new book is more than just an annotated checklist, however. While it does have much of the detailed species-by-species information that appeals to dyed-in-the-wool bird listers, it also contains a great deal of basic behavioural information that beginning birders or casual visitors to the Quetico-Atikokan area who have a passing interest in birds might find useful.

In particular, there are descriptions of nine habitat types in the area, within each of which the variety of bird life is fairly limited. Thus, a reader with only elementary birding skills is able to cope more easily with the task of identifying common birds in any particular habitat. Instead of looking through the entire book for what birds might be expected, one can quickly eliminate the vast majority and focus on the twelve to thirty-two likely species in any habitat which are listed at the end of each habitat description.

More advanced birders, especially those who are visiting from out of province or from even farther afield, can turn to the checklist provided as an appendix, where the status (common, uncommon, rare, or vagrant) of each species is provided. Whenever I travel to an unfamiliar part of the continent, or to other

continents, a book like this one, especially if it has range maps (which most regional guides, including this one, do not have), is of great help to me in determining what the common birds are that I am seeing. The next best thing is a checklist, and this book does provide that, albeit without any indication of seasonal abundance, which would have enhanced the list. If I put myself in the shoes of a birder visiting the Quetico-Atikokan area from some other part of North America (and there probably are a good many who do so on their holidays), I can see myself carrying, along with my Peterson, this useful guidebook and flipping constantly from the habitat descriptions to the checklist and back again. If I had time during my visit to devote to concentrated birding, I would want some directions to local "hot spots" or, better still, the addresses of local birders who might be willing to show them to me. Neither of these appears in this book.

For serious Ontario birders, including, probably, most readers of *Ontario Birds, The Birds of Quetico Provincial Park and the Atikokan Area* provides a teasing look at what may be expected in an area that lies solidly within Ontario's boreal forest but is tantalizingly close to the prairie biome and on the margins of the southeastern mixed forest. It is no accident that Ontario birders make pilgrimages to the Rainy River area, some two hundred kilometres to the west, to flesh out their Ontario lists with western species such as American White Pelicans, Swainson's Hawks, Sharp-tailed Grouse, Piping Plovers, Willets, Marbled Godwits, Wilson's Phalaropes, American Avocets, Franklin's Gulls, Western Kingbirds, Black-billed Magpies, Mountain Bluebirds, Clay-colored Sparrows, Le Conte's Sparrows, Western Meadowlarks, and Yellow-headed Blackbirds. All but four of these have occurred, with varying degrees of regularity, in the Quetico-Atikokan area, despite the distance from the core of their normal ranges. If I had to predict the next four species to appear for the first time in that area, I would single out these four, in descending order of probability: Franklin's Gull, Western Kingbird, American Avocet, Marbled Godwit. Rarer, more western vagrants (Western Grebe, Rufous Hummingbird, Say's Phoebe, Varied Thrush, Sage Thrasher, three Lark Sparrows, and, amazingly an Inca Dove and a Great-tailed Grackle) have also been recorded. It is also no accident that Canada's largest single-day lists are consistently achieved in an area not far from the Quetico-Atikokan region - southeastern Manitoba - where east meets west and north meets south.

Among the southern species which summer at least occasionally and quite possibly breed in the area covered by this book are Upland Sandpipers, Yellow-billed Cuckoos, Eastern Screech-Owls, Red-headed Woodpeckers, Eastern Wood-Pewees, Great Crested Flycatchers, Warbling Vireos, and Pine Warblers, an assemblage that would be unheard of in the Kirkland Lake area, which lies at the same latitude in northeastern Ontario. There are multiple records of Northern Mockingbirds, White-breasted Nuthatches, Summer Tanagers, and Lark Sparrows, and single observations of Least Bittern, Red-shouldered Hawk, Carolina Wren, Loggerhead Shrike, Golden-

winged Warbler, and Prothonotary Warbler. All of this is juxtaposed with all of the typically northern species which seldom occur in southern Ontario.

With a respectable total of 252 species having been recorded in an area that has had little systematic ornithological coverage and in which there are few active birders, the time was ripe for upgrading Peruniak's 1969 and 1971 list, which contained only 107 species. Unfortunately, such a book as this can never be kept up to date; on the very day that this review was written, I learned of the appearance of the 253rd species (Gray-crowned Rosy-Finch). While definitely a western vagrant, it was not among my four predictions. Elder has done an excellent job of contributing to the ornithological literature of Ontario. At the same time, he has managed, with the artistic assistance of Gisela Ewald, to produce an attractive and reasonably priced book that will appeal to a broad readership. He has also generously donated all of the proceeds from the first printing to Friends of Quetico Park.

Frederick M. Helleiner, 35 Kingwood Dr., Peterborough, Ontario K9J 6N2

Photo Quiz

by
Bob Curry

Our quiz bird is quite a small passerine judging its size in comparison to the twigs and leaves adjacent. It also has a fairly finely proportioned bill tapering to a comparatively fine tip. Few of our small birds combine densely streaked underparts and a slender, fine-tipped bill. Such a combination eliminates all the blackbirds and finches leaving only the *Parulinae* or wood-warblers. Again, using the same combination, we can quickly sift through the warblers bringing the range of possibilities down to about five species. Black-and-white photography has the advantage of forcing us to concentrate on pattern, contrast and shape rather than colour - a good thing in honing identification skills. The contrast is not great in this bird and this, in combination with the withering, dessicated leaves, indicates that we're dealing with one of those dreaded "confusing fall warblers", the stock-in-trade of bird guides.

All the potential species belong to that large genus of (at least in our province) northern forest warblers, the *Dendroicas*. I suppose a case could be made for a first basic Townsend's Warbler, a vagrant to Ontario, but the underpart streaking is too extensive, extending beyond the legs, and the auriculars are dark but not as contrasty as in Townsend's which, in addition, always has two distinct wing bars. Palm Warbler has streaked underparts, although again not so extensive, and a lighter rump like the photo bird, but it has much duller wings with vague lighter bars, less noticeable auriculars, its undertail would not appear so bright, and it is overall a slimmer bird than this one. Fall (basic) Blackpoll is certainly streaked but there are so many differences between it and our bird that I hesitate to mention it as a possibility. These include (in Blackpoll) the light coloured legs, the presence of two distinct wing bars, the lack of contrasting auriculars and rump seen in the subject and so on. Magnolia has a contrasting light rump, even more than our bird, and in alternate (breeding) plumage the male has extensive white wing coverts, while in fall all sexes and ages have two distinct white wing bars and the underpart streaks are not so long but are broader and blotchier. Again the head area lacks the pattern of our bird.

Probably the most difficult bird to distinguish from our bird would be a particularly dull first basic Yellow-rumped Warbler. However, in this species, the underpart streaking would be less extensive and the stripes broader. The throat would stand out more in contrast with the remainder of the underparts, the rump more with the upper tail and back, and the head-nape-back area would be concolour. Once again, there would be two definite, if perhaps dull, wing bars.

The most compelling feature of the bird is the white slash created by the mostly white greater and median upper wing coverts, a diagnostic feature of male **Cape May Warbler** in basic plumage. In fact, it's a pity that, for this quiz, we were not presented with a first basic female Cape May which lacks this white wedge and can be very dull indeed. In that case, a feature it shares with our bird, namely the light sides of the neck extending up to the nape area is diagnostic and, together with the bold but incisive underpart streaks, will

clinch the identification. Incidentally, the upper mandible of Cape May Warbler often is a little more down-curved throughout its length than on this bird (which was photographed by Jim Flynn).

Editors' Note:
Henceforth, our quiz bird photograph and its solution will appear in the same issue.

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

PUBLICATION NOTICES

A Birder's Guide to the Sault Ste. Marie Border Area. 1995. By *Edward Czerwinski.* Available from the Sault Naturalists of Ontario and Michigan, Box 21035, 292 Northern Avenue East, Sault Ste. Marie, Ontario P6B 6H3. $6.75 (incl. postage and handling).

This guide describes 16 of the best birding locations in the Sault Ste. Marie area. It contains maps and directions to 10 sites in Ontario and 6 sites in nearby Michigan. Recent bird observations from each location enhance the text. Some of the local highlights include Gyrfalcon, Harlequin Duck, Great Gray Owl, Snowy Owl, and Northern Hawk Owl. *Ontario Birds* will publish a full review of this new guide in an upcoming issue.

Artificial Nest Structures for Ospreys: A Construction Manual. By *Peter J. Ewins.* Canadian Wildlife Service Report CW66-134/1-1994E. Available from the Canadian Wildlife Service, 25 St. Clair Ave. East, Toronto, Ontario M4T 1M2. Free.

This report contains brief background information on the nesting site preferences of Ospreys, and then provides considerable detail on numerous designs for nesting platforms that can be erected to encourage the nesting of these birds. Photographs and/or illustrations, measurements, construction tips, and examples of existing structures are provided for each design. There are also suggestions on who to contact to pursue a nest platform project, or to find out more about Ospreys.