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Cover Illustration: Red-bellied Woodpecker (*Melanerpes carolinus*)
Barry Kent MacKay

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Letters to the Editors

Hi Chip,

I read with interest your review article of Little Gull nesting on North Limestone Island for the period 1979 to 1991.

In the interest of completing the nesting information for this time period, it may be of interest to you that I made a field trip to North Limestone on 10 July 1981, at which time I photographed two pairs of adults, nesting habitat, two empty nests, and a recently-hatched young.

A nest card of this breeding is on file in the Ontario Nest Records Scheme and it was noted in the annual report (ONRS 18). The record was also published in Ontario Birds, in April 1994 (see citation below):

Peck, G.K. and **R.D. James**. 1994. Breeding Birds of Ontario: Nidiology and Distribution. Volume 1: Nonpasserines (First Revision – Part C: Jaegers to Woodpeckers). Ontario Birds 12: 11-18.

It is our hope to keep the records in the ONRS database as complete as possible for all provincial nesting species.

Cheers,

George Peck

Reply: *George, Thank you very much for bringing this record to my attention. Obviously, I should have picked up on it myself. Let's compare what is in the ONRS with the data in my paper and I will provide any additional Nest Record Cards that are missing.*

Sincerely,

Chip Weseloh, Co-editor

ARTICLES

LEUCISTIC BIRDS IN ONTARIO

Barry Cherriere

Introduction

Leucism describes a plumage aberration in which a bird has a normal pattern and colour of plumage that is discernable, but is pale and washed out (Sage 1962). These birds often have normal bill and soft part colours, but the plumage is faded. This effect results from the lack of melanin pigment in feathers, but other carotenoid pigments may be present (Harrison 1962, Lucas and Stettenheim 1972). A partial albino, on the other hand, would lack melanin in only part of the plumage, either symmetrically or asymmetrically (Lucas and Stettenheim 1972). Only an individual completely lacking in pigment would accurately be called an albino.

The terms leucistic and leucism are derived from the prefix *leuc-*, the Latin variant of *leuk-*, from the Greek *leukos,* meaning "white". This prefix in both Latin and Greek is pronounced with a hard C or K sound, hence the correct pronunciation of leucistic is loo-kiss-tic, and leucism is loo-kism. (As a variant of *leuk-*, the terms may sometimes be spelled leukistic and leukism).

The term *schizochroism* (skiz-ZOK-row-ism — from the Greek *skhizein*, meaning "to split") has also been used to

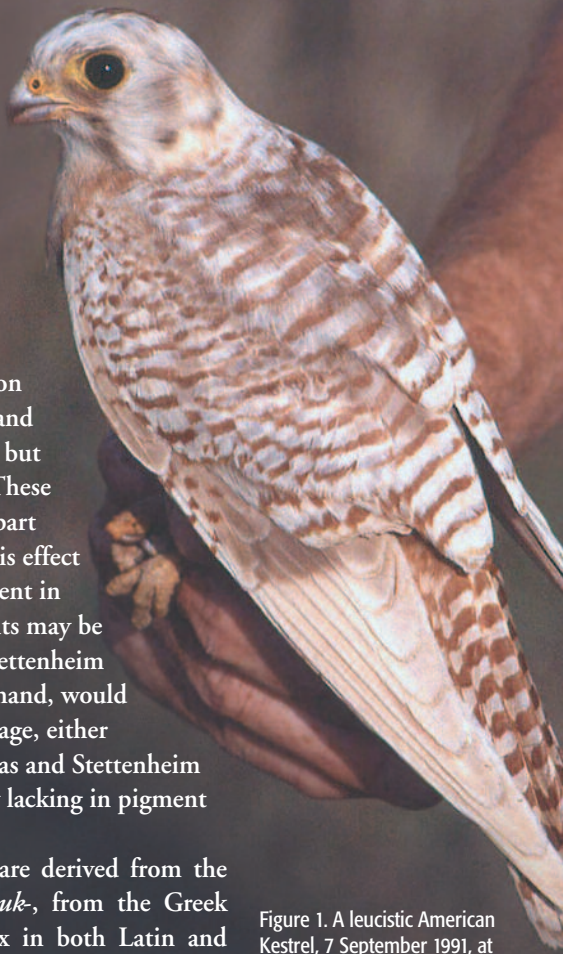

Figure 1. A leucistic American Kestrel, 7 September 1991, at Hawk Cliff, Elgin County, Ontario.
Photo: Barry Cherriere

describe birds that lack one of the pigments normally present, and may then exhibit a pale or washed out appearance (Van Tyne and Burger 1976, Terres 1980). Some authors consider this synonymous with leucism (e.g. Trost 1999), although, there may be other coloured birds not fitting leucism (e.g. blue coloured parrots — see Van Tyne and Burger 1976). Since leucism is derived from the root for white, it seems a much more appropriate name for overall pale whitish birds.

This paper recounts five instances where I have seen leucistic birds in Ontario. Photographs are provided for three of these birds, representing a range of variation in paleness.

Observations

My first encounter with a leucistic bird involved an American Kestrel (*Falco sparverius)* at the Hawk Cliff banding station south of Saint Thomas, Elgin Co., with the late Bruce Duncan. On 7 September 1991, we had observed the kestrel at a distance, and were discussing how remarkable it would be to be able to observe it in hand. Fortunately, Janet Snaith was able to lure in and capture that kestrel (Figures 1 and 2). This was an immature bird, with a nearly normal bill and eye colour. The areas normally black were white or nearly so, leaving the rufous colours much as they would be on a normal bird. At the time and location, it was no doubt a migrant bird.

Figure 2. The leucistic American Kestrel, 7 September 1991, at Hawk Cliff, Elgin County, compared to a normally coloured kestrel. *Photo: Barry Cherriere*

My next enounter involved a Red-necked Grebe (*Podiceps grisegena*) at the Burlington ship canal, Hamilton, on 14 January 2001. Due to circumstances of distance and lighting, I was unable to photograph this bird. However, Kevin McLaughlin provided the following field notes from his sighting on 13 January: overall white; bill normal colour; dusky brownish above and behind the eye; thin dark stripe down nape; dusky lower hind neck; light gray scapulars; coverts slightly darker gray. At this time of year, the bird was in winter plumage, and except for an apparently normally coloured bill, was decidedly much paler than expected. This also was no doubt a migrant at this location.

The next sightings involved two different Black-crowned Night-Herons (*Nycticorax nycticorax*). The first was on 25 May 2003 at the colonial nesting islands at the northeast shore on Hamilton Harbour. This bird was unapproachable for photographs. The bird was very pale overall, much like the second night-heron seen (below). While seen in the breeding season, the origins of the bird are unknown.

The second night-heron was discovered on 15 October 2006. It was a juvenile seen at Van Wagners Ponds across the road from Hutch's Restaurant, Hamilton, along the rail trail (Figures 3 and 4). On this bird, even the bill seemed somewhat paler than normal, and all

Figure 3. A leucistic Black-crowned Night-Heron, 15 October 2006, at Van Wagners Ponds, Hamilton, Ontario.
Photo: Barry Cherriere

Figure 4. Another view of the Black-crowned Hight-Heron at Van Wagners Ponds, 15 October 2006. *Photo: Barry Cherriere*

the normally brownish areas were only pale buff all over. This bird was so pale overall that, as it flew around, it struck me as having the likeness of both an egret and a Snowy Owl (*Bubo scandiaca*). While it may have been raised locally, it was more likely a wandering bird, otherwise it might have been seen earlier in local colonies.

Finally, on 7 April 2007, a leucistic Horned Grebe (*Podiceps auritus*) was seen at the Oakville bluffs lookout, Halton R.M., at the end of East Street. I discovered this bird while searching for a Western Grebe (*Aechmophorus occidentalis*) that had recently been reported with a large number of Red-necked Grebes offshore at this locality. The leucistic grebe came close to shore alone and was photographed from above (Figure 5). About 45 minutes later it returned, accompanied by a normally alternate plumaged Horned Grebe, providing an excellent comparison (Figure 6). The leucistic bird had a nearly normally coloured bill, somewhat faded at the tip and base. The normal chestnut or black areas were much faded, and the orange of the horns was completely gone.

Discussion

Abnormally pale-coloured birds have been described for a wide variety of species, including: ducks and geese, partridges and quail, grebes, herons, vultures, diurnal raptors, seabirds (Dovekie *Alle alle* and murre), doves, woodpeckers, crows and magpies, larks, thrushes, starlings, warblers, blackbirds, and weaver finches. However, it has not always been clear that they would correctly be called leucistic.

As a relataively rare phenomenon, leucism is not well studied or understood. Some have suggested that it might be induced directly by diet deficiency or toxicity (see Harrison 1964). Since diet can influence the coloration of plumage (see Derbyshire and Flinn 2007) this may seem an attractive theory at first. A deficient diet could result in a paler bird, particularly where diet is necessary for normal colouration

Figure 6.
The leucistic Horned Grebe, 7 April 2007 at Oakville bluffs, compared to a normally coloured bird.
Photo: Barry Cherriere

Figure 5. A leucistic Horned Grebe, 7 April 2007, at the Oakville bluffs lookout, Halton R.M., Ontario.
Photo: Barry Cherriere

(e.g. flamingos or House Finches *Carpodacus mexicanus*). But this alone seems an unlikely explanation for leucism. Leucistic birds can occur in many species with a wide variety of diets, and over a wide geographic range, not just where pollution or a diet deficiency might be expected to occur. Albinism is generally considered a genetic effect, and genetics undoubtedly contributes to leucism. Where inadequate or toxic diet influences genetics indirectly, perhaps it plays a role.

The birds figured here show the wide range of variation from nearly white to well marked, although not of normal colouration. Since the paleness of leucistic birds can vary, it suggests that the genes for normal feather colour are not expressed fully in leucistic birds. It would seem to be a case of incomplete dominance. However, it should be noted that the orange of the Horned Grebe horns was also missing. This might be expected to be provided by a carotenoid pigment, supplied by the diet. So there may be an interaction between diet and genetics. Much is yet to be learned, and hopefully these examples will add to the information about leucism.

Acknowledgements

I would like to thank Kevin McLaughlin for use of his field notes, and for helpful suggestions on an earlier draft of this paper.

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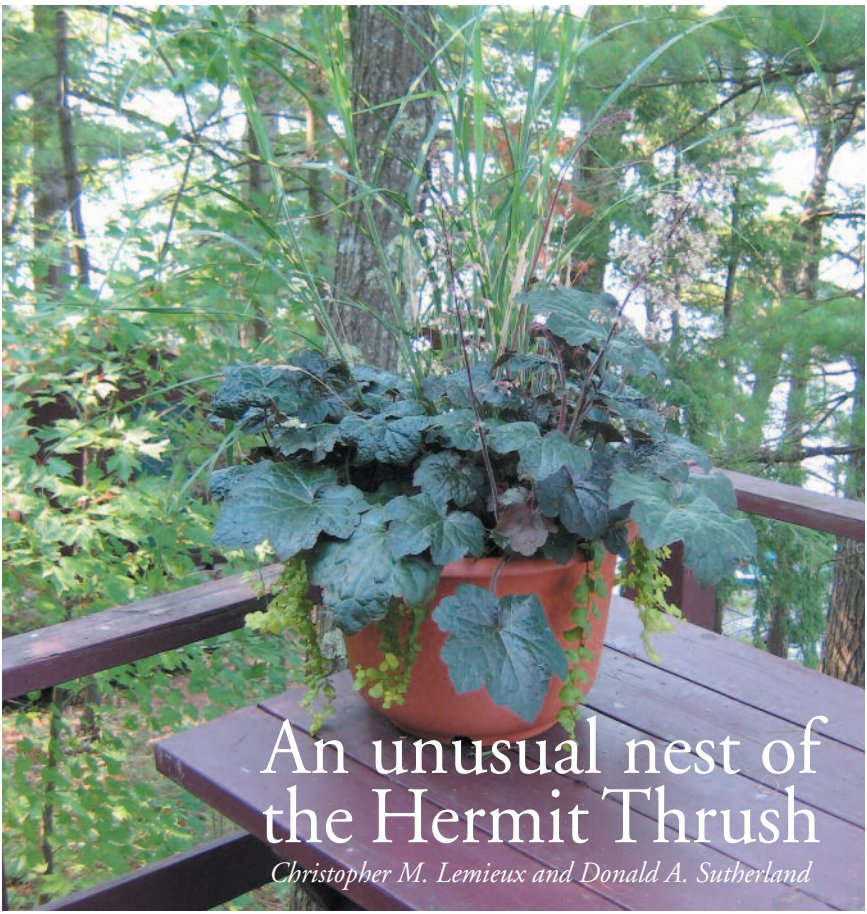

An unusual nest of the Hermit Thrush

Christopher M. Lemieux and Donald A. Sutherland

Figure 1: Potted plant containing the nest of a Hermit Thrush at Gold Lake, Peterborough Co., 25 July 2007. *Photo: C.M. Lemieux.*

The Hermit Thrush is a widespread and common breeding species in Ontario, nesting in a wide variety of dry to wet habitats, primarily in coniferous and mixed forest. The species often nests in or near clearings or along forest edges (Peck and James 1987). Nests are typically located on the ground or occasionally low in shrubs or saplings. Records indicate that the Hermit Thrush seldom nests on or around human habitations or other anthropogenic structures (Peck and James 1987, 1998; Jones and Donovan 1996).

On 24 July 2007, the nest of a Hermit Thrush was discovered by the primary author and Paul E. Clifford in a potted plant on the elevated deck of a cottage on Gold Lake, Galway and Cavendish Township Municipality,

Figure 2: Detail of Hermit Thrush nest amongst stems of Coral Bells, Golden Moneywort and Zebra Grass in potted plant, 28 July 2004. *Photo: C.M. Lemieux.*

Peterborough County, 44º 43′ N, 78º 16′W (Figures 1, 2). The potted plant was located on a picnic table directly outside a door providing access to the deck, which was elevated approximately 3.6 m above the surrounding grade. The standard 25 cm plastic flower pot was planted with a mixture of Coral Bells (*Heuchera* hybrid), Golden Moneywort (*Lysimachia nummularia* 'aurea'), and Chinese Silver Grass or Zebra Grass (*Miscanthus sinensis* 'zebrinus').

The nest and surrounding habitat were otherwise characteristic of the species. The surrounding habitat was generally typical of the Kawartha Highlands area and can be described as mature to moderately mature White Pine-Red Oak-maple forest on rocky, gently to steeply undulating relief with numerous small lakes and other wetlands. The Hermit Thrush is a widespread and relatively common breeding species in the Kawartha Highlands. The nest, which contained one egg at the time of its discovery, consisted of a slight depression in the potting soil amongst the plant stems, and was constructed of dead leaves (Sugar Maple, *Acer saccharum* ssp. *saccharum*, and Red Oak, *Quercus rubra*) and pine needles (primarily White Pine, *Pinus strobus*) and lined with fine grass stems, rootlets and pine needles. The clutch of four eggs was

completed and incubation initiated on 28 July. On 10 August, it was discovered that the nest had failed, following the drying and wilting of the untended plants in the pot. Records of anomalous nest locations for Hermit Thrush are summarized by Peck and James (1987, 1998), Jones and Donovan (1996) and Tozer (1997). Other nest locations around human habitations include sites in rain gutters, in old Eastern Phoebe (*Sayornis phoebe*) nests on drip caps, head jambs and nesting trays above windows, on rafters under roofs and in other locations under the eaves of buildings. Other unusual nest locations have included an abandoned mine shaft, in short grass under a cemetery grave marker, in the rough of a golf course fairway, in a cavity in a deciduous tree, on roadside rock cuts, on low (<2 m) ledges on vertical rock faces and on the side of a boulder, in the previously used nest of a Northern Waterthrush (*Seiurus noveboracensis*) and on the outer limb of an Eastern Hemlock (*Tsuga canadensis*), 4.3 m above the ground (Armstrong and Euler 1983; Peck and James 1987, 1998; Jones and Donovan 1996; Tozer 1997).

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First nest records of the Great Black-backed Gull on Lake Erie

Dave Moore, Ralph Morris and D.V. Chip Weseloh

The Great Black-backed Gull (GBBG, *Larus marinus;* Fig. 1) is a large, black-mantled gull with a mainly palearctic breeding distribution. In North America, it breeds on the Atlantic coast from Labrador to North Carolina, in the St. Lawrence Estuary and in the Great Lakes region (Godfrey 1986, Good 1998).

Prior to the early 1930s, it was considered a rare or uncommon winter visitor/resident on the lower Great Lakes (De Kay 1844, McIlwraith 1894, Savage 1895, Eaton 1910, Mayfield 1943, Good 1998). After 1934, reports of GBBGs in winter increased greatly on Lake Ontario, Lake Huron (Angehrn *et al.* 1979) and the south shore of western Lake Erie (Mayfield 1943; Dolbeer and Bernhardt 1986). Christmas Bird Count indices for Ontario show similar patterns to the studies cited above: few birds were observed prior to the early 1940s, an increase from 1943 to 1952 followed by a decline, then a dramatic increase from the mid-1970s to 1999 followed by a decline to present (National Audubon Society 2002).

The first recorded nesting of the Great Black-backed Gull on the Great Lakes, in 1954, was on Little Haystack Island, one of the Fishing Islands off the west coast of the Bruce Peninsula in Lake Huron (Krug 1956). During the 1960s and 1970s, GBBGs nested irregularly on two islands (Gull Island and Pigeon Island) in eastern Lake Ontario (Angehrn *et al.* 1979, Blokpoel & Weseloh 1982, Peck & James 1983, Weseloh 1984, Blokpoel 1987, Ewins *et al.* 1992, Canadian Wildlife Service [CWS], unpubl. data). During 1981–1985, single pairs were confirmed at six islands on Lake Ontario and one island on Lake Huron (Blokpoel 1987). It was also during this period that the first annually reoccurring multiple nestings of this species were recorded on the Great Lakes (Little Galloo Island, eastern Lake Ontario; Weseloh 1984).

Figure 1: An adult Great Black-backed Gull.
Photo by Brian Morin

Between 1988 and 1991, 12 breeding attempts were reported at 8 sites in Lake Huron (Ewins *et al.* 1992). The breeding population on Lake Ontario reached a peak in the late 1990s and early 2000s; for example, in 2001, 18 nests were found on Pigeon Island and 16 pairs nested on Little Galloo Island (C. Pekarik, unpubl. data). In 1994, GBBGs were also reported nesting on Spider Island, Lake Michigan, the westernmost point of this species' breeding range on the Great Lakes (Tessen 1994).

Great Black-backed Gulls currently breed or have bred on all of the Great Lakes except lakes Erie and Superior (Good 1998), with the greatest number of nests occurring in eastern Lake Ontario (CWS, unpubl. data). Here we present the first nesting records for Great Black-backed Gulls on Lake Erie, where single nests were discovered at Mohawk Island (1993 and 1996) and the Port Colborne Breakwall (1995-1996 and 1999-2001) in the eastern section of the lake.

Nest records

The first GBBG nest reported for Lake Erie was found on Mohawk Island (42°50′3″N, 79 °31′21″W), located 5 km southeast of the mouth of the Grand River near Port Maitland, Ontario, and 5 km southwest of Lowbanks, Ontario. Mohawk Island is relatively small (4 ha), but is the largest naturally occurring island in the eastern basin of Lake Erie. The island supports a lighthouse and keeper's house that were built in 1848 and decommissioned in 1969.

Figure 2. Mohawk Island, Lake Erie in 2007. *Photo by Clive Hodder.*

Figure 3. An aerial photograph (facing north) of the Port Colborne Breakwall, Lake Erie in the early 1980s. The rockpile is the white area on the north side of the breakwall, at the junction of the southern and east-west arms. *Photo by Ralph Morris.*

At present, only the stone structures for these two buildings remain; all original woodwork has been destroyed (Fig. 2). Currently, efforts are under way to restore these buildings (M. Walker, pers. comm.). Mohawk Island is a National Wildlife Area of the Canadian Wildlife Service (CWS). As such, it is protected from disturbance and access is restricted during the breeding season. The island is low lying, except for an elevated gravel mound on its north side. It is currently devoid of permanent vegetation and most of the island's surface is exposed limestone.

Herring Gulls (*Larus argentatus*) nest mainly on the top of the mound, with additional scattered nests along the northern shoreline (253 nests in 2007). Double-crested Cormorants (*Phalacrocorax auritus*) nest on the ground, in high density, on the western end of the mounded area (1,563 nests in 2007). Ring-billed Gull (*Larus delawarensis*) nests are found in the low-lying area surrounding the lighthouse (2,201 nests in 2007). Caspian Terns (*Hydroprogne caspia*) nest on a ridge of mussel (*Dreissena spp.*) shells that have accumulated along the southeastern shoreline during the past few years (300 nests in 2007).

On 7 June 1993, Dave Moore and Larry Benner visited Mohawk Island to census colonial waterbird nests. While on the island, they observed a pair of adult Great Black-backed Gulls with two, 7-10 day old chicks. The nest was located on the northeast side of the top of the elevated mound, among Herring Gull nests. The nest contained a single

egg in which the chick had died during piping. No further nesting attempts were observed at this site during the next two years.

On 27 June 1996, Chip Weseloh and Dave Ryckman visited Mohawk Island and observed a pair of GBBGs attending a single nestling that was too small to band. This GBBG nest was also located at the top of the mound area, surrounded by nesting Herring Gulls.

The third breeding record for GBBGs on Lake Erie was at the Port Colborne Breakwall (42°52′6″N, 79 °15′22″W), located at the mouth of the Welland Canal, 0.5 km offshore from Port Colborne, Ontario (Fig. 3). The breakwall, which runs in an east-west direction on the west side of the canal terminus, was constructed in the early 1900s; a lighthouse was added at the eastern end in 1903. A third arm of the breakwater runs to the south. The breakwater is currently owned and maintained by the St. Lawrence Seaway Authority; its function is to protect ships entering and leaving the Welland Canal from the prevailing south-west winds. Waterbird nests are found along the flat shelf area of the east leg of the breakwall, on a limestone bolder "rockpile" at the junction of the east-west and southern legs of the wall, and on flat rock and sand substrates extending to the west of the rockpile. The rockpile, and the sand strips surrounding the southern edges are the primary nesting sites of Ring-billed Gulls (2,740 nests in 2007) and Herring Gulls (158 nests in 2007). Double-crested Cormorants (262 nests in 2007) and Black-crowned Night-Herons (*Nycticorax nycticorax*; 10 nests in 2007) nest in the trees and shrubs on the western flat portion of the rockpile, while Common Terns (*Sterna hirundo*) nest exclusively on the shelf substrate of the section of breakwall east of the rockpile (14 nests in 2007).

All observations of GBBGs at the Port Colborne breakwall, from 1994-1996, were recorded by Kevin Brown and Rob Game. The first sighting of a Great Black-backed Gull during the breeding season occurred in 1994. A single adult was seen loafing near the rockpile on 6 May 1994; the next day an adult (the same?) was observed consuming a Ring-billed Gull egg at the north edge of the rockpile. This adult(s) was not seen again in that year.

On 1 May 1995, a pair of GBBGs was engaged in nest building activity in the centre of the Common Tern nesting area, on the eastern arm of the breakwall. The pair was observed consuming eggs and stealing nest material from nearby Ring-billed Gull nests. A single egg (mass = 135 g) was discovered in the GBBG nest on 2 May 1995, but was missing the following day. On 4 May 1995, a second egg was laid. However, the following day this egg was also missing and only shell fragments remained in the nest. The GBBG pair remained in the area, mainly loafing on the eastern arm of the breakwall. No further nesting attempts were recorded in 1995.

A pair of Great Black-backed Gulls was observed at Port Colborne again in 1996. From 21 April to 6 May 1996, the pair was seen loafing and appeared to have established a nesting territory on the extreme western end of the east arm of the breakwall (the western end of the Common Tern nesting area). On 6 May 1996, a GBBG egg was discovered in this area. The egg was removed immediately, and the pair subsequently abandoned this nesting territory. The egg was removed as a precaution, to protect nesting Common Terns, which were experiencing a severe decline at this site at the time (Morris 2007). In late May 1996, a (the same?) pair of GBBGs was observed incubating at a nest located on the north edge of the rockpile, approximately two metres from the water's edge. The nest was not visited, in order to minimize disturbance to the nesting pair. In late June, both of the adults and two large chicks, close to fledging age, were seen at this nest site. The nest was visited later that season, and was found to be surrounded by a large "halo", devoid of both Ring-billed Gull and Herring Gull nests. No further nesting attempts by GBBGs were recorded at the breakwall until 1999.

A single pair (likely the same pair) of Great Black-backed Gulls nested on the top of the rockpile in three successive years (1999-2001; all three nests were found by Ralph Morris). In each year, the GBBGs nested on the highest point of the rockpile, on the extreme north edge, completely surrounded by nesting Ring-billed Gulls. Both adults were extremely aggressive; a circle of dead Ring-billed Gulls, approximately 6 m in diameter, surrounded the nest each year (discovered after each breeding season). In 1999 and 2000, both nests contained two eggs (the modal clutch size for GBBGs is three eggs; Good 1998). Nest contents were not recorded in 2001, although the adults were still present at the colony in early August 2001. We have no information on the fate of eggs, or of chicks (if any successfully hatched), for any of these years.

Discussion

In this paper, we present the first nesting records of the Great Black-backed Gull on Lake Erie. All observations were made of single nests, spanning the period from 1993 to 2001. Nesting by this species was limited to two islands in eastern Lake Erie: the Port Colborne Breakwall (five nests, initiated from 1995-2001) and Mohawk Island (two nests, between 1993 and 1996). Parents successfully hatched chicks in three of these nests (two at Mohawk Island, one at Port Colborne) and one nest failed during incubation; the fates of eggs were not known for the remaining three nests.

Since the mid-1970s, personnel of the Canadian Wildlife Service have visited selected gull and waterbird colonies annually in western Lake Erie. In addition, four joint surveys of all colonial waterbird nesting colonies on Lake Erie

have been conducted by CWS and U.S. Fish and Wildlife Service personnel, at approximately 10 year intervals since the late-1970s (see Morris *et al.* 2003 for references). At the Port Colborne colony, Morris and his students have conducted intensive research on colonial waterbirds since the mid-1970s. Stapanian and Waite (2003) conducted extensive surveys in the offshore waters of western Lake Erie (including the areas containing most of the region's seabird islands) and did not record any GBBGs between 24 April and 24 August 2000. Finally, no GBBG nests were found on Lake Erie during either Ontario Breeding Bird Atlas survey period (1981-1985, Blokpoel 1987; 2001-2005, Weseloh 2007). Despite the opportunity to discover nesting Great Black-backed Gulls, only the seven nests reported here have been found on Lake Erie.

From the 1970s to the early 2000s, there was a rapid increase in the number of GBBG pairs breeding on Lake Ontario (CWS unpubl. data) and this species has been recorded nesting regularly on Lake Huron (Ewins *et al.* 1992, Good 1998). From Christmas Bird Count data, lakes Erie and Ontario appear to have similar densities of overwintering GBBGs, and counts are fairly uniform across Lake Erie (i.e. birds are found in similar densities along all shorelines; National Audubon Society 2002). This begs the question, why have there been so few nesting attempts on Lake Erie?

The delayed and limited expansion of the Great Black-backed Gull into Lake Erie, relative to lakes Huron and Ontario, may simply be a function of a paucity of available nesting sites. Suitable breeding islands are much less numerous on Lake Erie compared to the other water bodies in the Great Lakes Basin. Other than Port Colborne and Mohawk Island, and a few man-made sites in Buffalo Harbour, all other seabird colonies are located at the extreme western end of Lake Erie. Most of the islands in the western basin of the lake are heavily wooded and gulls only nest on their perimeters. As GBBGs seldom nest on wooded islands elsewhere in the Great Lakes, this type of island may not represent a suitable breeding habitat.

An alternative explanation for the lack of breeding records is that the colonization of Lake Erie by Great Black-backed Gulls coincided with the emergence and spread of botulism on the lower Great Lakes. Since 2004, CWS has conducted surveys for die-offs of waterbirds in eastern Lake Ontario. More than 4,600 dead waterbirds have been found (L. Shutt *et al.* in prep). The main cause of mortality has been identified as Type E botulinum toxin, a neurotoxin produced by the bacterium *Clostridium botulinum* (confirmed from lab tests on dead and dying birds collected in the region). Exposure to the toxin occurs through the ingestion of contaminated prey items, resulting in paralysis, and usually, death. One of the

main findings of this study was that Great Black-backed Gulls appeared to be more susceptible to this strain of botulism than other waterbird species. More than 130 dead GBBGs have been found since 2005. As a result, the breeding population of GBBGs has almost been eradicated on Lake Ontario: In 2007, only a single nesting pair was recorded on Lake Ontario, on Little Galloo Island. At least one member of this pair was found dead later in the breeding season.

On Lake Erie, large-scale waterbird mortality due to Type E Botulism was recorded earlier (in 1999; Carpentier 2000) than it appeared on Lake Ontario, coinciding with the period when GBBGs first colonized that water body. Botulism-related mortality has also been recorded annually on Lake Huron since 1999, first at Pinery Provincial Park and then moving steadily northward into Georgian Bay. In 2007, botulism cases were documented for the first time on Lake Michigan. Botulism could now be regulating the breeding population of Great Black-backed Gulls on the lower Great Lakes and/or preventing the species from getting a foothold in new nesting areas such as Lake Erie. Christmas Bird Count data confirms the decline of GBBGs in this region: count indices for Ontario have declined rapidly since the mid-1990s (National Audubon Society 2002). The emergence of avian botulism may explain why no GBBG nests have been found on Lake Erie since 2001, but it remains unclear why no pairs nested there prior to 1993, particularly when nesting by this species has been long-established on lakes Huron and Ontario.

The Great Black-backed Gull has now expanded its Great Lakes breeding range to include Lake Erie, the most southerly Great Lake. However, one has to wonder, given it was the fourth Great Lake to be colonized, and that there has been no further nesting since 2001, whether Lake Erie really represents suitable nesting habitat for this species. Given the spread and severity of botulism-related mortality for this species on the Great Lakes, it could be some time (if at all) before the breeding population of GBBGs rebounds. Future monitoring should answer these questions.

Acknowledgements

We are grateful to Kevin Brown and Rob Game for providing data on GBBG nests at Port Colborne, and Larry Benner and Dave Ryckman for assistance in the field. This manuscript was improved greatly by comments from Glenn Coady, Ross James and Ken Ross.

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Discovery of a Piping Plover on Akimiski Island, James Bay, Nunavut

Carmen Lishman

Introduction

The James Bay coastline in summer offers a seemingly endless expanse of shorebird habitat of intertidal mudflats, raised beach ridges, and supratidal marshes (Morrison and Harrington 1979, Martini and Glooschenko 1987). Many shorebird species use this coastline habitat either as a stopover in their migrations or as their breeding ground. The richness of shorebird diversity from the James Bay region adds many breeding species to the Ontario Checklist that would be unusual or impossible to see in many other regions of the province.

The Piping Plover, *Charadrius melodus*, is a federally endangered species with two breeding populations in Canada, one in the prairie provinces and the other in Atlantic Canada (Haig and Plissner 1993). The species is scarcely seen in Ontario and, until now, unprecedented in the James Bay region (Austen et al. 1994) or within Nunavut (Richards et al. 2002). In June 2007, a crew of field ecologists studying Marbled Godwits (*Limosa fedoa*), and Semipalmated Plovers (*Charadrius semipalmatus*) on the north coast of Akimiski Island in James Bay (Figure 1) discovered a single Piping Plover. The identification of this unique individual was well documented by a number of people and the details of this surprising discovery are provided in the following paper.

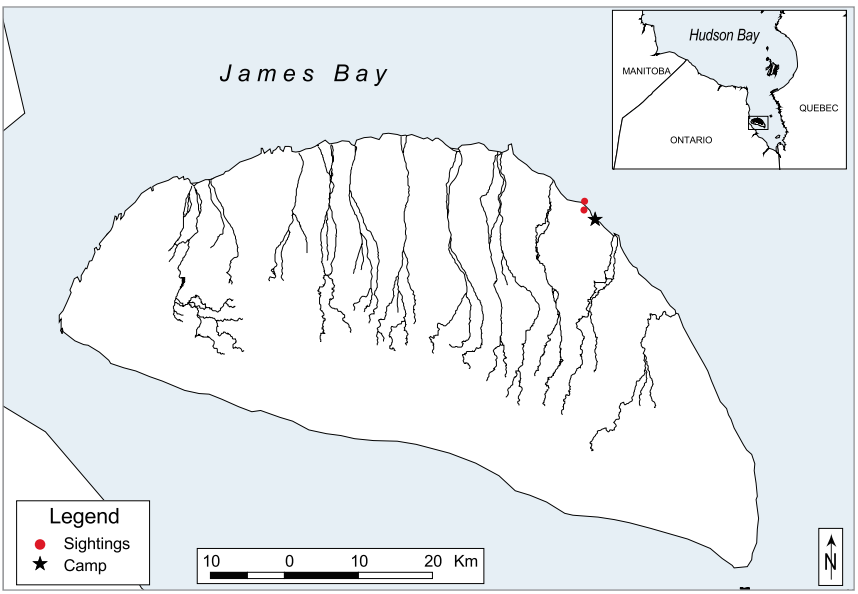
Photo: Carmen Lishman

Details of the Discovery and Observation

On 3 June 2007, American shorebird biologists Adrian Farmer and Bridget Olson, and the author, were studying Marbled Godwits on the north shore of Akimiski Island, Nunavut. On the trip back to the field camp, we walked through a mixed gravel-clay intertidal flat to one of the raised gravel ridges. It was a clear day, with excellent visibility and a light north wind. While walking along the length of the gravel ridge (53.12729° N, 80.97678° W), scanning for birds, a plover-sized bird moving in the mud substrate near the ridge (Figure 2), approximately 85 m from the observers, immediately caught the author's attention.

The first reaction was to identify it as a Semipalmated Plover, but its pale plumage was immediately recognized as being unusual. As it was approached, it pushed out into the mudflat farther from the gravel ridge. From the first observation with binoculars, it became clear that it was not a Semipalmated Plover, and we considered the possibilities together. The plumage was too light to be a Semipalmated Plover or a Common Ringed Plover. It was too small to be a Killdeer and lacked the two breast bands. The bill was orange and black, and its legs were orange, excluding it from being a Snowy or Mountain Plover (species with which Bridget is familiar).

Figure 1. Map showing the location of Akimiski Island in James Bay. Akimiski Island is part of Nunavut Territory, as are all islands in James Bay, however, it is adjacent to the northern Ontario community of Attawapiskat and is ecologically most similar to the western James Bay lowlands. *Map: Andrew Jano*



For over 15 minutes the three observed the bird and agreed that it was a Piping Plover. Lacking photographic equipment at that time, there was no further evidence than the three-person observation. As we continued down the ridge we heard the Piping Plover call, a very distinctive high-pitched, drawn-out, "*peep---peep---peep---peep*", which improved the confidence in the bird's identification at the time.

The second observation, presumably involving the same individual, although there is no certainty of that, was made late in the evening, around 1830h on 9 June 2007. Stacy Gan and the author were in the field west of camp on a calm day, with occasional rain squalls in the afternoon, but clear with good visibility in the evening. We were approximately 2.5 km NW of camp (53.116405° N, 80.978878° W). The author was distracted, trying to read the colour combination of bands of a Semipalmated Plover, when Stacy pointed out another plover 20 m to the NW of us, that she described as "pale and puffed-out". Being so focused on reading the bands, the author did not pay much attention at first. But, as Stacy persisted in calling attention to this different looking plover, it was given a closer look with binoculars, and was identified instantly as a Piping Plover (Figures 3, 4). This observation was more than 500 m farther inland from the open mudflat of

Figure 2. Typical James Bay coastline habitat used by many shorebird species. Photograph was taken at location of the first encounter with the Piping Plover (note the raised gravel ridge where territory was apparently established). *Photo: Carmen Lishman*

Figure 3. The adult Piping Plover discovered on Akimiski Island, James Bay. Photograph was taken on the second encounter shortly after its impressive aerial displays, trying to attract a mate and giving other indications of territorial behaviour.
Photo: Carmen Lishman

Figure 4. The adult Piping Plover discovered on Akimiski Island, James Bay. The photo was taken on the second encounter, on 9 June 2007.
Photo: Carmen Lishman

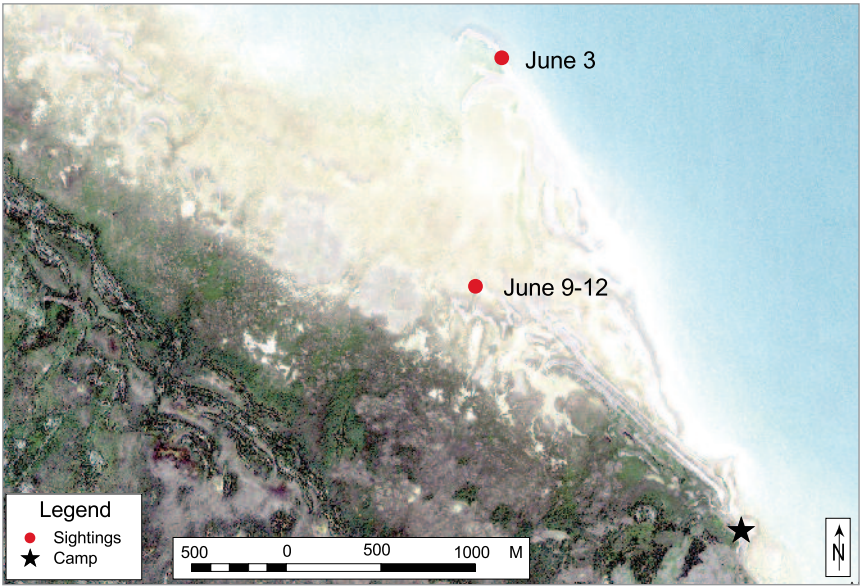


Figure 5: IKONOS satellite image of the north coast of Akimiski Island, taken 2 July 2003, showing the location of the Piping Plover sightings. *Photo courtesy of Ontario Ministry of Natural Resources. Map: Andrew Jano*

the bay where the first observation took place. Since the previous days had been spent examining field guides at camp and listening to "Birding by Ear" recordings of calls, the identification of this individual as a Piping Plover was made instantly and with confidence.

Radio communication was sent immediately to Ken Abraham, Adrian Farmer and Jessica Plourde, who were west of Stacy and Carmen, still working to capture Marbled Godwits. They transmitted a communication to the field camp requesting that the staff there bring tripods and cameras out to document the plover. Within an hour there were eight observers on site (those listed, as well as Steve Marson, Austin Taverner and Mike Banko). As everyone converged, the Piping Plover flew up into the air and began the characteristic 'piping' aerial displays within metres of the observers. This bird, presumably having established a territory at this site and trying to attract a mate, was persistent in its piping displays throughout the evening, and the observers were in awe of the quality of the observation. Each time the plover landed, it demonstrated a territorial attachment to the gravel ridge site (a mixture of gravel, clay and alkali grass *Puccinellia phryganodes*), unwilling to be pushed off by the pesky photographers. Steve Marson was able to take some excellent pictures of the plover, and others were taken with small digital cameras or through binoculars and spotting scopes. The crew left the area at sundown, around 2140h, with the bird remaining in the same location.

The third encounter with the Piping Plover was at the same location, between 1945h and 2200h on 10 June 2007, by a group of nine people (those listed above, as well as Emily Morton and Patrick Hubert). On this visit, the plover was at first quiet on its territory, but began once again performing its piping aerial displays and vocalizing regularly. During aerial displays, the vocalizations were bold, clear, constant pipes, and on the ground were much fainter spaced out "*peep... peep... peep.*" We left the plover in the same location once again at sundown.

The fourth and final encounter was on 12 June 2007, when the author, Stacy Gan, Emily Morton and Mike Banko saw the Piping Plover at the same location while passing by late in the morning, around 1030h. The bird vocalized a little, but was not performing its aerial displays.

On several occasions after this date, the location where the Piping Plover had apparently established its territory was visited and scanned for its presence, but it was not seen again.

Discussion

The bird we saw on Akimiski Island was certainly a Piping Plover. This is a confident identification given the unique characteristics of the species, distinguishing it from any similar plover species: light-coloured plumage; incomplete, single, black breast band; orange legs, orange and black bill, and characteristic vocalizations. In addition, the identification comes with the endorsement of all the observers that were present, including well-respected field ornithologists and experienced birdwatchers.

The sex of the individual could not be determined from plumage, but all agreed that it was likely a male. Haig and Elliot-Smith (2004) showed that it is the male Piping Plover that establishes and maintains a territory while giving aerial displays directly above the territory, to attract breeding females. The individual seen on Akimiski Island was indisputably demonstrating this characteristic aerial display, and its persistence in remaining in the same location over the course of several days is another strong indication of territoriality (Haig and Elliot-Smith 2004).

The question that arises from this unusual observation is the origin and fate of this displaced individual. Akimiski Island is roughly equidistant to both portions of the species' breeding range in Canada, over 1000 km southeast or southwest, so it is incautious to speculate which population it came from originally. Since the individual was not marked in any way, its movements before and after this observation are completely unknown. Nonetheless, it was a surprising and fascinating observation of an individual far from its natural breeding range. There has been some documentation in recent years of stray Piping Plovers in Ontario, and a

successfully breeding pair on Sauble Beach in 2007 (Cartwright 2007). Communications of stray individuals are important and interesting, as they could be early indications of range expansion of the species in Canada. Given the quality of shorebird habitat in James Bay, it would not be very surprising to see additional observations in the years to come. Continuing the avian research programs in James Bay and on Akimiski Island is critical for this type of natural history documentation, which would otherwise be impossible.

Acknowledgements

I would like to acknowledge the financial support of field efforts on Akimiski by the Department of Indian and Northern Affairs, Ontario Ministry of Natural Resources, the Hudson Bay Project and the Natural Science and Engineering Research Council. Also, I would like to express my gratitude to the 2007 Akimiski Island crew who were keen on assisting in the documentation of this discovery: Steve Marson, Jessica Plourde, Emily Morton, Mike Banko, Stacy Gan, Austen Taverner, Patrick Hubert, Adrian Farmer, and Bridget Olson. Thanks to Ken Abraham for field support, and encouraging the writing of this report. Finally, an important thank-you to Stacy Gan for insisting I take a closer look at the "pale, puffed-up" plover while I was so otherwise focused; without such persistence the bird may have gone unnoticed!

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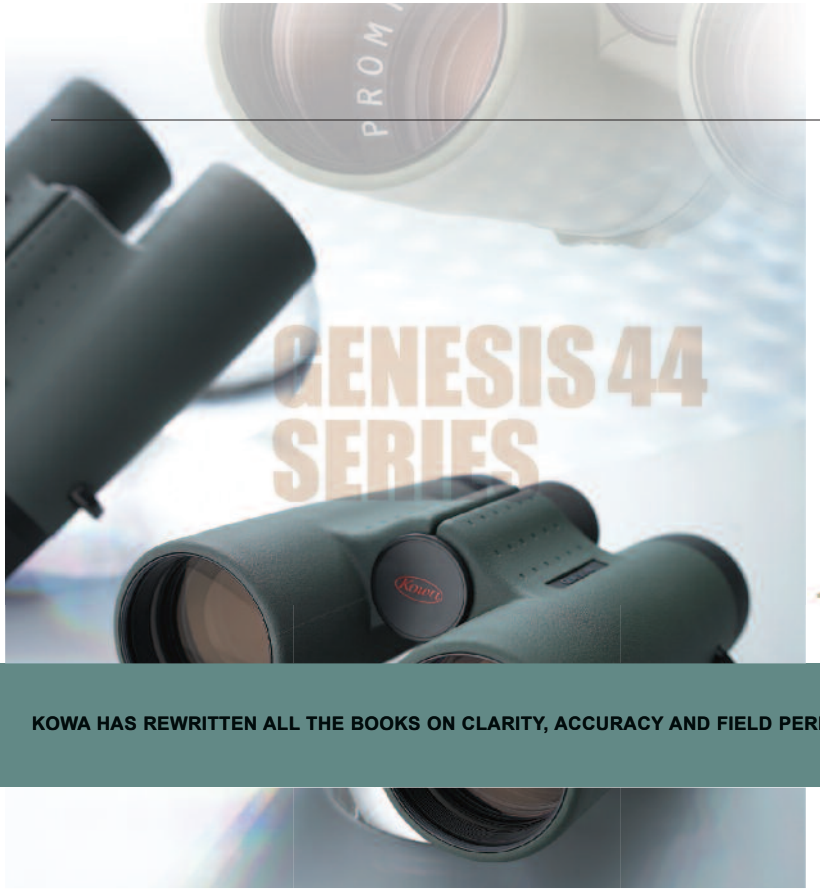

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Colony distribution and nest numbers of Double-crested Cormorants on the upper St. Lawrence River, 1991 – 2007

D.V. Chip Weseloh, Irene Mazzocchi, Tania Havelka, Lee Harper, James Farquhar III, Cynthia Pekarik and Bud Andress

Introduction

The Double-crested Cormorant (*Phalacrocorax auritus*, henceforth cormorant) was first reported to nest in the upper St. Lawrence River (USLR), i.e. from Kingston, ON and Cape Vincent, NY to Lake St. Francis, at Black Ant Island in 1945 (Baillie 1947, Postupalsky 1978, Weseloh *et al.* 1995) (Figure 1). The nesting of cormorants in the USLR came at the end of an eastward expansion of their breeding range from Lake-of-the-Woods, which had been underway for more than 30 years. Cormorants were first known to nest in the Great Lakes, on Lake Superior, in about 1913, and they spread eastward during the next three decades (Postupalsky 1978, Weseloh *et al.* 1995 but also see Wires and Cuthbert 2006 for an alternative view). They were found nesting in the North Channel and Georgian Bay sections of Lake Huron in 1932 and 1936, respectively (Baillie 1947), in Lake Erie in 1936 (Ligas 1952) and in Lake Ontario in 1938 (Baillie 1947). Nesting cormorants increased quickly on the Great Lakes during the 1940s, so much so that population control measures were instituted in some areas (Omand 1947, Baillie 1947, Postupalsky 1978).

Figure 1: After an absence of at least 15 years, the Double-crested Cormorant resumed nesting in the upper St. Lawrence River in 1991. *Photo: Brian Morin*

Figure 2 : Double-crested Cormorant on nest. *Photo: John Mitchell*

While no specific studies are known for the USLR, numbers there are presumed to have followed those on the Great Lakes proper once the species was established there. Numbers of breeding cormorants on the Great Lakes, and presumably on the USLR, declined dramatically during the "pesticide era" from the 1950s through the early 1970s, due to the effects of DDE-induced eggshell thinning (Weseloh *et al.* 1983). During this period, the number of cormorant nests across the Great Lakes declined from nearly 1,000 to less than 100 (Weseloh *et al.* 1995). At some point during this time, cormorants ceased to breed on the USLR. They were not known to nest there during either the 1st or 2nd Binational Great Lakes Colonial Waterbird Survey (1976-77 and 1990, respectively). During these surveys, all islands in the USLR were checked for nesting colonial waterbirds (Blokpoel 1977, Blokpoel and Tessier 1996, Scharf and Shugart 1998).

The first known nesting of cormorants in the USLR, after the pesticide era, occurred in 1991 on Strachan Island (see below). Thus, the return of the cormorant as a nesting bird to the USLR is considered to have started in that year. The purpose of this paper is to track the growth and distribution of cormorant colonies in the USLR during this period of resurgence, from 1991 to 2007 (Figure 2).

Methods

Beginning in 1976, during May and June, much of the USLR was surveyed annually as part of several other studies (L. Harper, unpubl. data, B. Andress,

Table 1. Number of nests of Double-crested Cormorants in the Upper St. Lawrence River from Kingston, ON and Cape Vincent, NY to Lake St. Francis, 1990 – 2007. The censuses in 1999 and 2002 were incomplete.

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SITE	0							0			
1. West Spectacle I.	0							0			
2. Black Ant I.	0							0			
3. Blanket I.	0							0			
4. Little Corn I.	0							0			
5. Corn I.	0							0			
6. Scorpion I.	0							0			7
7. Gull I. (2 rocks near Griswold I.)	0							0			
8. Griswold I.	0		0	0	2	7	41	137	242	343	323
9. West Crossover I.	0							0			
10. McNare I.	0						61	105	168	133	224
11. Murray I.	0							0			13
12. Bogartus I. (Three Sisters)	0							0			11
13. Spencer I. Pier	0							0			3
14. Murphy I.	0							0			
15. Island SW of Bergin I.	0							0			
16. Bergin I.	0							0			158
17. Strachan I. (5 islands)	0	12	38	115	290	314	329	485[1]	433	400[2]	356
18. Dickerson I.	0							0			250
19. Dodens I.	0							0			
20. Butternut I.	0							0			
21. Navigational marker D41	0							0			275
TOTAL	0	12	38	115	292	321	431	727	843	876	1,620

[1] = This figure includes 65 and 29 nests on the ground of the east and west arms of Strachan Island, respectively, on 10 June 1997 (LH, pers. obs.).This is the only time ground-nests of cormorants are known to have occurred on this island.
[2] = estimate

2001	2002	2003	2004	2005	2006	2007
				64	0	0
		50	150	265	300	260
18	0	60	200	263	111	35
		0	20	0	47	51
	15	9	46	13	0	0
	0		16	17	31	115
		30	84	66	267	278
274	394	291	313	334	120	322
4	7	14	0	16	7	1
251	166	266	373	536	578	603
0	0	0	0	0	0	0
20	17	0	0	0	0	0
8	0	0	1	0	0	0
	24	40	60	108	67	93
		41	33	21	41	51
259	183	394	432	559	586	475
386	215	332	244	281	313	286
145		496	326	245	252	18
				+[3]	72	167
		191	199	38	0	0
		330	332	171	64	30
1,365	**1,021**	**2,544**	**2,829**	**2,997**	**2,856**	**2,785**

[3] = nests present but not counted

pers. comm., Weseloh *et al.* 1995, Blokpoel and Tessier 1996, Scharf and Shugart 1998, CWS unpubl. data) and observations on the presence and absence of colonial waterbirds were noted. Annual systematic counts of cormorant nests began in 1991 and were conducted usually in the latter half of June (Ewins *et al.* 1995). All nests that appeared to be active in the given year were counted, regardless of contents. All nest counts were conducted by direct visitation; there were no aerial counts. New cormorant nesting islands were not searched for each year and, hence, some colonies were only discovered when they may already have been established for a few years. For example, note the relatively large number of nests recorded on Bergin and Dickerson islands in 2000, their first year of record (Table 1). On densely forested islands, e.g. Butternut Island, each nest tree was marked with flagging tape to keep track of which trees had been counted before recording their number of nests. At large ground-nesting colonies, e.g. on Navigational Aid D-41, nests were sometimes sprayed with a small spot of paint for the same reason.

Results

Numbers and Distribution of Colonies

Twenty-one cormorant colonies were located in the USLR during the study period. They were distributed in five groupings. From west to east, sites 1-6

Figure 3. Map of the Upper St. Lawrence River study area. The colony numbers are identified in Table 1.

Figure 4. Cormorants nesting in trees in late April on Strachan Island near Cornwall/Massena. Ring-billed Gulls are nesting on the ground.
Photo Credit: Brian Morin

(Figure 3) were just downstream from the Kingston-Cape Vincent area, sites 7-9 were near the Mallorytown Landing-Schermerhorns Landing area, sites 10-14 were near Brockville-Ogdensburg, sites 15-17 were above the dam at Cornwall-Massena and sites 18-21 were downstream from Cornwall-Massena (Figure 3). The only suggested pattern in the colonization of the upper St. Lawrence River was that the first four cormorant colonies were well separated; each was in a different section of the river as defined above.

Annual Nest Numbers and Population Growth

Cormorants first nested in the USLR during this study period in 1991 when 12 nests were found in the trees on the five island complex known as Strachan Island (Blokpoel 1977, Blokpoel and Tessier 1996), just above the dam near Cornwall, Ontario and Messina, New York (Figures 3 and 4, Table 1). This colony tripled in size in each of the next two years. In 1994, a second colony was found on Griswold Island (Figure 5) near Mallorytown Landing, Ontario and Schermerhorns Landing, NY; it contained two tree-nests. It also grew rapidly and contained over 100 nests within three years. In 1996, a third cormorant colony of over 60 nests was discovered at McNare Island near Brockville-Ogdensburg. Thus, within five years of the first nesting at Strachan Island, from 1991 to 1996, the cormorant population in the

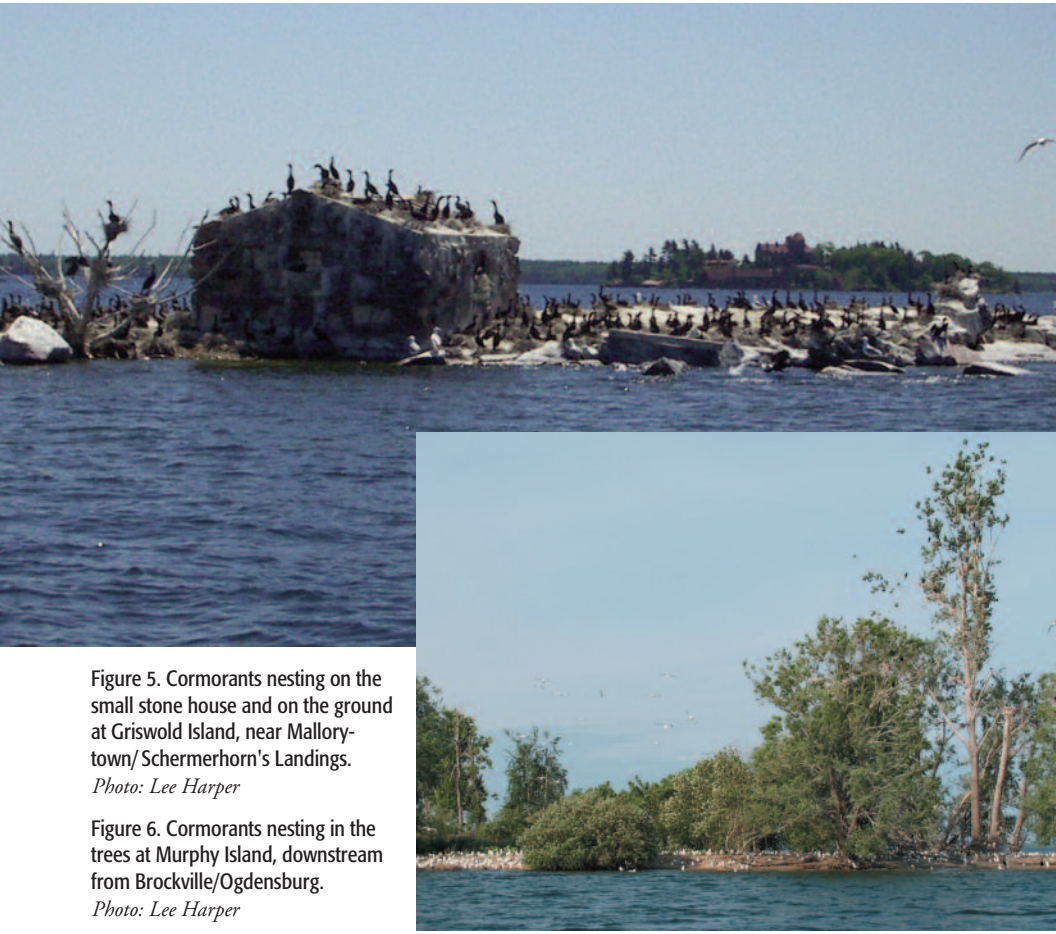


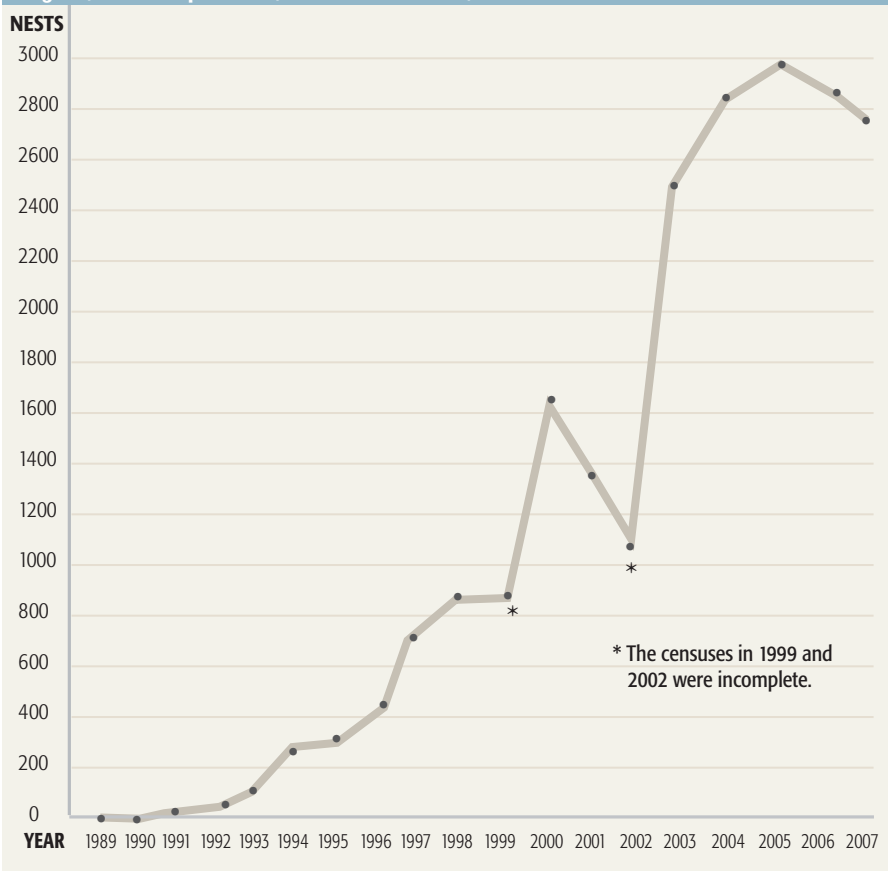
Figure 5. Cormorants nesting on the small stone house and on the ground at Griswold Island, near Mallorytown/ Schermerhorn's Landings.
Photo: Lee Harper

Figure 6. Cormorants nesting in the trees at Murphy Island, downstream from Brockville/Ogdensburg.
Photo: Lee Harper

USLR had reached over 400 pairs (Figure 6). This is an average annual growth rate of more than 100% (104.7%). The number of known colonies remained stable from 1996 to 1998 but the population nearly doubled to over 800 pairs (39.9% growth per annum).

From 1999 to 2000, the number of known cormorant colonies in the USLR more than tripled (from 3 to10) and the number of nests increased from an estimated 876 to 1,620. (Although data are missing for Strachan Island for 1999, it was active in both 1998 and 2000 and it seems safe to assume that it would have been active in 1999 with at least 400+/- nests.) Based on the relatively large number of nests present at some of these sites when first discovered, e.g. Bergin and Dickerson islands and Navigational Aid D-41, some of these colonies presumably had been in existence prior to 2000 but

Figure 7. Number of nests of Double-crested Cormorants in the Upper St. Lawrence River from Kingston, ON and Cape Vincent, NY to Lake St. Francis, 1989–2007.



had escaped detection by researchers (see below). We assume these colonies, which were active in 2000 but whose date of origin is not known, were probably established in 1998 or 1999. They were not known to be active in 1997, when all islands were visited (Cuthbert *et al.* 2006). Thus, the growth of the USLR cormorant population from approximately 431 nests in 1996 to 1,620 in 2000 includes the start-up of the new colonies first found in 2000. This growth yields an average annual rate of increase of 39.2%.

Cormorant nest numbers appear to have kept increasing over the next five year period, though again, some data points are missing, and reached a maximum of 2,997 nests in 2005 (Table 1). From 2000 to 2005, the average annual growth rate was 13.1% (Figure 7). Nest numbers declined slightly in 2006 and

2007 and currently stand at 2,785 nests at 15 active colonies. Since 2005, this represents an average decline of – 3.6% per year. By 2007, six previously active colonies had been abandoned and, during the period 2005 to 2007, eight additional colonies declined.

The overall annual growth rate from the year of first nesting until the cormorants reached their peak nest numbers in 2005 was 48.3% per year. Since 1991, cormorants have nested at 21 different locations in the USLR but never at more than 17 sites in any one year.

The USLR forms the border between Canada and the United States for much of its length. From 1991-1999, all known cormorant colonies in the USLR were located in Canada. In 2000, cormorants were first found nesting in the U.S. waters of the USLR. During 2000-2007, four colonies were established there: sites 3, 9, 12 and 14 (Table 1). Their numbers increased slowly and comprised from 0.6 to 12.9% of the total USLR population. Numbers on the Canadian side have always comprised at least 87% of the population. Measures to reduce the number of cormorants nesting on US sites 3 and 12 were begun by New York State Department of Environmental Conservation (NYSDEC) in 2003. In 2004, site 9 was managed by the United States Department of Agriculture (USDA) and, since 2006, all four US sites have had some control by NYSDEC under the Public Resource Depredation Order (PRDO) (50 CFR 21.48 available at http://www.fws.gov/migratorybirds/issues/cormorant/FinalRule/fed1regdccofinalrule.pdf). As a result, the number of nests reported here for some of the U.S. colonies in mid-June is substantially reduced from what they were in May. For example, 538 nests were counted on Blanket Island (site 3) on 29 May 2007, before management activities. The mid-June count recorded only 35 nests, after management. Presumably most of the birds which left this site (due to management activities) went elsewhere to nest, where their numbers would have been captured by other counts.

Discussion

The Double-crested Cormorant resumed nesting in the USLR in 1991 after an absence of at least 15 years, since at least 1976. From 1991 to 1996, the average annual rate of increase was over 100%. However, from 1996 to 2000 it was 39.2% per annum and from 2000 to 2005 it was 13.1% per annum. From 2005 to 2007, the population declined at an annual rate of 3.6%. Price and Weseloh (1986) examined the population growth of cormorants on Lake Ontario from 1974 to 1982. They noted that an average annual rate of increase as high as 56% could be achieved without immigration but only under very favourable conditions of recruitment, age at first breeding and pre-breeding and adult mortality. Growth rates of over 100% would have to had been supplemented by immigration. Thus, it was not until

the 1996 to 2000 period that the average annual growth rate of the USLR cormorant population was in a range where it could have been self-sustaining; prior to that, population growth would have been maintained through immigration. Cormorants are known to move from eastern Lake Ontario to the St. Lawrence River. Cormorants, marked with colour-bands and/or satellite transmitters, have been found to move from Little Galloo Island in eastern Lake Ontario to colonies in the St. Lawrence River within a season, but only when harassed/disturbed at the Little Galloo Island colony (Mazzocchi 2003, B. Dorr, pers. comm.). To what extent they make that same move when not harassed is not known.

Six cormorant colonies were abandoned during the study period: sites 1, 5, 11-13 and 20; the years of colony abandonment ranged from 2001 – 2006. Also, since 2005, nest numbers have declined substantially (> 20%) at four other sites but the colonies have remained active: sites 3, 9, 18 and 21. Various human activities were probably responsible for several of these situations. Active shooting, or evidence of recent shooting, was noted by DVCW at three of the above colonies: sites 1, 20 and 21. At site 1 (West Spectacle Island), shooting was done under permit from the Ontario Ministry of Natural Resources to prevent fouling of a small cottage (J. Stewart, pers. comm.). Active shooting at cormorants was observed on site 20 (Butternut Island) on 17 May 2004 and spent shotgun shells and more than 250 dead birds were found on site 21 (Navigational Aid D-41) on 7 June 2004. An additional 65 dead cormorants, also apparently shot, were found on at the same site on 16 June 2006 (DVCW, unpubl. data) It is not known if permits were issued in these cases.

At site 5 (Corn Island) in 2001, 50 Great Blue Heron (*Ardea herodias*) nests were constructed and occupied, presumably by herons forming outlying colonies from the break-up of the dwindling heron colony on Ironsides Island (6.8 km to the south). By 2002, cormorants had taken over 15 former heron nests on Corn Island. Within a couple of years, the herons had abandoned the colony and by 2006 a cottage had been built where none existed previously and the cormorants also abandoned the site (B. Andress pers. obs.). At sites 3, 9 and 12 extensive nest removal was conducted by NYSDEC under the PRDO resulting in reduced nest counts or possibly abandonment. At site 18 (Dickerson Island), tracks of at least one raccoon (*Procyon lotor*), a documented predator of waterbird nests (Ellis *et al.* 2007), were noted (L. Harper, pers. obs.) and predation may have been a factor in the decline of cormorant nests at that site. There are no known factors contributing to the decline in nest numbers or colony abandonment at sites 11 and 13.

In 2006, Black-crowned Night-Herons (*Nycticorax nycticorax*) also nested

on 3 of the 15 active cormorant colonies in the USLR: McNare, Bergin and Strachan islands (CWS, unpubl. data). On all three of these islands, there were areas where nests of the two species were interspersed between one another. In these areas, there were also instances of cormorants occupying nests which, based on the size of twigs used in the construction of the original nest platform, appeared to have been first built by night-herons. The take-over of night-heron nests by cormorants is a condition which has led to the abandonment of their colony by the night-herons at other sites. Several night-heron colonies on Lake Ontario have suffered just such a fate (Jarvie *et al.* 1999, Weseloh *et al.* 2002). This condition of cormorants nesting in close proximity to night-herons, Great Egrets (*Ardea alba*) or Great Blue Herons should be monitored carefully to track potentially positive or negative impacts to the heron species (Cuthbert *et al.* 2002).

The Future for Cormorants on the Upper St. Lawrence River

Allowing for years when data are missing, the nesting cormorant population on the upper St. Lawrence River increased each year from 1991 to 2005. For the last two years, 2005 – 2007, it has decreased. Since 2005, nest numbers have declined on 11 colonies and increased on 7 colonies. Management (either legal or illegal) has occurred on at least 6 of the 11 sites which have declined, but on only one 1 of the 7 sites that has increased. Colonies which have decreased have lost 842 nests (-40.6%). Colonies which have increased have gained 630 nests. This latter figure represents an annual growth rate of 29.8%, well within the range of normal growth for a cormorant colony (or population) (Price and Weseloh 1986), i.e. immigration to colonies which are growing need not to have occurred. Major colonies (those with > 170 nests in one of the years 2005-2007, N=9) lost 413 nests and declined from 2,720 and 2,307 nests. Minor colonies (N=9) gained 201 nests and increased from 277 to 478 nests (31.3% per annum). Again, it would appear that cormorants from major colonies are leaving the USLR area and are not simply moving to minor colonies. At present, it would appear that management activities, augmented by possible predation (Dickerson Island), are the major influences on the number of cormorants nesting in the USLR.

Acknowledgements

We wish to thank Donna Radke, Holly Bell, the Mohawks of Akwasasne and other land owners for allowing us access to several of the islands. Dave Moore updated Table 1 and drafted the original graphic Figures. He and Ken Ross provided useful comments on an earlier draft of the paper. Charles Maisonneuve and Louise Champoux provided the date for Dickerson Island (2001 and 2002).

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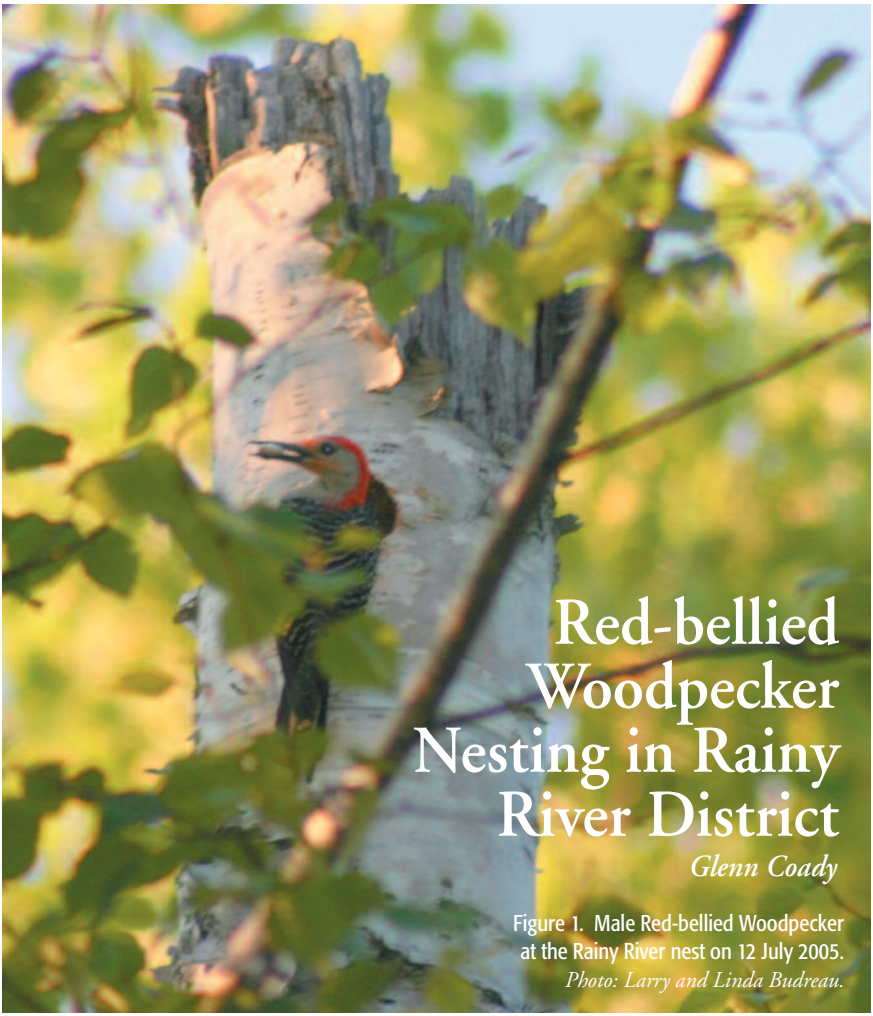


Red-bellied Woodpecker Nesting in Rainy River District

Glenn Coady

Figure 1. Male Red-bellied Woodpecker at the Rainy River nest on 12 July 2005. *Photo: Larry and Linda Budreau.*

Introduction

The Red-bellied Woodpecker (*Melanerpes carolinus*) is a permanent resident of open deciduous woodlands, riparian forests, swamps, parklands, agricultural lands and suburbs of southeastern North America (Shackleton *et al.* 2000).

It is resident from south-central North Dakota, eastern South Dakota, central Minnesota, central Wisconsin, central Michigan, southern Ontario, central New York and Massachusetts south to central Texas, the Gulf Coast and southernmost Florida, and west to Iowa, central Nebraska, northeastern Colorado, western Kansas, western Oklahoma, and north-central Texas. (AOU 1998).

Casual records have occurred north to Idaho, southern Saskatchewan, northeastern Montana, southeastern Wyoming, southern Manitoba, northern Ontario, southern Quebec, New Brunswick, and Nova Scotia, and west to southeastern Colorado and eastern New Mexico (AOU 1998).

In Ontario, James (1991) listed it as a rare to locally uncommon permanent resident in the extreme south (north to Huron County, Durham Regional Municipality and Prince Edward County) and a vagrant in the north to western Rainy River District in summer.

This paper provides details of the first documented nest record of the Red-bellied Woodpecker in northern Ontario.

Observations

The Red-bellied Woodpecker is a rare bird in northern Ontario, with 17 records accepted by the Ontario Bird Records Committee (OBRC) up to 2006 (Crins 2007).

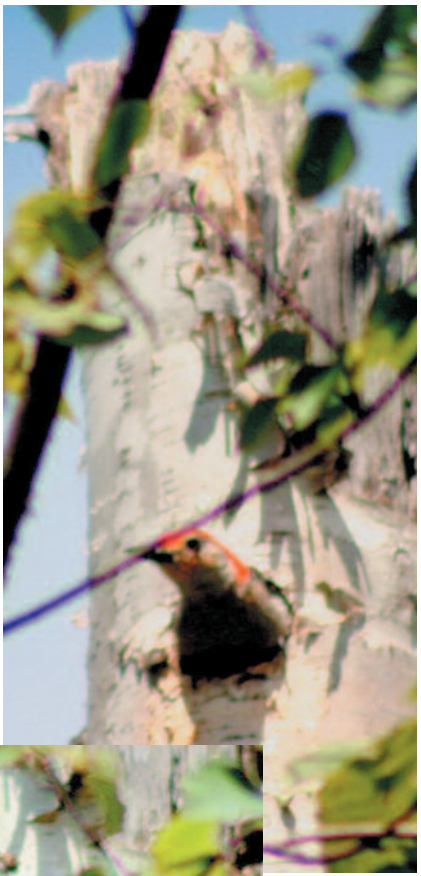
The first record for Rainy River District involved a male found at Harris Hill by Robert Tymstra on 15 June 1989 (Wormington and Curry 1990). The second record involved a male found at the Rainy River mouth by Chris Martin and Gordon Martin from 24 May to 1 June 2003 (Crins 2004). A third record involved a male found by Colin Young that remained in Atikokan from mid-November 2003 to June 2004 (Crins 2004). The fourth record pertained to a male found at Devlin from 8-18 May 2004 by Arlene Rae (Crins 2005).

The fifth record for Rainy River District also involved a male bird. It was found in December 2004, coming to the feeders of Julia and Roland Hill, at their home just south of the Oak Grove Camp near the Rainy River mouth. This bird was also observed repeatedly gleaning fat from a deer skin that was hung out to dry on their property (pers. comm. Roland Hill). This male bird continued visiting their feeders into the spring of 2005, when it was regularly heard drumming near their property. In May 2005, this male Red-bellied Woodpecker was joined at their feeders by a female (photographs of both birds were obtained by Julia Hill), and both birds continued to visit the feeders at both the Hill's home and the Oak Grove Camp home of Larry and Linda Budreau throughout the summer.

On 8 July 2005, while doing field work on behalf of the Ontario Breeding Bird Atlas, the author discovered the nest of this pair of Red-bellied Woodpeckers (Ontario Nest Record Scheme # 180838), in a dead snag near the top of a Paper Birch *(Betula papyrifera)*, on the east side of the cottage road that runs south from the Oak Grove Camp, near the mouth of the Rainy River (nest location: 15U 375629 5408537 NAD83; 48° 49′ 2.5″ N, 94° 41′ 39.26″ W). The nest hole was approximately seven metres above the ground and faced west (Figure 1).

In four hours of observation 8-9 July 2005, both the male and female Red-bellied Woodpeckers were observed by the author delivering a wide assortment of food items (suet, berries, acorns, caterpillars, grasshoppers, beetles, wasps, and one unidentified bird egg) to a minimum of three large young at the nest hole (Figures 2 and 3). This nest was videotaped by the author and still photographs were obtained by Larry and Linda Budreau (Figures 1-3). Julia Hill later observed the successfully fledged young visiting her feeders with the adults.

Linda Budreau reported a male still present at the Oak Grove Camp on 30 May 2006 (Crins 2007). Throughout the summer of 2007, male Red-bellied Woodpeckers were present at both the Oak Grove Camp (pers. comm. Linda Budreau) and the Harris Hill Resort (pers. comm. Cheryl Gauthier). The Red-bellied Woodpecker has been removed from the OBRC Review List for northern Ontario, effective 1 January 2007 (Crins 2007).



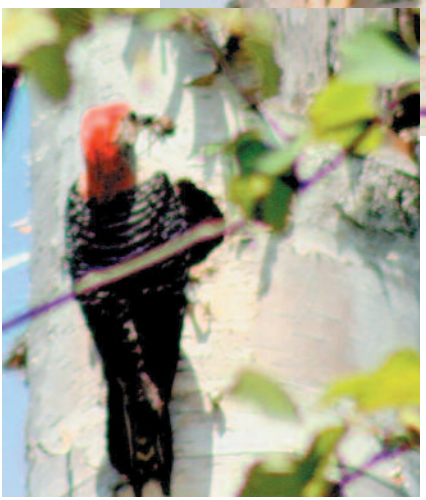


Figure 2. Male Red-bellied Woodpecker exiting the nest hole on 12 July 2005.
Photo: Larry and Linda Budreau.

Discussion

The closest area to western Rainy River District where the Red-bellied Woodpecker is a known regular breeding species is well to the south (approximately 240 km) in central Minnesota (Janssen 1987).

Figure 3: Male Red-bellied Woodpecker delivering food to young at the nest on 12 July 2005.
Photo: Larry and Linda Budreau.

In Manitoba, although the Red-bellied Woodpecker is not considered a confirmed breeding bird, there have been several interesting anecdotal records. A pair of birds was found by Mrs. Bert Skinner on 29 May 1941 in Winnipeg's Kildonan Park and remained throughout June. Although breeding was suspected, it was never confirmed. The following year it was claimed that a brood of young were observed at that site, but no nest was located (Hatch and L'Arrivée 1981). On 28 June 1952, a female and two fledged young were reported by Victor Latta and Orland Gibson at Whitemouth, but local breeding was never confirmed (Hatch and L'Arrivée 1981). More recent records in Manitoba have included a drumming bird in Shilo on 11 June 1991, and a probable family party near Crystal City in the summer of 2001 (Manitoba Avian Research Committee 2003).

The nest of Red-bellied Woodpeckers found near the Rainy River mouth on 8 July 2005 represents the first nest of this species for northern Ontario (Peck and Peck 2006) and the northernmost confirmed nest record for North America.

Acknowledgements

My thanks to Larry and Linda Budreau for allowing me to publish their photographs of this Red-bellied Woodpecker nest. I would also like to thank Roland and Julia Hill and Dan Lee for providing information on sightings of this pair of Red-bellied Woodpeckers that helped in locating the nest.

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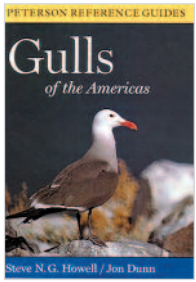
Book Reviews



Gulls of the Americas. 2007. *Steve N. G. Howell and Jon Dunn*. Houghton Mifflin. Boston and New York. Hardcover, 17 x 26 cm, 1,160 colour photographs, 516 pages. $45.95 CAN. ISBN 13:978-0-618-72641-7.

Gulls of the Americas (hereafter H & D) is the latest in the Houghton Mifflin nature guide series. It is more precisely termed one of the Peterson Reference Guides. Indeed, the book's large size and weight preclude it as a field guide. Steve Howell and Jon Dunn have produced an exhaustive reference work for the 36 species of gulls recorded in the Americas. This includes 22 species that have bred in North America, 10 that breed in South America, and 4 that strayed from Europe and Asia. With a great volume of published identification material, H &D are field identification experts.

The book begins with the chapter How To Use This Book. A lengthy but informative introduction follows, which is essential reading for the gull student. It starts by defining gulls, and continues with sections on taxonomy, field identification, individual variation, geographical variation, hybridization, topography, molts and plumages, age terminology, molt strategies and behaviour. The final 200 plus pages are Species Accounts in ascending order of body size. There is a section on Hybrid Gulls that discusses regular hybrids occurring on both coasts, almost exclusively involving large gulls. The book concludes with a Glossary, extensive Bibliography and a section on Geographic Terms. Medium-sized photographs begin species account groupings. A range map is found on the first page of each Species Account. Included are an identification summary, discussions on taxonomy, status and distribution, field identification vis-à-vis similar species, detailed descriptions and molt. Hybrids involving other species are listed and references for further information conclude each species account. An astounding 1,160 colour photographs are contained in this book. Most are found in the plate section (pages 47 to 298) sandwiched between the introduction and the species accounts. Most of my comments are directed at the impressive number of photographs.

My review compares this book to its main competitor *Gulls of North America, Europe and Asia* by Olsen and Larsson (2003), hereafter O & L. See the review of O & L by Pittaway (2005) in *Ontario Birds*. Both books were influenced by the seminal work of Jonathan Dwight (1925), and in the past quarter century by two editions of the splendid Gulls by the late Peter J. Grant (1982, 1986). H & D's 516 pages and O & L's 608 make both large, weighty tomes. Both are marvelously produced and visually appealing. I have not read all species accounts in either book, but those examined are free of typographical errors. The books differ in price. My copy of O & L was $80.00 Canadian in 2004. H & D is a relative bargain at $45.95 in 2007. O & L is currently out of print in North America.

These books diverge in formatting and use of illustrations. O & L treats each species as a separate entity with the text interspersed with illustrations (generally excellent) followed by photographs. H & D place a nearly all-encompassing block of photographs in the first 300 or so pages. Species accounts follow in a separate grouping. H & D is nearly devoid of illustrations save for the paintings of Ross's Gull on pages 71 and 73, Red-legged Kittiwake on pages 79 and 81, and a chart showing varying adult wing tip patterns in Kumlien's Gull on page 252. These were done by Martin T. Elliott. Another difference between the books is taxonomy, centred on two complex taxonomic groups. H & D acknowledge that the American Herring Gull (*Larus argentatus smithsonianus*), European Herring Gull (*L. a argentatus/argenteus*) and Vega Herring Gull (*L. a. vegae*) are best regarded as separate species, but the American Ornithologists' Union (AOU) has not split them. Conveniently, H & D give these three subspecies groups separate accounts. O & L treat all three "Herring Gulls" as distinct species following European taxonomic decisions. The other contentious group is the Iceland Gull *(Larus glaucoides*) complex. H & D give separate accounts for the North American breeding subspecies (*L. g. kumlieni*) and the Greenland nominate subspecies *L. g. glaucoides*. They treat Thayer's Gull (*Larus thayeri)* as a full species. See the Iceland Gull Complex on page 462 for a discussion of this vexing issue. O & L handle both subspecies of Iceland Gull separately in one section and Thayer's Gull gets full species treatment.

Which book should I buy? There are 36 species in H & D and 32 of them are in O & L. I will make some comparisons and let you decide. Field guides and handbooks derive their success or failure from the quality of photographs and illustrations. Gull study is heavily visual and detailed, and both H & D and O & L score highly in this regard.

I heard comments about the small images in H & D. The small photos in O & L are actually smaller than similarly sized photos in H & D. Though smaller, these images in O & L are consistently brighter and sharper than the slightly larger ones in H & D. O & L has many

more bright and larger sized photos than H & D, and mixes large and small throughout the book. This creates a more attractive layout than in H & D, whose photos on most pages are small and similarly sized.

Regarding complaints of dark and fuzzy images in H & D, I found very few that are a real concern. Some examples of too dark photos are: Gray-hooded Gull (p. 56, 3.4), Red-legged Kittiwake (p. 80, 9.9), Lava Gull (p. 99, 15.9), Heermann's Gull (p. 105, 16.15), Gray Gull (p. 108, 17.8) and Glaucous-winged Gull (p. 238, 33.19, 33.20).

In assessing the "too small" complaint, I think that the small size of the photos in H & D exacerbates a problem where the birds in the image are already small, particularly where two or more birds are compared. A pertinent example is on page 69 (6.6), Little Gull with a Bonaparte's Gull. Another case is a photo showing a group of Sabine's Gulls (p. 84, 10.6).

Hans Larsson's fine illustrations in O & L add lustre to that book, both for their aesthetics and accuracy. Should H & D have used artist Martin Elliott more or perhaps the talents of Thomas Schultz? The latter's gull illustrations, virtually unaltered through five editions of the National Geographic Field Guide (2006) are eye pleasing and technically correct. The already large size of H & D likely did not allow for extra pages of illustrations considering the massive number of photos. My preference is having superb illustrations and excellent photographs. O & L combine these two facets exceptionally well.

There are many pluses among the photographs in H & D such as the instructive use of photos in topographical diagrams on pages 18 to 22; the photos on pages 75 to 78 showing the subtle differences between eastern and western Black-legged Kittiwake subspecies; the eight photos of Ivory Gulls on pages 88 and 89; a seldom seen side by side comparison of adult Franklin's and Laughing Gulls on page 90; page 264 has three photos demonstrating that juvenile Thayer's Gulls can vary in appearance as much as any large gull; and the 101 photos on pages 274 to 298, of presumed hybrid large gulls, are a major resource in the literature. This is the first major publication to have photos of these hybrids in a single group. Most hybrid gull photos are from the West Coast, where hybrids are frequent.

It is heartening to see photos of uncommon species in Ontario so well represented such as 41 images of California Gull (*L. californicus*) and 37 of Lesser Black-backed Gull (*L. fuscus)*. For species of regular occurrence in Ontario, I compared captions and photos, checking that they matched in terms of identification and plumage. I found very few points of concern. Some examples are the bill on the Kumlien's Gull in photo 35A.9 on page 253. The bird is in its first calendar year, but the bill is markedly two-toned. Juvenile Kumlien's seen in autumn in southern Ontario are essentially black-billed, with the bill becoming obviously

pale basally only after New Year. Also, I had difficulty determining the feather generation of the scapulars on this bird. The authors term it first cycle indicating that they do not know its exact plumage. Although it is often difficult to separate juvenal from first basic scapulars, my sense is that many Ontario Kumlien's retain full juvenal plumage until New Year or later. Note the second cycle Kumlien's Gull number 35A.39 on page 259. The two outer primaries (P9 and 10) on the right wing seem much too narrow and pointed for a second cycle (second basic primaries) age designation. It looks like a first basic bird to me. See first cycle Thayer's Gulls on page 266 (36.17). Not noted in the caption, the right most bird appears to be a second basic Western or Glaucous-winged x Western hybrid. On page 270, the photo 36.34 of the adult nonbreeding Thayer's Gull has a production error involving the tips of P9 and 10 on the right wing, referred to in the caption, which is cut off at the margin.

A key component of the photo captions is the terminology for age and plumage designations. Rather than attempt to provide any clarification myself, I refer readers to the following: the Species Accounts themselves; "Description and Molt" on page 6; pages 30 to 44, beginning with "Molts and Plumages", and concluding with "Molt Strategies of American Gulls". Central to this section is "Molt and Changing Appearance" starting on page 33. The maturation stages in a Western Gull are shown using 34 photos of birds in all plumages from juvenile to adult.

I caution readers the plumage and molt terminology is heavy going and should be read several times to fully understand it. Its basis is the Humphrey and Parkes (1959) system of molts and plumages. This under rated and under utilized method is actually simple and easy to use once learned. Ron Pittaway introduced me to Humphrey and Parkes (H & P) about 15 years ago and I now employ it religiously. The authors have determined that both the H & P and the British system, favoured by Peter Grant, do not adequately address the many anomalies to understanding molts and plumages in gulls. They employ a customized H & P system. An example is found in Ivory Gull, which goes from juvenal plumage to definitive basic in its second calendar year. This species, according to the book, has no definitive prealternate molt, and does not change its appearance seasonally. Contrast this to the treatment in Grant's (1986) guide. I still struggle with the concept that very few large white-headed gulls have a first prealternate molt in the spring of their second calendar year. H & D contend that most transition from first basic to second basic plumage is by a protracted complete molt from spring to fall.

Howell and Corben (2000) started the confusion and controversy by deviating from the terminologies used by Grant and H & P. Grant taught us that first basic (first winter) large gulls have a

Figure 1. Definitive basic Iceland Gull, Markham, Ontario, 6 January 2006. *Photo: Brandon Holden.*

head-body molt beginning in late January and lasting until late April, resulting in first alternate (first summer) plumage. The complete second prebasic molt then commences in June and lasts until November on average, according to Grant. However, we can clearly see that the second prebasic molt starts in late April and early May, when the innermost primaries are shed, well shown in second calendar year Herring Gulls in Ontario. So where does a first alternate plumage fit in? Compounding this is the difficulty in determining how much of the extremely variable appearance of large second year gulls is due to the effects of wear and fading, as well as molt. Adding to this conundrum are gulls returning north from southern coastal areas with extreme bleaching effects of sun and sand abrasion. Perhaps through all of this confusion, it is best to keep in mind that a great deal of work has been undertaken over the past 25 years, furthering our understanding of the complex issue of molt in gulls. I think an open mind is the best tool to employ here.

The majority of the 1,160 photographs in the book are from California, with a heavy reliance on photos taken in that state by the first author. The remainder are from other American states, foreign countries on six continents and Canada. Most Canadian photos are from Newfoundland by Bruce Mactavish. Not one photo is from Ontario. The closest is a photo taken by Willie D'Anna of a presumed hybrid Glaucous x American Herring on page 285 (H3.1). This photograph is one of only two in the book taken in the Great Lakes region. Ontario is one of the largest jurisdictions in North America. Gulls abound here as breeders, migrants, and in winter.

Ontario has one of the largest gull lists of any state or province and has many talented photographers such as 20-year-old Brandon Holden who specializes in gull photography (see Fig. 1). Many of Brandon's images of gulls in flight are unrivalled. The Niagara River, with most of the best vantage points on the Ontario side is one of the prime gull watching areas in the world. The Point Pelee area has a high number of gull species in all four seasons. Were the authors handicapped by a lack of familiarity with Ontario's gulls and birders? How many gull experts west of Canada's youngest province were consulted about identification matters, variation in Herring Gulls, and the status and distribution of gulls across the country? Past issues of Ontario Birds should have been more thoroughly examined for relevant articles. I found only four listed in the lengthy Bibliography. The considerable specimen resources of the Canadian Museum of Nature and Royal Ontario Museum were not used. The above illustrate the strong "American West Coast bias" that pervades the birding literature over the past few decades.

For the birder with only a general interest in gull identification, I recommend the National Geographic Guide (2006) or Sibley (2000) to identify most gulls. However, serious gull students should acquire Howell and Dunn's book and give it a place on the bookshelf next to Olsen and Larsson's guide. Having both books will serve you well as key references for years to come.

Acknowledgements

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Michael D. Cadman
Distinguished Ornithologist

Mark K. Peck

Figure 1. Mike Cadman (right) receives the 2007 Distinguished Ornithologist Award, presented by Mark Peck, at the 25th Anniversary Annual Convention of the Ontario Field Ornithologists on 13 October 2007. *Photo: Jean Iron.*

This note is based on remarks by Mark Peck at the Distinguished Ornithologist Award to Mike Cadman at the Ontario Field Ornithologists (OFO) Annual Convention in Leamington on 13 October 2007.

The second Ontario Breeding Bird Atlas will be published in December of 2007. It is the culmination of more than eight years of dedicated planning, organization, research, coordination, writing, editing and finally, publishing. It has involved over two thousand volunteers, dedicated amateurs and professionals alike, working together to produce the most up-to-date information on the distribution and relative abundance of Ontario birds. The Coordinator of this Atlas, like the first Atlas 20 years earlier, was Mike Cadman. It is a difficult role requiring many hats: coordinating individuals and groups, clear and effective communication, openness to new ideas,

knowledge of current research and analysis, field expertise and time management. Mike excels in all of these areas. His commitment to the Ontario Atlas Programs, and his many other endeavours, make it easy to see the impact Mike has had in Ontario ornithology. This is why he is such a deserving recipient of the OFO Distinguished Ornithologist Award for 2007.

Mike was born in Blackpool, England. His interest in birds first began at the age of four, when his uncle took him to a soccer game. It turns out that Mike was more interested in the Rock Pigeons flying around the soccer pitch than the game itself. A birder was born!

At the age of fourteen, Mike and his brother took a week long boat trip across the Atlantic and joined their parents in Canada. They moved to Mississauga initially, eventually settling in Bramalea a few years later. Mike was the only birder in the family, but he had an understanding father who was willing to drive around to local hotspots, drop him off, and then return later in the day to take him home. Mike also often had the benefit of spending his earlier birding career with two of Ontario's best: John Lamey and Don Perks. For a young birder it was a very solid beginning.

After high school, Mike moved on to University of Guelph, graduating with a Bachelor of Science in Fisheries and Wildlife Biology in 1976. In 1977 he began work on his MSc. at the University of Toronto (U of T) and the Royal Ontario Museum (ROM) with Allan Baker. Allan is a dedicated and detailed scientist who Mike credits with encouraging his love of science and research.

Mike shared his time between the U of T, the ROM and fieldwork in Virginia working on the greatest bird in the world, the American Oystercatcher. Even then, Mike was on his chosen path. While at graduate school, Mike had been reading about the recently completed British Bird Atlas, impressed with the remarkable research being undertaken in the country of his birth. In 1980, Mike successfully defended his thesis, "Age related foraging efficiency of the American Oystercatcher", and began looking for a job. A phone call to David Hussell started him in the right direction. David suggested he give Paul Eagles a call. The rest, as they say, is history. Paul offered Mike work writing up the instruction manual for the first Ontario Breeding Bird Atlas. The pay was not great, $2000.00 for a three month contract, but it was a start. Before the three months were up, Mike, with tremendous support from Paul Eagles, George Francis and Bruce Falls, was offered the position of Atlas Coordinator. It even came with a raise! The next seven years were busy. The logistics of organizing and running an Atlas in a province as large as Ontario prior to personal computers meant extensive mailings, numerous committee meetings and many late nights. Mike stayed with it though and in 1987 the Ontario

Breeding Bird Atlas was published, co-edited by Mike, Paul Eagles and Fred Helleiner, moving Ontario a giant step forward in our knowledge of the distribution of Ontario birds.

For Mike, it was just the beginning of a profession dedicated to Ontario ornithology. The Atlas was followed by the design, development and coordination of the Ontario Rare Breeding Bird Program from 1989 through 1992, under the auspices of the Federation of Ontario Naturalists (FON). The program is still running today as the Ontario Birds at Risk program, administered now by Bird Studies Canada. Not one to rest on his laurels, Mike then took on the challenges of a whole new class of animals when he accepted the position of Coordinator, Atlas of the Mammals of Ontario in 1989 and 1990. This was followed by his appointment to Director, Atlas of the Mammals of Ontario from 1990-1992, also with the FON.

From 1992 until the present, Mike has been with Environment Canada as a Senior Songbird Biologist and the Coordinator of the Ontario Forest Bird Monitoring Program. It has been a busy time, as Mike also assisted in the design and development of the Marsh Bird Monitoring Program in 1993 and 1994, and with staffing and supervising the Ontario Peregrine Falcon survey from 1985 through 1990. He followed that work as Recovery Team Chair for Acadian Flycatcher, Hooded Warbler, and Loggerhead Shrike from 1992 through 2001, publishing reports and articles on different aspects for many of these projects. He has also spent time on several committees within Bird Studies Canada: Chair, Ontario Program Committee (1995-2001); Board of Directors (1995-2002); National Council (1995-2003); and on the Board of Directors, Society of Canadian Ornithologists (1996-1998). Throughout it all, Mike credits much of his success due to the strong support of Environment Canada staff members Dan Welsh and Rick Pratt.

Forward to 1999 and the second Ontario Breeding Bird Atlas. While representatives from the five sponsor organizations were busy getting things ready for the second Atlas, Mike happened to miss a meeting. Michael Bradstreet, never one to miss an opportunity, suggested to Paul Pratt that they should ask Mike to be the coordinator. After all, he was doing a lot of the initial work anyway — he might as well get credit for it. It was kind of like a mutiny in reverse. This time, however, Mike knew what he was getting into, and after taking a couple of days to think about it, and discussing the offer with his family, Mike was once again the Coordinator of the Ontario Breeding Bird Atlas.

In some ways, the 2nd atlas has been easier, because much of the initial work had been sorted out during the first atlas. Mike knew he had regional coordinators he could work with, and he knew the volunteers much better this time. The committees were well organized, with Mike sitting or chairing most

of them. Personal computers and online data entry would make data collection easier and confirmation faster. Relative abundance estimates through point counts and improved GIS capabilities were valuable additions to the second atlas which were quickly accepted and supported by Mike. The big difference between the two atlases, according to Mike, was the increased complexity in the second atlas, and the challenge of relating the findings between the two atlases.

Working with Mike during this atlas, it was easy to see how important his efforts were to the success of the project. Through his education and experience, Mike brought a complete package to the table. He is a proven field biologist, his knowledge of the literature and research techniques is excellent and his communication ability is unparalleled. I couldn't help but be impressed with his handling of difficult situations, his skill at listening, his acceptance of new ideas, his ability to put aside his own biases, and his willingness to take risks in support of the atlas. It all meant a much stronger end product.

Equally important, throughout all of the dedication and productivity shown during his 28 year career, Mike has been able to maintain a balanced home life, and credits his family with much of his success. To paraphrase a line from Mike's thesis: "Finally, special thanks go to Elspeth McCarrol-Cadman, Rachael Cadman and Ellen Cadman, for their undaunted assistance and encouragement at all stages of this study". When I asked his daughter, Ellen, if she was aware of all of the great work her Dad had done, she told me —"not completely, but I am very proud of him. He is a great Dad".

Ladies and gentlemen, on behalf of all OFO members and Ontarians everywhere, it is time to recognize the outstanding contributions of Michael Cadman during a career in support of Ontario ornithology. It is my great pleasure to present the Ontario Field Ornithologists Distinguished Ornithologist for 2007 to Michael D. Cadman.

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Nikon Photo Quiz

Sponsored by Nikon Canada *Glenn Coady*

For this quiz, we feature a photo of a bird that even the most novice observers would readily identify as a duck.

Based on this duck's long, slender, cylindrical, and saw-tooth edged bill, we can confidently identify it as one of the four species of merganser on the Ontario checklist. Furthermore, the reddish colour of the bill allows us to easily eliminate both the accidental Smew (in which both sexes have a blue-gray bill) and the Hooded Merganser (in which males have a black bill and females a yellowish bill). Both of these smaller species of merganser also have much shorter bills than the bird in this photograph.

Therefore, in rather short order, we know that our quiz bird is either a Red-breasted Merganser or a Common Merganser. While discrimination of breeding-plumaged adult males of these two species is quite straightforward, females and males in eclipse plumage can be more difficult to separate from one another. This photo will provide us with an excellent opportunity to review the characters that are useful in identifying those individuals.

This bird's overall gray body colour and brownish head colour indicate that it is either a female or a male in the eclipse plumage of summer. We are fortunate to have a photograph of this bird with its wings spread, for this allows us to accurately determine the sex. It lacks the distinct, contrasting, dark cheek stripe that would be evident on a juvenile merganser of either of these species. Adult male mergansers of both of these species retain extensively white lesser coverts in eclipse plumage. However, our quiz bird shows uniformly gray lesser coverts, indicating that it is an adult female. Our remaining task is therefore to separate the adult female Red-breasted Merganser from the adult female Common Merganser.

Adult female Common Mergansers have darker cinnamon-brown head colouration compared to the lighter, tawny-brown head of the female Red-breasted Merganser. Our quiz bird exhibits the darker cinnamon-toned head colour of the former species.

Although both species exhibit a crested appearance to the head, most field guides stress the difference between the shorter crest and more regularly rounded head shape of the female Common Merganser versus the longer, wispier, spiky crest of the female Red-breasted Merganser. While this field mark is generally very useful on most birds, it is most useful in separating birds with a relaxed head posture, and can be quite variable in its usefulness on birds which have been recently diving or preening. In a bird apparently bathing and about to rear up and flick the wings, as this bird appears, it is probably not too useful a characteristic, as the head is not in a relaxed posture. The spiky appearance

to the crest of this bird is therefore not a character we should rely too heavily upon.

The bird's bill is quite crucial in diagnosing the proper identification. Common Merganser females tend to have bright, blood-red bills, whereas Red-breasted Mergansers tend to have duskier, dark-red bills. Our quiz bird seems more consistent with the former pattern.

Common Mergansers have fairly thick, very broad-based bills, whereas Red-breasted Mergansers have much thinner and more narrowly-based bills. Our quiz bird clearly shows a thick and very broadly-based bill that corresponds better with the Common Merganser.

The relative position of the nostril of the bill is also very useful. The forward edge of the bill's nostril extends to a point nearly 45-50% along the bill's length in the Common Merganser, whereas it barely extends to 25-30% of the bill's length in the Red-breasted Merganser. The quiz bird appears to show the more centrally located nostril of a Common Merganser (although the oblique angle of the bill makes this assessment difficult — a more perfectly lateral view of the bill would be desirable to properly assess this feature).

The feather border at the base of the bill is also useful in separating the two species (particularly in fresh plumage like our quiz bird). In the Common Merganser, the feathering extends equally forward onto both the upper and lower mandibles, whereas in the Red-breasted Merganser the feathering extends noticeably further onto the upper mandible (thus coming much closer to the more basally-placed nostril). The quiz bird clearly demonstrates the former pattern of the Common Merganser.

The colour contrast in the area of the neck is also useful in differentiating these two merganser species. In the Common Merganser, there is a sharp and cleanly cut demarcation between the cinnamon-brown of the head and the gray lower neck and breast. The Red-breasted Merganser shows a much more suffuse blending between the

tawny-brown colouration of its head and the light-gray lower neck, sometimes even fading to whitish in the front of the neck. The quiz bird is more consistent with the Common Merganser for this character as well.

Another useful field mark in separating the females of these two merganser species involves the colour in the chin area. The female Common Merganser typically shows a very well-marked white chin area that contrasts strongly with its dark cinnamon-brown cheek and throat. The Red-breasted Merganser often lacks any white in the chin altogether, or may show a diffusely whitish area in the chin that does not form a discrete, evenly bordered chin marking, as is seen in the Common Merganser. Once again, our quiz bird clearly has a well-marked white chin that is more in keeping with the pattern of a **Common Merganser** — and indeed that is the correct identification.

This adult female Common Merganser was photographed on 23 September 2007 in Algonquin Provincial Park by Mark Peck.

Glenn Coady, 604 – 60 Mountview Avenue, Toronto, Ontario M6P 2L4

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