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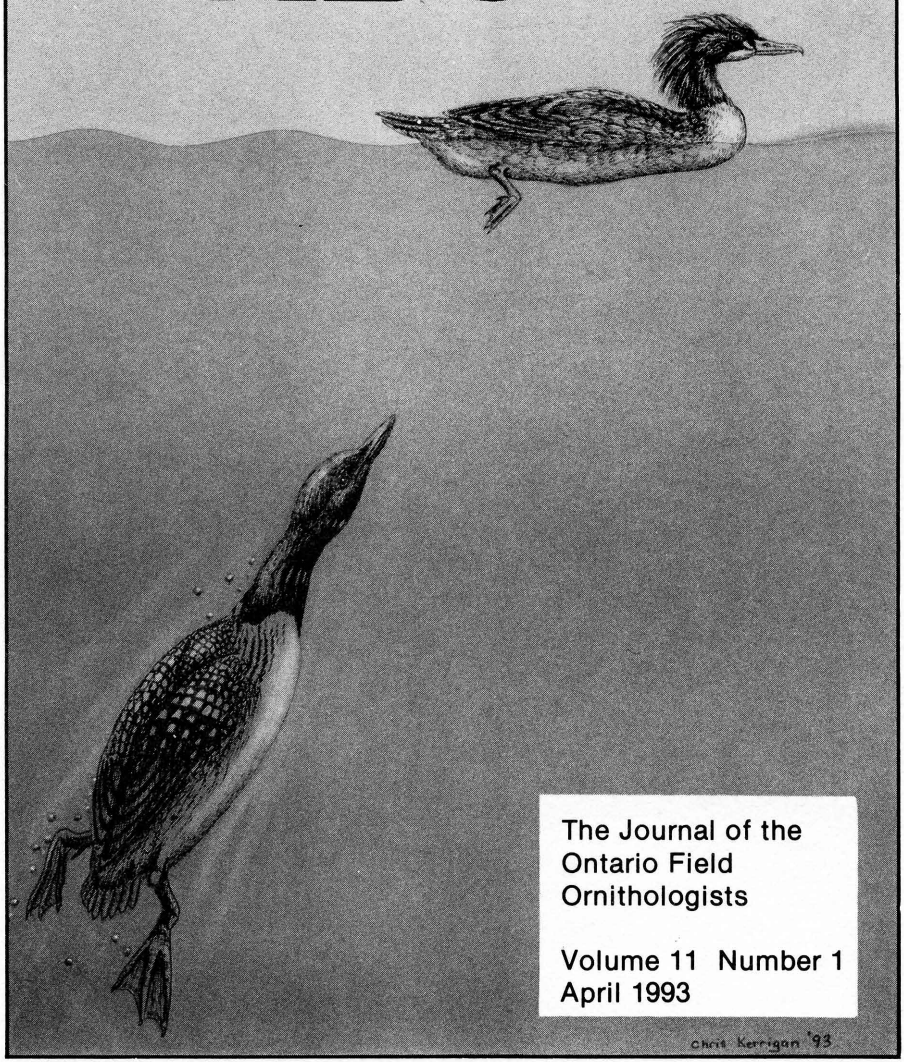

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Editorial Policy

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

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Letter to the Editors

Snow bathing in Common Ravens

Further to Al Sandiland's "Snow Bathing Proves Fatal for American Goldfinch" in *Ontario Birds* 10(2), 1992 (I add the following observations):

In his notes on the occasional habit of snow bathing, Sandilands mentions the Common Raven as one species that practices this habit. During the winter of 1991-92 at my home near Evansville on western Manitoulin Island, I have observed ravens so engaged several times; however, always in conjunction with water bathing.

Near our farm house, there are open springs where water springing from the earth is always sufficiently warm to keep these holes open all winter, regardless of how low the thermometer drops. Such holes prove popular with many birds, year-round. During winter, ravens bathe here quite regularly.

Last winter, on several occasions around noon, in late winter when it was calm, bright, and very cold, ravens left their bath in the water to complete it in the snow banks along the stream. With wings held ajar, they immersed the breast in snow, dipped both their head and shoulders up and down, and generally thrashed about much as they do when water bathing.

What prompted such behaviour? One thinks of thermal adjustments, snow used as water blotters, effects upon parasites, rituals (courtship and otherwise), and more. Ordinarily, most birds, including ravens, move directly from the water to trees nearby for preening. What was different on these days?

I trust these observations will add to the knowledge on snow bathing among birds.

Doreen Bailey
Evansville, Ontario

Publication Notice

Bird Trends: A Report on Results of National and Regional Ornithological Surveys in Canada. Number 1, Summer 1991. Migratory Birds Conservation Division, Canadian Wildlife Service, Ottawa, Ontario K1A 0H3. No charge.

This report describes a number of bird population monitoring and surveying programs across Canada, and includes addresses to contact for birders interested in participating. One section presents data on population trends in Canadian songbirds, with analysis by Erica Dunn (Long Point Bird Observatory).

(**Bird Trends** is distributed free to interested amateur ornithologists, upon request.)

Articles

Interspecific Aggression by Common Loons

by
Ron Tozer

The popularity of loons is reflected in the many books which have been written about them in recent years (see Dunning 1985, Klein 1985, McIntyre 1988, Miller 1987). The inherent beauty of their appearance and calls, plus their apparently docile and confiding nature, make loons extremely attractive to outdoor enthusiasts. The Common Loon (*Gavia immer*) is often considered symbolic of our northern wilderness. And yet despite this high profile and the increased availability of published information, relatively few people are aware of attacks by loons on other species of birds.

Kirkham and Johnson (1988) reviewed reported instances of this behaviour, noting that " in all cases to date, the aggression was directed at waterfowl intruding on the loon's feeding or nesting territory...when they were reproductively active". This report will review published cases of loon aggression, and provide additional observations — including occurrences outside the breeding season, and apparently unrelated to feeding or nesting territories.

Published Reports

The literature contains numerous reports of attacks by Common Loons on various species of water birds, where the aggression was limited to chasing and harassing. Species recorded include: Canada Goose (*Branta canadensis*) young (Zicus 1975); Wood Duck (*Aix sponsa*) adults (Olson and Marshall 1952); American Black Duck (*Anas rubripes*) adult (Olson and Marshall 1952); Mallard (*A. platyrhynchos*) adults (Sperry 1987) and young (Anderson 1970, Kennedy 1981, Olson and Marshall 1952); Ring-necked Duck (*Aythya collaris*) young (Sperry 1987); Common Goldeneye (*Bucephala clangula*) adult and young (Sperry 1987); Common Merganser (*Mergus merganser*) adults (Barr 1973) and young (Forbush 1912); Red-breasted Merganser (*M. serrator*) adults (Sperry 1987); and American Coot (*Fulica americana*) adults (Taverner 1937). It appears that the harassment and displacement of birds by Common Loons during the breeding season occurs regularly.

However, Common Loons have also been reported to actually kill the following waterfowl: Canada Goose adult (Sperry 1987) and young (Zicus 1975); Mallard young (Sperry 1987); Ring-necked Duck young (Sperry 1987); Common Eider (*Somateria mollissima*) young (Meinertzhagen 1941, Brooks 1941); Common Goldeneye adult and young (Sperry 1987); Common Merganser adults (Barr 1973); and Red-breasted Merganser young (Kirkham and Johnson 1988). In addition, Munro (1939) considered it likely that

Common Loons had killed several unspecified young "diving ducks" which he found with puncture wounds.

In passing, it should be noted that a similar pattern of fatal attacks has been reported for the Pacific Loon (*G. pacifica*), involving: Snow Goose (*Chen caerulescens*) young (Kirkham and Johnson 1988); Canada Goose adult (Jones and Obbard 1970); and Oldsquaw (*Clangula hyemalis*) adult (Alison 1975) and young (Kirkham and Johnson 1988). Also, an Arctic Loon (*G. arctica*) was reported to have severely wounded a Great Crested Grebe (*Podiceps cristatus*), which may have died later (Higgott and MacKay 1991).

Additional Observations

The following records of interspecific aggression by Common Loons were made in Algonquin Provincial Park, Ontario. They fit the previously reported pattern of attacks during the breeding season within the loon's feeding or nesting territories.

— On 11 May 1964, a Common Loon chased a pair of Common Mergansers on Found Lake, forcing them to go on shore to escape. (Reported by R.J. Rutter and R. Tozer.)

— On 23 May 1992, a Common Loon approached a male Mallard on the surface of Lake Travers; the Mallard took flight when the loon was one metre away. (Reported by R. Tozer.)

— On 25 June 1992, a Common Loon attacked from below twice, making contact with a female Common Merganser that was swimming with her brood of young on Pen Lake. The adult and young mergansers flapped across the surface to escape. (Reported by canoeists.)

— On 26 July 1989, a Common Loon attacked and killed the single young of a female Common Merganser on Crow Lake. Earlier mortality of other young in this brood may also have been due to loons. (Reported by K. Knox.)

— On 6 August 1989, a Common Loon cornered a female Common Merganser with six non-flying young in a small, shallow bay of Jack Lake. The loon rushed at the mergansers each time they attempted to leave the bay, forcing them up onto the shore. (Reported by D. Tozer and R. Tozer.)

— On 15 and 19 August 1987, a Common Loon chased a brood of young Common Mergansers across the surface of Burnt Island Lake, forcing them to scatter. (Reported by canoeists.)

— On 23 August 1990, a Common Loon attacked three large young Common Mergansers from below the surface of Big Porcupine Lake. The loon emerged with its bill full of merganser down feathers, and the ducklings scattered wildly. (Reported by R. MacKay.)

— On a day in August 1991, a Common Loon burst to the surface on Costello Lake, directly under a female Common Merganser, which flapped across the water to escape. (Reported by M.W.P. Runtz.)

The additional sightings of Common Loon interspecific aggression reported below apparently differ from previously published accounts in that they did not occur within nesting or feeding territories during the breeding season.

— On 28 August 1990, a Common Loon surfaced among six adult Red-breasted Mergansers on Lake Ontario

off Thickson's Point, Durham R.M.; the mergansers scattered wildly across the water to escape. The loon and mergansers were migrants at this location. (Reported by D. Tozer and R. Tozer.)

— On 3 October 1992, a Common Loon surfaced several times directly under a Herring Gull (*Larus argentatus*) on Smoke Lake (Algonquin Provincial Park). Each time, the gull sprang into the air and landed nearby on the water, only to be attacked again by the loon. (Reported by B. Charlton and R. Dobos.) The Herring Gull has apparently not been previously reported as a target of loon aggression.

— On a day in early November 1990, a Common Loon shot to the surface among a small flock of Red-breasted Mergansers on the Ottawa River at Ottawa, R.M. of Ottawa-Carleton, causing them to scatter in all directions. The loon and mergansers were migrants at this location and date. (Reported by M.W.P. Runtz.)

Conclusion

Aggression by loons toward other species of water birds occurs in two basic forms. The loon may approach on the surface, with neck held low and outstretched, and attempt to seize birds in its bill or stab them with the bill. Alternatively, loons often approach underwater. They surface explosively directly under the intended victims, again using their bills to attempt to seize the birds or stab them on the underside. The puncture wounds which can result from such attacks have been sufficient to kill birds as large as adult Canada Geese. However, loons often do not make contact with the birds they attack due to the latter's alertness and evasive behaviour.

Why do loons attack other birds? Researchers have varied in their assessment of just how loons might benefit from interspecific aggression. Kirkham and Johnson (1988) considered hypotheses concerning the function of this behaviour, which included predation, defence of scarce resources against competitors, demonstration of reproductive fitness, and non-discriminatory aggression toward territorial intruders. They concluded that the latter hypothesis best fit the observed behaviour, and that it was aberrant or non-adaptive, with no apparent benefit to the aggressor. (However, we have noted in this report that loon aggression also occurs outside the breeding season, away from feeding or nesting territories.) Also, Barr (1973) reported that "sufficient overlap does occur in the use of habitat and prey, that such overlap may account for the conflict frequently observed between the Common Merganser and the Common Loon". And Sperry (1987) speculated that the cost of interspecific aggression in loons is low, and that it may provide limited benefits to loons in "protection of young, defense of food resources from marginal competitors, sexual selection, and practice for intrageneric combat".

Acknowledgements

I would like to thank the following for their contribution of loon aggression observations: Barb Charlton, Rob Dobos, David Eden, Ken Knox, Rory

MacKay, Michael Runtz, and Doug Tozer. I appreciate the helpful comments of Bill Crins and Ron Pittaway on an earlier draft of this report.

Literature cited

Allison, R.M. 1975. Breeding biology and behaviour of the Oldsquaw (*Clangula hyemalis* L.). Ornithological Monographs, Number 18.

Anderson, K.C. 1970. Mallard duck family harassed by Common Loon. Passenger Pigeon 34: 123.

Barr, J.F. 1973. Feeding biology of the Common Loon (*Gavia immer*) in oligotrophic lakes of the Canadian Shield. Ph.D. Thesis, University of Guelph, Guelph, Ontario.

Brooks, A. 1941. The loon as a duck killer. Condor 43: 197.

Dunning, J. 1985. The Loon: Voice of the Wilderness. Yankee Publishing Inc., Dublin, New Hampshire.

Forbush, E.H. 1912. A History of the Game Birds, Wild-fowl and Shore Birds of Massachusetts, 1912. Massachusetts State Board of Agriculture.

Higgott, J.B. and A.J. MacKay. 1991. Black-throated Diver attacking Great Crested Grebe. British Birds 84: 394.

Jones, R.N. and M. Obbard. 1970. Canada Goose killed by Arctic Loon and subsequent pairing of its mate. Auk 87: 370-371.

Kennedy, A.J. 1981. Interspecific aggressive display by a Common Loon. The Murrelet 62: 20-21.

Kirkham, I.R. and S.R. Johnson. 1988. Interspecific aggression in loons. Journal of Field Ornithology 59: 3-6.

Klein, T. 1985. Loon Magic. Paper Birch Press Inc., Ashland, Wisconsin.

McIntyre, J.W. 1988. The Common Loon: Spirit of Northern Lakes. Fitzhenry and Whiteside, Toronto.

Meinertzhagen, R. 1941. August in Shetland. Ibis 5, 14th Series: 105-117.

Miller, T.L. 1987. The Common Loon. The Cartwheel Co., St. Paul, Minnesota.

Munro, J.A. 1939. The relation of loons, Holboell's Grebes, and coots to duck populations. Journal of Wildlife Management 3: 339-344.

Olson, S.T. and W.H. Marshall. 1952. The Common Loon in Minnesota. Occasional Papers: Number 5. Minnesota Museum of Natural History.

Sperry, M.L. 1987. Common Loon attacks on waterfowl. Journal of Field Ornithology 58: 201-205.

Taverner, P.A. 1937. Birds of Canada. National Museum of Canada, Ottawa.

Zicus, M.C. 1975. Loon predation on a Canada Goose gosling. Auk 92: 611-612.

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Violet-green Swallow: New to Ontario

by
Peter Burke

A white-bellied swallow being blown south by cold northerly winds flew high over the heads of Dawn Brenner, Mark Dugdale, and Peter Burke at about 0945h on 28 October 1992, at the tip of the Sleeping Giant (Thunder Bay District, Ontario) on Lake Superior. Tree Swallows (*Tachycineta bicolor*) are normally gone by early August from Northern Ontario, therefore suspicions were immediately raised about the identity of this bird. Alas, we could only speculate (sadly) as it quickly continued south. After the fourth member of our party, Dave Shepherd, joined us, we watched the swallow descend and disappear over the chop of the lake. Having enjoyed Ontario's first Black-throated Sparrow (*Amphispiza bilineata*) just weeks before at nearby Silver Islet (Henshaw and Kerr 1992), we felt that a second rarity had likely just eluded us.

Not five minutes later, and with our attention directed back to the north, Dawn announced that the swallow had returned, and was flying right above our heads! This time we could see much more of the bird as it quickly turned and dove at treetop level, allowing brief glimpses of its back and head. Due to overcast skies, iridescence was absent from the bird's plumage. However, we could all see the extensive white patches on the sides of the rump (reminding Mark, a visiting British birder, of a House Martin (*Delichon urbica*) which has an entirely white rump), and the beady eye on a white face. Suddenly we realized that we were indeed hosting a stray Violet-green Swallow (*T. thalassina*)!

The bird stayed around the tip for the rest of the day, flying low over the shoreline and grassy clearing. It favoured the lee side of the point, presumably finding more shelter and food. Several attempts were made to net the bird, but all failed. It maintained a steady, powerful flight involving very litte soaring, and made low sweeps which were repeated over one particular area at a time. It seemed very trusting and would fly within one metre of an observer. Standing at the forest's edge, we could enjoy the beautiful golden and purple flashes of the bird's mantle as it passed over the shoreline rocks. It was so fast that viewing with binoculars was difficult.

On 29 October, the day dawned at a temperature of minus 7°C, raising doubts that the swallow had survived the night. But at 0900h, I found it again cruising the east shore. Then it settled on a serviceberry (*Amelanchier* sp.) branch, appearing weakened by the cold. This was the first opportunity to observe its brilliant plumage in detail. In dull light, it was nearly identical to a Tree Swallow except for the very prominent white edgings to the tertials. This is a feature of freshly moulted birds; the white has mostly or entirely worn off by spring (Bent 1942, Oberholser 1973). The face was very gentle looking, due to near

Figure 1: Violet-green Swallow in flight. Photo by *Peter Burke.*

Figure 2: Violet-green Swallow perched on mist net. Photo by *Peter Burke.*

isolation of the dark eyes against white feathering. When in full sunlight, the stunning iridescence of greens, blues, purples, and bronze treated the eye. Most of the nape was reddish purple, bordered by greenish-bronze of the back and forehead. In certain lights the back also appeared extensively purple. The secondary coverts were bright forest green, the colour of wet Balsam Fir (*Abies balsamea*). The tertials, secondaries, primaries and tail showed deep green or navy blue depending on the angle of light. Such coloration indicated the bird was a male. Furthermore, because of the presence of old, greyish, worn flight feathers, and subtle smudges to the facial area, we felt confident that this individual was an immature moulting into its first winter plumage.

Later the swallow sluggishly flew to our furled mist nets, where it spent the morning huddled and tolerant of our close approach. When a Northern Shrike (*Lanius excubitor*) perched nearby, the swallow immediately flew, giving a sharp, double-noted call. Also, when perched in the sun, it gave a softer call, much like a Common Redpoll's (*Carduelis flammea*) "chiff-chiff". At midday, the swallow sprang to life with the sun's warmth, and fed actively on numerous insects. We last saw it later that day, still feeding. But after another cold night, it did not reappear on 30 October. The only other observer to make the long 13 km haul by foot and bike to the tip to see the swallow was Nick Escott of Thunder Bay.

The Violet-green Swallow is normally distributed in breeding season in western North America, from Alaska to California, south into the Mexican highlands of Oaxaca and Veracruz. It breeds as far east as southwestern Saskatchewan, western South Dakota and western Nebraska (AOU 1983). Three races are recognized, with *lepida* being the most widespread, and breeding from Alaska to northern Mexico. The other two subspecies breed in Mexico only (Turner and Rose 1989). Our individual appeared to fall under the nominate *lepida* due to the extensive violet colour of the mantle, a feature not shared by the other two subspecies (Turner and Rose 1989). Violet-green Swallows are early spring migrants and nesters, ready to move south by mid- to late July in the northern parts of their range (Bent 1942). The main winter range extends from southern Baja California and central Mexico to El Salvador and Honduras (Turner and Rose 1989).

For a bird which migrates and spends so much time on the wing, it has been recorded as a stray surprisingly few times. It is a casual visitor to the Aleutians, east to Manitoba (four records) (Godfrey 1986, Gollop 1988, A. Wormington pers. comm.), North Dakota, Missouri and central Texas (Turner and Rose 1989). In the East, it has been recorded only a handful of times (Table 1). Despite this fact, many Ontario birders have predicted its occurrence in this province, likely because so many other species of the Canadian Rockies have turned up at one time or another, and some are now regular, such as Varied Thrush (*Ixoreus naevius*). Indeed, Bruce DiLabio of Ottawa correctly predicted this record in 1982 by stating that

Table 1: Violet-green Swallow Records in the East.

State/Province	Status	Source
Nova Scotia	One record; 30 October 1965, Cresent Beach, Lunenburg County. Generally accepted, but undocumented.	Tufts 1986
New Hampshire	One record; mid- September 1965. Also undocumented.	Tufts 1986
Florida	Extremely rare vagrant.	Desante and Pyle 1986
Illinois	One record; 4 May 1897, Calumet region. Specimen.	Bent 1942
Ohio	One record; 16 May 1990, Holmes County. Photograph.	Peterjohn 1990
New Jersey	One record; 8 November 1992, Cape May.	Anonymous 1992
Minnesota	Extremely rare vagrant.	Desante and Pyle 1986

Violet-green Swallow would turn up on the shore of Lake Superior in October (Wormington 1982)!

Summary

We recorded a first fall male Violet-green Swallow at the tip of the Sleeping Giant on 28 and 29 October 1992. This is the second record in Canada east of Manitoba, where it is casual, and the first to be fully documented. The sighting has been accepted as the first for the province by the Ontario Bird Records Committee (Margaret Bain, pers. comm. 1993). This species is extremely rare east of the Mississippi, with only five states having recorded it, and most of these only once. This record also fits the pattern of Lake Superior's fantastic reputation for late fall western vagrants. One can't help but wonder what will occur next!

Acknowledgements

Thanks go to Ron Tozer and Ron Pittaway for assisting in the literature review and helpful comments. Alan Wormington provided information on previous records from eastern Canada and Ohio. Also, Dawn Brenner, Phill Holder and Brian Henshaw provided useful comments in the preparation of this article.

Literature cited

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

Anonymous. 1992. Good birds from the hotline, November 1992. Winging It (American Birding Association) 4(12): 3.

Bent, A.C. 1942. Life Histories of North American Flycatchers, Larks, Swallows, and Their Allies. United States National Museum Bulletin 179.

Desante D. and P. Pyle. 1986. Distributional Checklist of North American Birds. Volume 1. Artemesia Press, Lee Vining, California.

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

Gollop, B. 1988. Prairie Provinces Region. American Birds 42: 450-451.

Henshaw, B. and H. Kerr. 1992. Ontario round-up. Birders Journal 1: 310-318.

Oberholser, H.C. 1973. The Bird Life of Texas. Volume Two. University of Texas Press, Austin, Texas.

Peterjohn, B.G. 1990. Middlewestern Prairie Region. American Birds 44: 432-439.

Tufts, R.W. 1986. Birds of Nova Scotia. Third Edition. Nova Scotia Museum, Halifax.

Turner, A. and C. Rose. 1989. Swallows and Martins. Houghton Mifflin Co., Boston.

Wormington, A. 1982. Trends in the Ontario list of birds: past, present and future. Birdfinding in Canada 9: 15-17, 19.

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Publication Notice

Field Checklist of Birds for the Southern James Bay Region. 1992. By *Doug McRae.* Available from Moose River Naturalists, Box 699, Moosonee, Ontario P0L 1Y0. $1.00 + 0.50 (postage & handling).

This checklist provides a compilation of data on the 292 extant species of birds known to have occurred in the vicinity of Moosonee and Moose Factory. It provides a general indication of the status of each species in the region, and further indicates the regularity of breeding of each species. The checklist does not utilize the bar graph format that has become regular fare in regional checklists, perhaps because there are not yet sufficient data to do so for all species. This checklist provides columns for five days (or locations) of observations, a welcome feature.

Another publication on the birds of southern James Bay has appeared recently (Kubisz, M. *Birders Journal* 1: 343-347, 349-350. 1992). The area covered by this second publication is much larger than that covered by the *Checklist* (extending all the way north to the Attawapiskat River, and inland, presumably to the edge of the Hudson Bay Lowlands biophysiographic region), which accounts for differences between the two publications in status and species included.

Both lists provide useful summaries of avifaunal information. However, readers should be aware of the differences in area covered between these two publications. For those visiting the Moosonee/Moose Factory area, the *Checklist* is more likely to provide accurate estimates of status. However, birders visiting other portions of southern James Bay, north of Moosonee, will want to refer to Kubisz's article, as well.

Notes on Birds Observed at Netitishi Point, Southern James Bay

by
Doug McRae, Y. Robert Tymstra and Stephen Scholten

Late fall bird movements in southern James Bay are highly correlated with weather systems. Previous studies during October and November at Netitishi Pt. and East Pt. revealed large movements of waterbirds leaving James Bay during substantial gales (McRae 1992, Sinclair 1986). We wanted to examine the nature of bird movements on the coast during the relatively quiet period of early fall, before the major fall gales arrived.

We spent from 21 September to 4 October 1992 watching birds in the Netitishi Pt. (pronounced Nest-i-she) area of southern James Bay (Figure 1). One hundred and sixteen species were seen (Table 1). Recent signs of Pileated Woodpecker were also found. The species accounts detail birds which are either considered rare or uncommon in southern James Bay, or for which interesting information was gathered.

Our birding effort was focused on the shore and the forest area immediately inland from the coast. Typically, we covered the area from Netitishi Creek to the west, to Little Netitishi Pt. on the east. Occasionally we made further forays, west to Buoy Bluff, and east to Big Stone Pt. Our methods of observation were not strictly controlled, but we generally watched the coast for at least four hours each day usually centred around the high tide(s). Forest coverage included a regular 1 km walk to the east of camp. When the coast was quiet, we sometimes spent several hours intensively birding the forest paralleling the coast.

Weather during our study was highly variable, with temperatures ranging for -2°C to 25°C. Prevailing winds were from the southwest to northwest, and bird movement was generally steady, although no enormous flights were recorded. Precipitation was negligible during the two weeks except for a few brief periods of drizzle, sleet and light snow. A stalled high pressure cell brought a prolonged warm spell from 24 to 27 September, and migration was light during that time. The most significant weather event of the period occurred on 27 September. In mid-afternoon the barometric pressure and temperature dropped dramatically and brief, but stiff, north winds up to 60 kph developed, followed by sleet and rain. Despite the brevity of the blow, it was enough to stimulate a large movement of birds the next day (28 September) and produced our highest daily species total (69; average = 52) and number of individuals (3090; average = 1878). Many "new" passerines had arrived the preceding night including large numbers of Ruby-crowned Kinglet, Hermit Thrush, American Robin, Yellow-rumped Warbler, Swamp and White-crowned Sparrow. Accompanying this movement was a large flight of

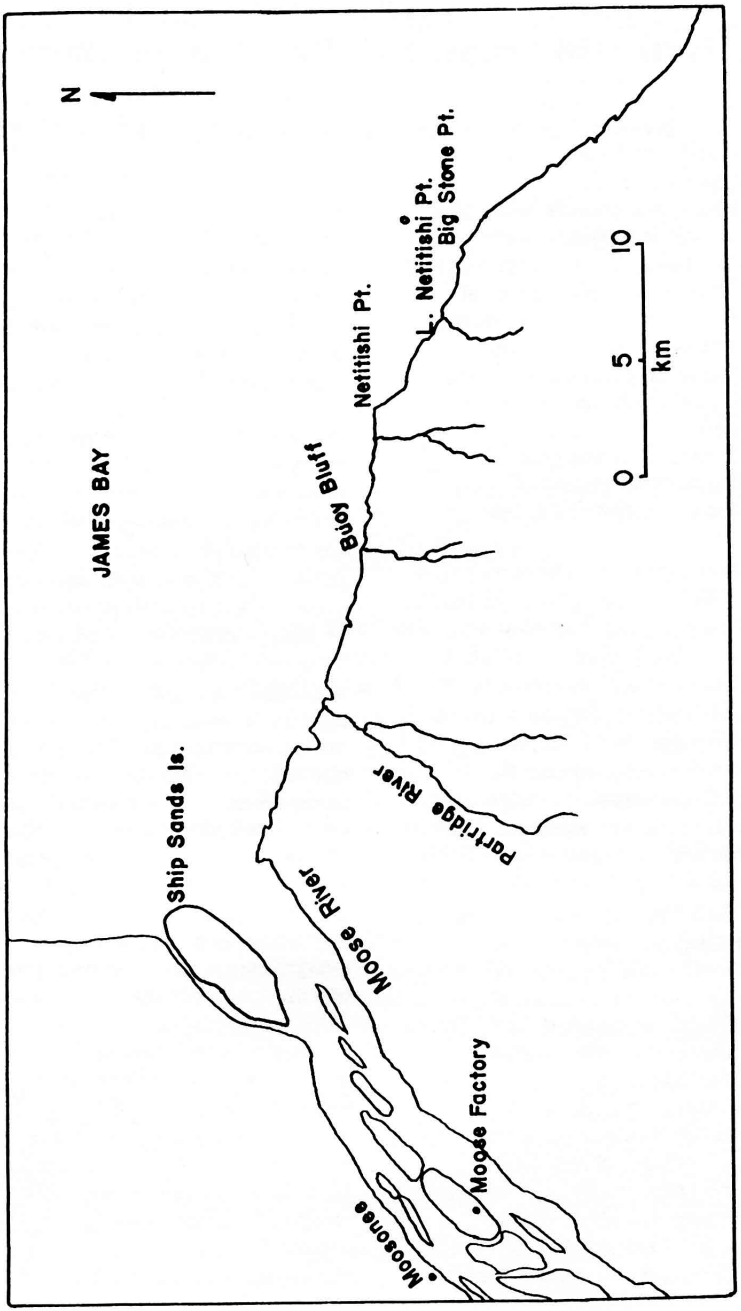

Figure 1: Netitishi Pt. area of southern James Bay.

Peregrine Falcons (day total of 11) and the first Gyrfalcon. Many of the falcons observed were arriving from the north, over the waters of James Bay.

The cold spell and high pressure persisted until 1 October and migration slowed to normal. On 1 October the barometric pressure dropped once again and the temperature rose to 17°C with light southwest winds. Rough-legged Hawks moved in numbers for the first time, with a high count of 60, and there were also seven Peregrine Falcons and two Gyrfalcons. The following day, winds were out of the north and the second largest species total (64) was recorded. The last few days were cold, with a noticeable drop in the number of passerines and shorebirds, although the passage of Peregrine Falcons and Rough-legged Hawks continued.

While it is unwise to try to draw any conclusions about weather and bird movements based on only two weeks of observation, it is interesting to note that the days with the greatest species diversity (28 September and 2 October) occurred on days immediately following warm days with steep pressure drops, associated with a north wind.

Table 1: Birds observed at Netitishi Point, 21 September - 4 October 1992.

Species	(a) # of days	(b) max./day	(c) avg./day
Common Loon	1	1	1
Double-crested Cormorant	2	2	1.5
Great Blue Heron	4	1	1
Tundra Swan	1	3	3
Snow Goose	14	300	101.4
Brant	5	40	11.6
Canada Goose	14	550	256.8
Green-winged Teal	3	5	3
American Black Duck	13	110	26.2
Mallard	10	175	42
Northern Pintail	9	175	41.1
Northern Shoveler	3	7	3.3
American Wigeon	5	25	12.8
Redhead	1	1	1
Ring-necked Duck	1	1	1
Greater Scaup	4	6	2.8
Lesser Scaup	3	13	5.7
Oldsquaw	1	20	20
Black Scoter	9	30	8
Surf Scoter	2	4	3
White-winged Scoter	2	15	8
Common Goldeneye	4	10	5
Bufflehead	2	8	4.5
Hooded Merganser	1	1	1
Common Merganser	12	5	2.8
Red-breasted Merganser	10	5	2.3
Osprey	2	1	1
Bald Eagle	6	1	1
Northern Harrier	13	3	1.8

Species	(a) # of days	(b) max./day	(c) avg./day
Northern Goshawk	4	1	1
Red-tailed Hawk	4	1	1
Rough-legged Hawk	12	60	8.1
Golden Eagle	1	1	1
Merlin	11	2	1.1
Peregrine Falcon	13	11	3.9
Gyrfalcon	3	2	1.3
Spruce Grouse	1	1	1
Ruffed Grouse	7	1	1
Black-bellied Plover	13	75	19.3
Lesser Golden-Plover	14	75	20.2
Semipalmated Plover	8	10	4
Greater Yellowlegs	13	15	5.5
Lesser Yellowlegs	1	2	2
Hudsonian Godwit	10	120	34.1
Ruddy Turnstone	4	4	2.5
Red Knot	7	12	4.1
Sanderling	13	300	119.7
Semipalmated Sandpiper	4	7	3
Least Sandpiper	2	2	1.5
White-rumped Sandpiper	8	3	2.1
Baird's Sandpiper	5	15	4.6
Pectoral Sandpiper	14	70	22.7
Dunlin	14	450	256.3
Long-billed Dowitcher	2	1	1
Common Snipe	11	6	2.7
Red Phalarope	1	3	3
Bonaparte's Gull	1	1	1
Ring-billed Gull	14	35	15.9
Herring Gull	14	45	24.3
Glaucous Gull	1	1	1
Great Black-backed Gull	1	1	1
Sabine's Gull	1	2	2
Caspian Tern	1	2	2
Mourning Dove	8	2	1.1
Great Horned Owl	4	2	1.5
Yellow-bellied Sapsucker	1	2	2
Downy Woodpecker	11	5	1.5
Hairy Woodpecker	5	2	1.2
Three-toed Woodpecker	1	1	1
Black-backed Woodpecker	1	1	1
Horned Lark	14	800	350
Gray Jay	10	7	3.6
American Crow	6	1	1
Common Raven	14	10	5.2
Black-capped Chickadee	7	5	2.6
Boreal Chickadee	14	15	7.7
Red-breasted Nuthatch	8	8	2.1
Brown Creeper	1	1	1
Winter Wren	12	5	2
Golden-crowned Kinglet	13	35	11.3
Ruby-crowned Kinglet	12	100	31.3
Hermit Thrush	8	10	2.8

Species	(a) # of days	(b) max./day	(c) avg./day
American Robin	13	35	14.2
Gray Catbird	3	1	1
American Pipit	14	40	16.1
Cedar Waxwing	13	16	4
Solitary Vireo	1	1	1
Red-eyed Vireo	1	1	1
Orange-crowned Warbler	4	6	2.8
Northern Parula	3	1	1
Yellow Warbler	1	3	3
Magnolia Warbler	1	1	1
Yellow-rumped Warbler	12	75	22.5
Palm Warbler	9	8	4.2
Black-and-white Warbler	1	1	1
Common Yellowthroat	2	1	1
American Tree Sparrow	8	33	6.6
Savannah Sparrow	12	53	15.8
Le Conte's Sparrow	3	6	3.7
Sharp-tailed Sparrow	1	1	1
Fox Sparrow	7	7	2.6
Song Sparrow	2	1	1
Lincoln's Sparrow	5	4	2
Swamp Sparrow	11	28	9.2
White-throated Sparrow	14	50	15.2
White-crowned Sparrow	6	11	4.3
Dark-eyed Junco	9	10	4.6
Lapland Longspur	14	500	173.2
Snow Bunting	6	3	1.8
Red-winged Blackbird	1	2	2
Rusty Blackbird	4	7	3.8
Pine Grosbeak	1	2	2
Purple Finch	1	4	4
White-winged Crossbill	7	19	7.4
Common Redpoll	3	3	2
Evening Grosbeak	1	1	1

(a) The number of days, out of a total of fourteen, that a species was recorded.

(b) The maximum one day count for each species.

(c) Total number seen/total number of days seen.

Species Accounts

Double-crested Cormorant:

A sub-adult on 24 September and two unaged birds on 29 September were moving west. Reports of this species in southern James Bay have increased dramatically in the past few years.

Tundra Swan:

Three birds arriving at dusk on 1 October were early.

Snow Goose:

The near total breeding failure of this species in 1992 was well illustrated by the finding of only 14 juveniles out of a total of 1674 birds.

Redhead:

A female on 22 September was the only report. This species is rare but annual in southern James Bay.

Red-tailed Hawk:
All sightings refer to the same adult which frequented the forest at Little Netitishi Pt., rather than to migrant birds.

Peregrine Falcon:
There were 51 sightings over the period, believed to represent a conservative minimum of 35 different birds. Eleven birds on 28 September, all moving east along the coast, was the highest single day total. All birds identified to subspecies were of *F. p. tundrius*.

Gyrfalcon:
Four birds were seen; one on 28 September, two on 1 October and one on 4 October. While Gyrfalcons are frequent on the coast in late October and November, these birds were somewhat early.

Black-bellied Plover:
A late adult, still in breeding plumage, was seen with juveniles on 24-25 September.

Ruddy Turnstone:
A late adult, still in breeding plumage with an injured leg, was seen on 2 October.

Long-billed Dowitcher:
Single birds, thought to be juveniles, were seen and heard flying overhead on 24 and 28 September. There is only one previous observation for southern James Bay, but with increased coverage, the species will likely prove to be a regular but rare fall migrant.

Red Phalarope:
Three birds were seen from shore on 4 October. In addition, single birds were seen from the boat near the mouth of the Moose River on 21 September and off the mouth of Partridge River on 4 October.

Bonaparte's Gull:
A single adult on 23 September was the only observation. Curiously, this species becomes very scarce in southern James Bay after early September.

Great Black-backed Gull:
A first-winter bird was seen on 2 October. Recent field work in the area suggests that this species, although not common, is a regular migrant in southern James Bay.

Sabine's Gull:
Two juveniles were seen feeding over rough water on 3 October, representing one of the very few records for this species in southern James Bay. The only previous fall record is of a juvenile seen on 26 September 1940, about 10 miles south of Charlton Island (Lewis and Peters 1941). Fall reports of this species should prove to be more frequent with increased coverage of the coast.

Mourning Dove:
One bird was seen almost daily near camp from 21 to 30 September and a second bird was located 2 km east of camp on 24 September. Both birds frequented the debris at the high tide line.

Gray Catbird:
One bird was present at camp from 26 to 27 September. The same bird, or possibly a second individual, was found 2 km east of camp on 28 September. This species is a rare, but annual, visitor to the region and breeding has been reported once.

Northern Parula:
Two birds were seen; one from 22 to 23 September and another on 28 September. This species is a very scarce migrant in the region.

Yellow Warbler:
Three birds on 24 September was the only report. Interestingly this species often remains in the James Bay area until early October, much later than do birds in southern Ontario.

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Literature cited
Lewis, H.F. and H.S. Peters. 1941. Notes on birds of the James Bay region in the autumn of 1940. Canadian Field-Naturalist 55: 111-117.

McRae, D. 1992. The great late fall exodus from James Bay. Seasons 32(3): 44-45.

Sinclair, P. 1986. The effects of weather on late fall coastal bird migration in James Bay. B.Sc. Thesis, Biology Department, Queen's University, Kingston, Ontario.

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Publication Notice

Bird Trends: A Report on Results of National and Regional Ornithological Surveys in Canada. Number 2, Autumn 1992. Migratory Birds Conservation Division, Canadian Wildlife Service, Ottawa, Ontario K1A 0H3. No charge.

This publication presents overview reports on the status of "birds that live in Canada's marine environment, where their populations are vulnerable to oil spills, overfishing, toxic waste dumping and other marine problems". One section covers colonial waterbirds of the Great Lakes.

Opportunities for participation in volunteer monitoring programs are discussed.

(**Bird Trends** is distributed free to interested amateur ornithologists; the next issue will focus on shorebird trends.)

Breeding Birds of Ontario: Nidiology and Distribution

Volume 1: Nonpasserines (First Revision — Part A: Loons to Ducks)

by
George K. Peck and Ross D. James

A decade has elapsed since the publication of Volume 1 of Breeding Birds of Ontario (Peck and James 1983) dealing with the nonpasserines, and during that period a number of changes and additions to their distribution and nidiology has occurred. For example, our largest database, the Ontario Nest Records Scheme (ONRS) has expanded to over 104,000 nest cards, and our file of provincial breeding records has also substantially increased. In addition to ONRS contributors, some of the sources responsible for these increases include: *American Birds*; Ontario Atlas nest cards (1981-85); more historical records from field notes of L.H. Beamer, R.C. Brooman, O.E. Devitt, J.A. Morden, P. Harrington, and W.E. Saunders; *CWS Progress Notes*; MNR district nest cards; ROM files (over 1100 nest records since 1984); and University of Guelph 1964 project (400 nest cards).

Some changes and additions to Volume 1 were published in Volume 2: Passerines (Peck and James 1987) as Appendix A of that volume. In this, the first part of our planned revision of Breeding Birds, we will outline more significant new information for those species for which we have acquired such data. Most of these changes and additions are current, but some reveal past information that has only recently been reported. The term "nesting" implies the finding of an active nest, whereas "breeding", a less exact designation, usually refers to the observation of an adult with flightless or recently-fledged young away from the nest. For colonial species, the record (nest card) numbers indicate the number of cards of colonies rather than nests. In non-colonial species, where more than one nest is listed on cards, the actual nest total is given in brackets after the record (nest card) number. New early and late egg dates are given if they have been acquired. The revision will incorporate the order and new nomenclature as given in the current American Ornithologists' Union Check-list (AOU 1983) and its four supplements dating to 1 March 1991 (AOU 1985, 1987, 1989, 1991).

Although some provincial regions, for political expediency, have recently been grouped together (e.g. Leeds/Grenville, Stormont/Dundas/Glengarry), we have continued to list the 52 regions as mapped and described in both volumes of Breeding Birds. The four symbols used to qualify records on the breeding distribution maps of both volumes still apply, and it is understood that these revisional changes may add symbols, or alter existing symbols if documentation has been received with the record.

Breeding Bird Species

Red-throated Loon, *Gavia stellata*
5 nests representing 2 provincial regions. A nest was found 32 km (20 mi) south of Cape Henrietta Maria in 1984, and 2 nests in 1985 on the Cape itself, all in Kenora District. The details of these three nests are given in Appendix A, Volume 2.
EGG DATES 5 nests, 30 June to 3 August.

Pacific Loon, *Gavia pacifica*
20 nests representing 1 provincial region. Additional nests have all been confined to the Hudson Bay coast in Kenora District, with the most recent (1991) nest in a large slough near the mouth of the Brant River.
EGG DATES 20 nests, 19 June to 14 July.

Common Loon, *Gavia immer*
490 nests representing 29 provincial regions. Historical records from Kent and Lambton counties and a 1983 nest in Lennox and Addington were additions for southern Ontario.

Pied-billed Grebe, *Podilymbus podiceps*
439 nests representing 31 provincial regions. Nests were reported from Essex (1983), Grey (1986), and Niagara R.M. (1990). In 1983 a breeding record was noted at Wavy Creek, Cochrane District. The Niagara nest had an outside diameter of 44 cm (17.3 inches), inside diameter 13 cm (5.1 inches), outside depth 7 cm (2.8 inches), and inside depth 4 cm (1.6 inches).
EGG DATES 23 April to 22 August.

Red-necked Grebe, *Podiceps grisegena*
88 nests representing 8 provincial regions.
EGG DATES 12 May to 17 September.

American White Pelican, *Pelecanus erythrorhynchos*
38 records (colonies) representing 2 provincial regions. By 1991 the Lake of the Woods colony had increased to ca 7500 pairs. A second provincial colony (3 nests) was found on Pretty Island, Lake Nipigon, Thunder Bay District, in 1991 (Bryan 1991). In 1992 a third colony (10 nests) and a fourth (4 nests) were found, also on Lake Nipigon, but in the northern portion of the lake.

Double-crested Cormorant, *Phalacrocorax auritus*
346 records (colonies) representing 15 provincial regions. Nesting populations have been increasing on the Great Lakes in the last 15 years and 4,698 nests were counted on Lakes Erie and Ontario in 1990 (Blokpoel and Tessier 1990). New nesting regions were Haldimand-Norfolk R.M. and Simcoe, both in 1983.

American Bittern, *Botaurus lentiginosus*
255 nests representing 37 provincial regions. An historical nest record from Grey (1937), and nests from Nipissing (1982) and Peterborough (1987) were recent additions.
EGG DATES 4 May to 10 August.

Least Bittern, *Ixobrychus exilis*
344 nests representing 27 provincial regions. A nest was reported from Hamilton-Wentworth R.M. in 1983.

Great Blue Heron, *Ardea herodias*
594 records (colonies) representing 40 provincial regions. Earlier nestings for Lennox and Addington (1967) and Perth (1969) have been added.
EGG DATES 4 April to 30 June.

Great Egret, *Casmerodius albus*
37 records (colonies) representing four provincial regions. This species continues to nest in Simcoe County on Nottawasaga Island where there were 10 nests in 1991 and 8 nests in 1992, with most nests in dead or partially-dead White Cedar. Nesting reported on Chantry Island, Bruce County in 1990, provided a new provincial region and suggested a continuing northward expansion.
EGG DATES 28 April to 24 June.

Green-backed Heron, *Butorides striatus*
216 records (colonies) representing 32 provincial regions. Nesting was reported from Ottawa-Carleton R.M. in 1986.

Black-crowned Night-Heron, *Nycticorax nycticorax*
407 records (colonies) representing 17 provincial regions. Earlier nestings in Hamilton-Wentworth R.M. (1975) and Nipissing (1961) have been acquired and a 1984 nesting in Manitoulin.
EGG DATES 28 April to 9 September.

Tundra Swan, *Cygnus columbianus*
8 nests representing 1 provincial region. All nests and breeding records have been near the Hudson Bay coast in Kenora District. Three nests were on wet, sedge tundra; three were on the shores of coastal sloughs; and one was on an islet in a large, shallow slough.

One nest was a mound of vegetation in standing sedge. Another was formed of moss, and had an outer diameter of 2.4 m (7.8 ft.), inner diameter of 45 cm (17.7 inches), outer depth of 75 cm (29.5 inches), and inner depth of 20 cm (7.8 inches).
EGGS 2 nests: 1 with 5 eggs, 1 with 1 egg and 2 young.
EGG DATES 2 nests, 6 June and 25 June.

Trumpeter Swan, *Cygnus buccinator*
Recent attempts to return this species to Ontario (Lumsden, 1984) have resulted in sightings of free-flying birds, but as yet no nests from the wild have been reported.

Mute Swan, *Cygnus olor*
282 nests representing 8 provincial regions. A breeding record from Grey (1990) and nest records from Kent (1989) and Northumberland (1990) have been added. A dramatic increase in the number of nests in the past decade was largely due to the field work and contributions of H.G. Lumsden, and the resulting data is given below.

Most nests were formed of cattails, but other materials in order of preference were sticks and twigs including willow and alder; down and feathers; mud and bottom debris; sedges and grasses; loosestrife stems; leaves; and plant debris and stalks including beggar-ticks and pondweed. Outside diameters of 10 nests ranged from 1 to 2.4 m (3.3 to 7.9 ft.); inside diameters from 30 to 60 cm (11.8 to 23.6 inches); and outside depths of 10 to 60 cm (3.9 to 23.6 inches). Inside depths of 5 nests ranged from 0 to 45 cm (0 to 17.7 inches).
EGGS 22O nests with 1 to 11 eggs; 1E (2N), **2E** (5N), **3E** (8N), **4E** (16N), **5E** (41N), **6E** (76N), **7E** (40N), **8E** (21N), **9E** (8N), 10E (2N), 11E (1N).
Average clutch range 5 to 7 eggs (157 nests). Eggs were laid at 48 hour intervals. Re-nestings occurred if first clutch failed, and third clutches were reported twice. Second clutches were usually smaller.
INCUBATION PERIOD 3 nests: 1 of 34 days, 2 of at least 35 days.
EGG DATES 187 nests, 4 April to 7 July (314 dates); 94 nests, 25 April to 13 May.

Snow Goose, *Chen caerulescens*
13 records (colonies) representing 2 provincial regions. Three nests in 1983 and 2 nests in 1984 were reported from the Fort Severn area in Kenora District. The most southerly nest to date was found at Longridge Point, Cochrane District in 1991.
EGG DATES 2 June to 27 June.

Canada Goose, *Branta canadensis*
885 nests representing 27 provincial regions. Earlier records from Lambton (1968) and Northumberland (1953) have been added; as well as more recent records from Ottawa-Carleton R.M. (1990) and Sudbury (1988). In 1992 a Durham R.M. nest contained 10E.

Wood Duck, *Aix sponsa*
156 nests representing 26 provincial regions. Added nesting records are from Durham R.M. (1984), Middlesex (1944), Niagara R.M. (1991), Nipissing (1983), and Ottawa-Carleton R.M. (1985). The Lennox and Addington record in Appendix A was a breeding record, not a nesting record.

Green-winged Teal, *Anas crecca*
26 nests representing 12 provincial regions. New breeding records from Opinnagau Lake in Kenora (1984), and from south of Gogama in Sudbury (1986) have been reported. There was also a nest found at the mouth of the Shagamu River, Kenora District (1990).

American Black Duck, *Anas rubripes*
363 nests representing 39 provincial regions. Old nest records for Lincoln County (1937) and Middlesex (1941) were recently added. A 1983 nest record was received from Prince Edward County.

Mallard, *Anas platyrhynchos*
1379 nests representing 46 provincial regions. Lanark (1987) and Renfrew (1991) were recently added as nesting regions. Inside diameters of two nests were 24 and 25.4 cm (9.4 and 10 inches).

Northern Pintail, *Anas acuta*
61 nests representing 22 provincial regions. A new breeding record from Grey (1985), and nesting records from Carleton (1964), Renfrew (1991), Victoria (1986), and Welland (1969) are recent additions.

Blue-winged Teal, *Anas discors*
324 (332 nests) representing 31 provincial regions. A 1938 nest record (2 nests) from Whitefish Lake, Thunder Bay District has been included (Dear 1940).

Cinnamon Teal, *Anas cyanoptera*
1 nest representing 1 provincial region. In Appendix A of Volume 2 of Breeding Birds the 1984 nesting date given should have been 24 June 1983; the nest, containing 8 eggs was found at the Amherstburg sewage ponds (Essex). The nesting was unsuccessful.

Northern Shoveler, *Anas clypeata*
13 nests representing 7 provincial regions. Reports of breeding have been received from Grey (1985) and Oxford (1988), and also nests from Haldimand-Norfolk R.M. (1977) and from Attawapiskat (1983) and Shagamu (1990) rivers in Kenora.

American Wigeon, *Anas americana*
22 nests representing 8 provincial regions. Breeding records have been added from Hamilton-Wentworth (1989) and Opinnagau Lake in Kenora (1984); and a nesting record from Haldimand-Norfolk R.M. (1976).

Ring-necked Duck, *Aythya collaris*
31 nests representing 9 provincial regions. Additions were a breeding record from Bruce (1985), and nesting records from Carnarvon Twp., Manitoulin (1983), and Parry Sound (1986).

Greater Scaup, *Aythya marila*
5 nests representing 1 provincial region. A breeding record was reported from Opinnagau Lake in Kenora (1984), and a nest with 9 eggs at the Brant River, Kenora (1991).
EGG DATES 2 July to 14 July.

Lesser Scaup, *Aythya affinis*
10 nests representing 5 provincial regions. Breeding records from Haldimand-Norfolk R.M. (1986) and Opinnagau Lake in Kenora (1984) have been added. Two nests with 3 and 8 eggs were found at the Shagamu River, Kenora (1990), and a nest with 2 eggs at Kiruna Lake, Kenora District in 1981.

Common Eider, *Somateria mollissima*
6 records (colonies) (109 nests) representing 1 provincial region and 2 islands, one in James Bay and one in Hudson Bay, geographically in Ontario but administered by the Northwest Territories (NWT).

On Little Bear Island, NWT, near Ontario's Hudson Bay coast in Kenora, a total of 79 nests were recorded on 26 June 1981 (Cadman *et al.* 1987).
EGG DATES 26 June to 16 July.

Oldsquaw, *Clangula hyemalis*
5 (7 nests) representing 1 provincial region and an adjacent island in James Bay (NWT).
EGG DATES 26 June to 25 July.

Common Goldeneye, *Bucephala clangula*
125 nests representing 7 provincial regions. Because of nesting box studies, the number of nests for this species has more than tripled in the decade. A historical nest record for Missinaibi River, Algoma (1926), and a 1983 nest at Sioux Lookout in Kenora represent regional additions.

Bufflehead, *Bucephala albeola*
2 nests representing 2 provincial regions. Another undocumented sight record of a female entering a tree cavity near Winisk, Kenora District (1983) was received.

Hooded Merganser, *Lophodytes cucullatus*
137 nests representing 19 provincial regions. Nest box projects have added considerably to nest numbers in this species. Hastings (1984), Ottawa-Carleton R.M. (1983), Peterborough (1984), south of Gogama in Sudbury (1985), and Waterloo R.M. (1986), were all new nesting regions.

Red-breasted Merganser, *Mergus serrator*
37 nests representing 15 provincial regions. The map for this species in Volume 1 (p. 98) omitted to indicate a nest for Muskoka District. Two historical nest records, Abitibi River in Cochrane (1860), and Leeds (1896) have now been added.
EGG DATES 16 May to 6 August.

Literature cited

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

American Ornithologists' Union. 1985. Thirty-fifth supplement to the American Ornithologists' Union Check-list of North American Birds. Auk 102: 680-686.

American Ornithologists' Union. 1987. Thirty-sixth supplement to the American Ornithologists' Union Check-list of North American Birds. Auk 104: 591-596.

American Ornithologists' Union. 1989. Thirty-seventh supplement to the American Ornithologists' Union Check-list of North American Birds. Auk 106: 532-538.

American Ornithologists' Union. 1991. Thirty-eighth supplement to the American Ornithologists' Union Check-list of North American Birds. Auk 108: 750-754.

Blokpoel, H. and G.D. Tessier. 1991. Distribution and abundance of colonial waterbirds nesting in the Canadian portions of the lower Great Lakes system in 1990. Technical Report Series No. 117. Canadian Wildlife Service, Ontario Region.

Bryan, S. 1991. Pelicans nesting on Lake Nipigon. Ontario Birds 9: 58-63.

Cadman, M.D., P.F.J. Eagles, and F.M. Helleiner (comps.). 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ontario.

Dear, L.S. 1940. Breeding birds of the region of Thunder Bay, Lake Superior, Ontario. Transactions of the Royal Canadian Institute 23: 119-143.

Lumsden, H.G. 1984. A swan song with a difference. Seasons 24(2): 18-23, 39.

Peck, G.K. and R.D. James. 1983. Breeding Birds of Ontario: Nidiology and Distribution. Volume 1: Nonpasserines. Life Sciences Miscellaneous Publications, Royal Ontario Museum, Toronto.

Peck, G.K. and R.D. James. 1987. Breeding Birds of Ontario: Nidiology and Distribution. Volume 2: Passerines. Life Sciences Miscellaneous Publications, Royal Ontario Museum, Toronto.

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Recognizable Forms

Subspecies and Morphs of the Red-tailed Hawk

by
Ron Pittaway

Introduction

Hawkwatching has been growing in popularity by leaps and bounds in recent years. Increasingly, hawkwatchers are recording the age classes (adult and immature), subspecies (races) and morphs (colour phases) of the hawks passing their lookouts.

The Red-tailed Hawk (*Buteo jamaicensis*) is a highly variable species, having a number of recognizable forms. In this note I discuss the status and identification of the Red-tailed Hawk subspecies and morphs in Ontario. I also will review the question of whether "Krider's" Red-tailed Hawk (*B. j. kriderii*) and "Harlan's" Red-tailed Hawk (*B. j. harlani*) are valid subspecies, or morphs.

Taxonomy

For subspecies in this account, I follow the treatment used by Godfrey (1986). See Pittaway (1991) for a list of the subspecies and morphs found in Ontario.

The "Eastern" Red-tailed Hawk (*B. j. borealis*) "breeds over most of the province" (James 1991). Observant watchers will occasionally see the other following forms in the province: "Western" Red-tailed Hawk (*B. j. calurus*) and its colour morphs; "Krider's" Red-tailed Hawk; and "Harlan's" Red-tailed Hawk.

Since I will be discussing whether Krider's and Harlan's hawks are valid subspecies or just colour morphs, a review of the differences between a subspecies and a morph is in order. Under the rules of taxonomy, a subspecies is considered to be a distinct subdivision of a species occupying a separate geographical breeding range exclusive of other subspecies. Subspecies intergrade (interbreed) freely with related subspecies where their ranges meet. Subspecies are recognized taxonomically by a formal scientific name; for example, the "Eastern" Red-tailed Hawk is *Buteo jamaicensis borealis*. The third part of the scientific name, *borealis*, is the name of the subspecies. On the other hand, morphs are not formally recognized taxonomically by a scientific name. The key difference between a morph and a subspecies is that morphs constitute two or more distinct forms which coexist over a wide area in an interbreeding population, often even in the same brood.

Plumages, Molts and Ageing

The sexes in the Red-tailed Hawk are similar, except that females on average are somewhat larger. Like most hawks, there are two distinct

age classes and plumages: immature (juvenile) and adult. In hawks, most birders prefer to use the term immature for birds which are in juvenile plumage. "The juvenile plumage is assumed in the nest and is retained until the next midsummer moult, when the adult plumage is assumed at approximately fifteen months of age" (Taverner 1927). Adults undergo a prolonged molt annually during the summer months. For additional details of plumages and molts see Palmer (1988).

Albinos

Albinistic Red-tailed Hawks are regularly encountered. They range from partial albinos, having various mixtures of white and normal feathers, to completely white birds. Partial albinos usually show a patchy pattern quite unlike "Krider's" Red-tailed Hawk. See the illustration on Plate 11 in the Peterson hawk guide (Clark and Wheeler 1987). Total albinos could be confused with white morph Gyrfalcon (*Falco rusticolus*), but differ in "behaviour, general shape and flight style" (Lish and Voelker 1986).

"Eastern" Red-tailed Hawk
(*B. j. borealis*)

This subspecies of the Red-tailed Hawk is the common large hawk in most of Ontario. The distinctive rufous tail of a soaring adult is visible at a great distance. Immature birds have barred, brownish-grey tails and like adults usually have a distinctly streaked band across the belly. Overhead, the dark patagial marks at the leading edge of the inner wing are diagnostic of both adults and immatures. See Plate 11 in Clark and Wheeler (1987).

The plain red tail, usually with a narrow black subterminal band, is a trait of the Eastern subspecies (Taverner 1936, Godfrey 1986). See Figure 1. It is almost invariably a light morph bird. I could find no reports in the literature of rufous or dark morph birds breeding in eastern Canada.

Interestingly, Todd (1950, 1963) named the northern population of the "Eastern" Red-tailed Hawk breeding in the spruce-fir forests from Nova Scotia to Alberta as *Buteo jamaicensis abieticola*. This subspecies was not recognized by the American Ornithologists' Union (A.O.U.) Check-list (1957) or by Palmer (1988). Godfrey (1986) stated that he had not "seen adequate material to appraise it". However, Godfrey (pers. comm. 1993) has said that Todd (1950) was probably correct in naming this northern subspecies. Dickerman and Parkes (1987) supported the recognition of *abieticola*, and reported a breeding record south to Frontenac County, Ontario. If this subspecies were to be formally recognized, then true Eastern *borealis* would be restricted to the deciduous forests of extreme southern Ontario and the eastern United States except Florida.

Typical adults of this proposed "Spruce-Fir" subspecies, *abieticola*, differ from more southern birds "in having bold, heavy, dusky to black streaking on the feathers of the belly band. The throat is never pure white as in many *borealis*, and may be so heavily streaked as to appear almost black...The ground color of the underparts of *abieticola* averages more richly colored (buffy) than in *borealis*, overlapping somewhat with the palest

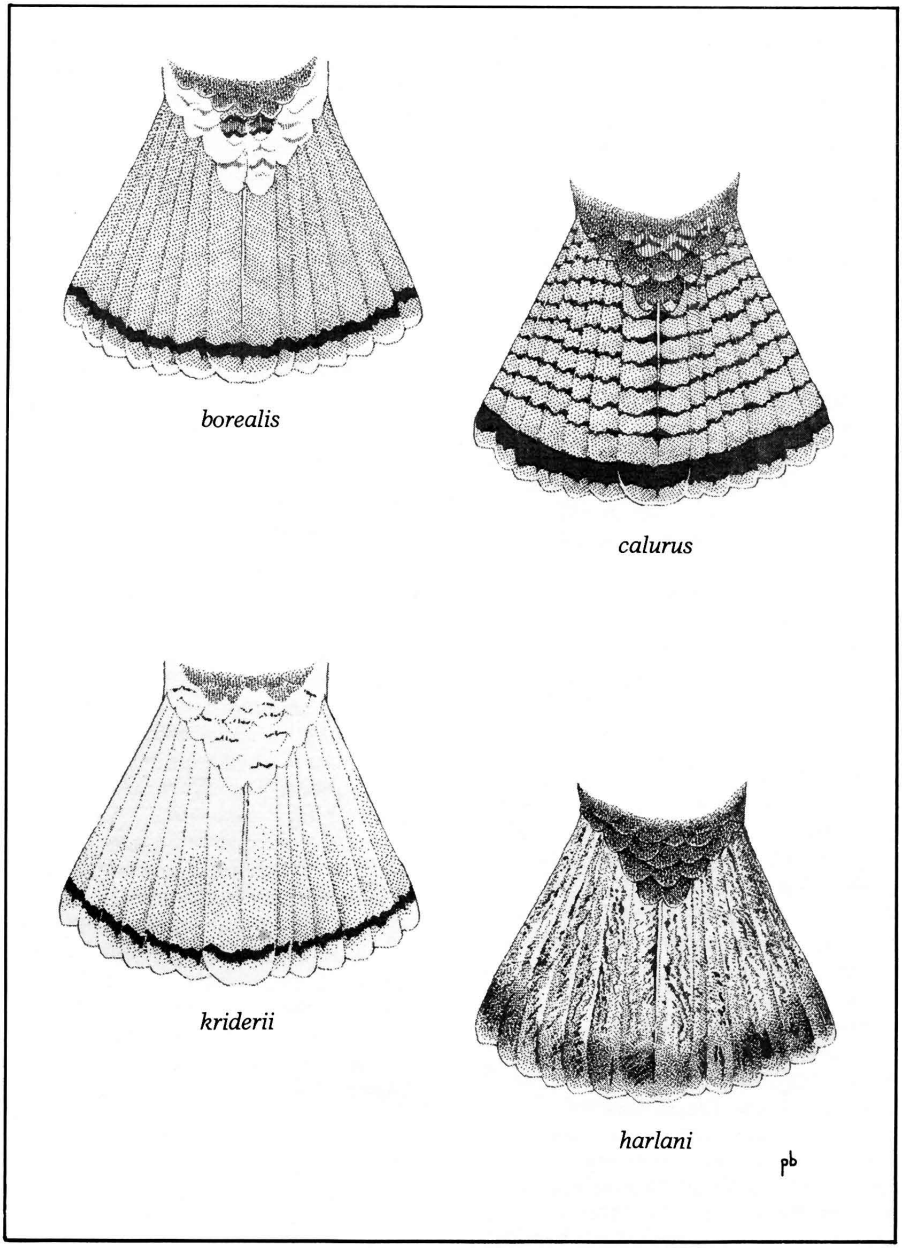

Figure 1: Adult tail patterns of four Red-tailed Hawk subspecies. Drawings by *Peter Burke.*

individuals of *calurus*." Immatures "often may be identified as such by the greatly increased area of blackish ventral streaking, in some instances forming almost a solid band" (Dickerman and Parkes 1987).

During the peak flight of 371 Red-tailed Hawks at Cranberry Marsh, Durham Region, 25 October 1992 (Barker 1993), and being aware of the description of *B. j. abieticola*, I noted that most of the birds were typical of this proposed race. Whether or not this is a valid subspecies, it is certain that northern Redtails are much more heavily marked than their extreme southern Ontario counterparts.

"Western" Red-tailed Hawk
(*B. j. calurus*)

The highly polymorphic Western subspecies, *calurus*, breeds east to central Manitoba, where it intergrades with the Eastern Red-tailed Hawk (Godfrey 1986). "As a migrant and wintering bird, it regularly occurs along the Atlantic seaboard" (Dunne *et al.* 1988). It is a "rare wanderer" throughout Ontario from autumn to spring (James 1991).

Western Redtails are usually divided into three morph categories: light (most common morph), rufous, and dark, with various intermediates. Clark and Wheeler (1987) provide illustrations and a thorough discussion of these morphs.

Adult light morph Western Redtails are like Eastern Redtails but have distinctly rufous-washed underparts and rufous-barred leg feathers. A characteristic of all morphs of the Western subspecies is that the red tail is often crossed by several sharply defined black bars (Taverner 1936). The black on the tail varies from flecking to complete cross-barring. Note to, that the subterminal band is usually wider. See Figure 1. The Western adult on Plate 11 in Clark and Wheeler (1987) is somewhat intermediate between a typical light morph and the rufous morph on Plate 14. Note the black barring on the red tails. Immature light morph Western Redtails are often difficult to separate from Eastern immatures.

Rufous and dark morph Western Redtails are less frequent in the population than are the light morph birds, but they are reported more often than the latter. A rufous morph adult was seen by Alan Wormington at Point Pelee on 24 October 1992 (Henshaw and Kerr 1992). Rufous morph immatures are often distinctive; see Plate 14 in Clark and Wheeler (1987). I saw a dark morph adult on 20 October 1990 near Saintfield, Durham Region (Bain and Henshaw 1991). At first I thought it was a dark morph Rough-legged Hawk (*Buteo lagopus*) and would have overlooked it had I not stopped my car to view it with binoculars. To my amazement, it was a beautiful all-black Redtail except for silvery underwing flight feathers and a barred red tail. Immature dark morph Western Redtails are usually difficult to separate from immature Harlan's.

It is generally assumed that rufous and dark morph Redtails with red tails seen in Ontario are of the Western subspecies since such morphs are virtually unknown in the Eastern race. When it can be seen, the black-barred red tail of the adult Western should further support the identification of this subspecies. If in doubt about the subspecies, just call them rufous and dark morph Red-tailed Hawks.

"Krider's" Red-tailed Hawk
(*B. j. kriderii*)

This is a very pale form which breeds on the southern prairies east to extreme western Ontario (Godfrey 1986, James 1991). Krider's is a rare migrant in southern Ontario (Taverner 1927, James 1991). Typical adults are like bleached Eastern Redtails, being much whiter overall with a whitish or pinkish tail. See Figure 1. Immatures are similar to adults, but have a whitish cross-barred tail. In flight, Krider's has a distinctive white-headed appearance. Both adult and immature Krider's commonly show large whitish rectangular patches on the upper wings, leading to confusion with the immature light morph Ferruginous Hawk (*Buteo regalis*). See the excellent illustrations of Krider's on page 195 of the National Geographic Guide (Scott 1987) and the perched adult and flying immature on Plate 11 in the Peterson hawk guide (Clark and Wheeler 1987).

Currently most authorities follow the A.O.U. Check-list (1957) in treating Krider's as a subspecies of the Red-tailed Hawk. However, Taverner (1936) and Palmer (1988) do not recognize Krider's as a valid subspecies but consider it to be a colour morph. Dr. W. Earl Godfrey (pers. comm. 1993) now also believes that Krider's may be a morph because "it occurs side by side with other Red-tailed Hawks in the same breeding population". The A.O.U. (1957) stated that "there are extensive areas of intergradation with *B. j. borealis* on the east and *B. j. calurus* on the west". Since Krider's coexists (and interbreeds) over a large breeding range "where it is outnumbered by the Eastern form" (Clark and Wheeler 1987); therefore, Krider's is by definition a morph and not a valid subspecies. In any case, typical Krider's are distinctly recognizable in the field.

"Harlan's" Red-tailed Hawk
(*B. j. harlani*)

Harlan's Hawk is "a variable population in Alaska and western Canada formerly regarded as a distinct species" (Sibley and Monroe 1990). It migrates through the prairie provinces and winters mainly in the south-central United States. There is a specimen record from Pennsylvania (Dickerman and Parkes 1987), and Gerry Smith (pers. comm. 1993) has seen Harlan's twice in spring migration at Derby Hill, New York, at the southeast corner of Lake Ontario. There are a few sight records for southern Ontario.

Classic adult Harlan's Hawks are quite recognizable if the distinctive tail is seen well. They are similar to the other dark morph Redtails but lack the diagnostic red tail, and usually they have "much white speckling on breast and underwing coverts" (Clark and Wheeler 1987). The tail is "mottled and freckled with black, grey, white and red in various proportions and with longitudinal streaks instead of transverse bars" (Godfrey 1986). See Figure 1. Immatures have barred tails and are difficult to separate from other dark morph Redtails (Clark and Wheeler 1987). Harlan's interbreeds with other subspecies; for example, there are recognizable intergrades between Harlan's and Western Redtails showing characteristics of both subspecies. Harlan's Hawk is normally a dark morph bird;

however, it is reported that Harlan's has both a light morph and a rare barred-tailed morph (Clark and Wheeler 1987, Mindell 1985). It is questionable whether these morphs are pure Harlan's or birds showing intergrade traits with other subspecies.

The taxonomic status of Harlan's Hawk has changed several times between species and subspecies since its discovery by Audubon in 1829 (Julian 1971). The A.O.U. Check-list (1957) listed it as a distinct species. Since Harlan's Hawks interbreed freely with other Red-tailed Hawks, it cannot be a separate species under the biological species concept. The A.O.U. (1973) reassigned Harlan's to subspecies status. However, the debate continued whether Harlan's was a valid subspecies or a colour morph having no taxonomic status. Mindell (1983) appears to have settled the matter. He presented very convincing evidence that Harlan's has an extensive core breeding range exclusive of other Red-tailed Hawk subspecies, although a small number of intergrades occur throughout its range. Harlan's is therefore a valid subspecies (Mindell 1983). Nevertheless, Palmer (1988) still preferred to consider Harlan's a morph.

In summary, Cade (1990) believes that the Harlan's Hawk represents "a breeding population that became isolated in a Pleistocene refugium, where these hawks achieved distinctive morphological differentiation from other Red-tailed Hawk populations but failed to achieve reproductive isolation, so that on recontact of formerly separated populations, there has been exchange of genes".

Conclusion

For those hawkwatchers wanting more information, there are two field guides to the hawks that I highly recommend: The Peterson Guide to the Hawks (Clark and Wheeler 1987) and Hawks in Flight (Dunne *et al.* 1988). Both books cover Red-tailed Hawk subspecies and morphs in considerable detail.

Acknowledgements

I thank Dan Brunton, Peter Burke, Bill Crins, Bob Curry, Kim Eckert, Earl Godfrey, Michel Gosselin, Ron Tozer and Mike Turner for much valuable help in the preparation of this note. Peter Burke kindly provided the illustrations which greatly enhance this note.

Literature cited

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

American Ornithologists' Union. 1973. Thirty-second Supplement to the American Ornitholigists' Union Check-list of North American Birds. Auk 93: 875-879.

Bain, M. and B. Henshaw (editors). 1991. Annual Bird Report, Durham Region, Ontario, 1990. Published by the editors.

Barker, J. 1993. Cranberry Marsh Raptor Watch, Year End Report - 1992. Unpublished.

Cade, T.J. 1990. Review of Palmer, R.S. (Editor). 1988. Handbook of North American Birds, Diurnal Birds of Prey, Volume 4 and 5. Auk: 213-216.

Clark, W.S. and B.K. Wheeler. 1987. A Field Guide to Hawks. Houghton Mifflin Company, Boston.

Dickerman, R.W. and K.C. Parkes. 1987. Subspecies of the Red-tailed Hawk in the Northeast. Kingbird 37: 57-64.

Dunne, P., D. Sibley and C. Sutton. 1988. Hawks in Flight. Houghton Mifflin Company, Boston.

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

Henshaw, B. and H. Kerr. 1992. Ontario round-up, October and November 1992. Birders Journal I: 358-366.

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

Julian, P.R. 1971. Harlan's Hawk, a challenging taxonomic and field problem. Birding 3: 67-71.

Lish, J.W. and W.G. Voelker. 1986. Field identification aspects of some Red-tailed Hawk subspecies. American Birds 40: 197-202.

Mindell, D.P. 1983. Harlan's Hawk (*Buteo jamaicensis harlani*): a valid subspecies. Auk 100: 161-169.

Mindell, D.P. 1985. Plumage variation and winter range of Harlan's Hawk (*Buteo jamaicensis harlani*). American Birds 39: 127-133.

Palmer, R.S. 1988. Handbook of North American Birds, Volume 5, Diurnal Raptors (Part 2). Yale University Press, New Haven and London.

Pittaway, R. 1991. Checklist of recognizable Ontario bird forms. Ontario Birds 9: 49-55.

Scott, S.L. (ed.). 1987. Field Guide to the Birds of North America. National Geographic Society, Washington, D.C.

Sibley, C.G. and B.L. Monroe Jr.. 1990. Distribution and Taxonomy of Birds of the World. Yale University Press, New Haven and London.

Taverner, P.A. 1927. A study of *Buteo borealis*, the Red-tailed Hawk, and its varieties in Canada. Victoria Memorial Museum, Bulletin 48: 21 pages including colour plates. Canada Department of Mines, Ottawa.

Taverner, P.A. 1936. Taxonomic comments on Red-tailed Hawks. Condor 38: 66-71.

Todd, W.E.C. 1950. A northern race of Red-tailed Hawk. Annals. Carnegie Museum, Pittsburgh.

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

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Publication Notice

Population Ecology, Habitat Requirements, and Conservation of Neotropical Migratory Birds. 1991. By *Deborah M. Finch.* Publications Distribution, Rocky Mountain Forest and Range Experiment Station, 3825 E. Mulberry, Fort Collins, CO, U.S.A. 80524. No charge.

Recent analyses of local and regional bird population counts, radar migration data, and capture data from banding stations show that forest-dwelling bird species, many of which are neotropical migrants, have experienced population declines in many areas of North America. The factors that have been advanced to explain the population declines include forest fragmentation on the breeding grounds, deforestation of wintering habitats, pesticide poisoning, or the cumulative effects of habitat changes. This literature review summarizes current information on population trends of neotropical migratory birds and the factors affecting migrant populations on the breeding and wintering grounds.

Notes

Large Ring-billed Gull Clutches on an Island in Southern James Bay

by
Doug McRae

On 1 July 1992 I had the chance to visit a Ring-billed Gull (*Larus delawarensis*) colony on a small island in James Bay, just off Big Stone Point, Ontario, about 45 km east of Moosonee. The island is variously called Seagull Island or Big Stone Island, and is loosely joined to the mainland during very low tides. It appears as an unnamed island at UTM coordinates 810700 on 1:250,000 Topographic Map 32L (Lower Harricanaw River). I was joined on this visit by Barry Hunter from the Moosonee office of the Ministry of Natural Resources and by John and Frank Turner of Moose Factory.

We spent about thirty minutes on the island and located nests of Ring-billed Gull and several of Herring Gull (*L. argentatus*). In addition, Common Terns (*Sterna hirundo*) appeared to be breeding in a separate area of the island but we did not go to that section, therefore no actual nests were located. I estimated that at least 250 pairs of Ring-billed Gulls were present on the island. John Turner noted that there appeared to be only about half as many birds as when he last visited the island in 1980, and that the actual colony area had decreased as well. In addition to the Ring-billed Gulls, I estimated that about 25 pairs of Herring Gulls and 15 pairs of Common Terns were also present.

The colony was typical in appearance to any other gull colony, but was unusual in that there was a high incidence of abnormally large clutches. Of the 35 nests examined, over 17% had unusually large clutches. The breakdown of nest contents was as follows: 4 (11.43%) had one egg and/or chick, 15 (42.86%) had two eggs and/or chicks, 10 (28.57%) had three eggs and/or chicks, 1 (2.86%) had four eggs and 5 (14.29%) had five eggs.

H. Harrison (1975) and C. Harrison (1978) state that Ring-billed Gulls usually lay three, "sometimes" or "often" two, and "rarely four" eggs. Peck and James (1983) list Ontario clutches ranging from one to six eggs and state that "some 5- and 6- egg clutches may have involved laying by more than 1 female". They also note that of 38,919 nests documented through the Ontario Nest Records Scheme, only 359 (0.9%) involved clutches of more than three eggs, and mention that the number of large clutches may be somewhat inflated since "an additional bias has been created because on some colony visits exact counts were recorded only of sets of 4 or more eggs". While the large clutches we found are not unprecedented, the frequency within

Figure 1: Ring-billed Gull nest with five eggs, on Seagull Island, James Bay, 1 July 1992. Photo by *Doug McRae.*

this colony is substantially higher than the provincial average (i.e. 17.1% compared with 0.9%).

It seems improbable that, for some strange reason, the females from this island lay abnormally large clutches. The more likely explanation for the large clutches would be that more than one female was laying in each nest. However, there is no strong evidence to support this either way, since in the five egg nests, eggs in some clutches appeared the same colour while differences within a clutch were noted in others (see Figure 1).

If the large clutches are a result of "dumping" by additional females, one has to wonder why the frequency of dumping is so high on this island. John Turner's observation that the colony had decreased both in numbers and physical area may provide a clue. If, for some reason, parts of the former colony are unsuitable for nesting now, females may be under greater pressure to use existing nests to lay their eggs. While I could see nothing that would preclude gulls from expanding the colony in area, there may well be subtle factors to which the gulls are sensitive. Also, island nest sites are at a premium in southern James Bay, which may add to the pressure to use this nest site even if its suitability is declining.

This Ring-billed Gull colony would be an exellent location to further study this interesting

situation. In order to determine if dumping by multiple females is the reason for the large percentage of abnormally large clutches, it would be advisable to arrive during egg laying. Our visit on 1 July appeared to coincide with the onset of hatching, so presumably early June would be a good time for a follow-up visit.

My thanks go to John Turner who, while on his way to Netitishi Point, kindly went out of his way to take us to the island. These observations were made while employed as the Moosonee Community Naturalist, a program co-sponsored by the Ministry of Natural Resources, Moosonee Area Development Board and Ontario Northland.

Literature cited

Harrison, C. 1978. A Field Guide to the Nests, Eggs and Nestlings of North American Birds. Collins.

Harrison, H. 1975. A Field Guide to Birds Nests. Houghton-Mufflin Co., Boston.

Peck, G.K. and R.D. James. 1983. Breeding Birds of Ontario: Nidiology and Distribution. Volume 1: Non-Passerines. Royal Ontario Museum, Toronto.

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Unusual Escape Strategy by Tree Swallow from Merlin

by
Marcie Jacklin and Jim Harris

On 2 September 1992, we were birding at the Munster Sewage Lagoons near Ottawa, Ontario. We had just finished scanning the first cell where a group of approximately 50 Tree (*Tachycineta bicolor*) and 12 Barn (*Hirundo rustica*) Swallows were hawking insects when Jim noticed an adult female Merlin (*Falco columbarius*) which had swung in over the second cell. The bird was about ten metres away at the closest point of observation, and we could clearly see a swallow struggling in the talons of the Merlin. As the birds passed us, we noted that the Merlin was having a lot of difficulty holding onto its prey. Within the next few seconds the prey, which we were now able to identify as a Tree Swallow, had worked itself free of the Merlin. The swallow hovered in the air for a few seconds, and then when it noticed the Merlin had swung around for a second try, the swallow dove directly down approximately seven metres into the sewage lagoon. Unfortunately in all the excitement we lost sight of the swallow so we don't know if it resurfaced. The Merlin left the area and returned approximately 20 minutes later and chased a group of shorebirds and then the swallows again.

Although we have observed this kind of behaviour in ducks and shorebirds when being pursued by falcons, we have never witnessed or heard of passerines using this technique. A review of the literature (Bent 1938, Palmer 1988, Terres 1982) did not provide any further insight into this unusual behaviour.

Literature cited

Bent, A.C. 1938. Life histories of North American Birds of Prey. Part Two. United States National Museum Bulletin 170.

Palmer, R.S. (ed.) 1988. Handbook of North American Birds, Volume 5: Diurnal Raptors (Part 2). Yale University Press, New Haven, Connecticut.

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

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Concealment Behaviour in the Loggerhead Shrike

by
Ron Pittaway

During a recent study of the Loggerhead Shrike (*Lanius ludovicianus*) on the Carden Plain, Victoria County, in central Ontario, it was discovered that both juvenile and adult shrikes exhibit a well-developed concealment behaviour (Pittaway 1991). This activity has apparently not been adequately described previously, based on the extensive literature search undertaken during my study.

I first observed concealment behaviour in juvenile shrikes on 15 June 1991. When looking for old shrike nests I accidently discovered two fully grown juvenile birds hiding inside a thick hawthorn (*Crataegus* sp.). The young shrikes attempted to hide while being observed at very close range. They soon flew, each diving out of sight into the interior of separate, nearby hawthorns. They remained hidden and did not give alarm calls.

At another nest site, the fledged young I had been monitoring could not be located. An adult called "meeg" in alarm several times from nearby trees. The young were suspected to be hiding and two were eventually discovered concealed in a thick buckthorn (*Rhamnus* sp.). As the branches were parted, each of the young darted in different directions, taking cover in a dense clump of hawthorns.

The young of the three other pairs in the study also exhibited this well-developed concealment behaviour. This behaviour was used frequently by juveniles for up to

three weeks after leaving the nest (fledging). Even when young shrikes were known to be in the nest site area, they could not be located on several occasions.

Amy Chabot (pers. comm.) of McGill University also reported this hiding behaviour in recently fledged shrikes near Napanee, Ontario. In Saskatchewan, Wayne Harris (pers. comm.) also has observed this behaviour and has seen young shrikes "freeze" when alarm calls were given by adults. All these observations suggest that concealment behaviour may be an adaptation to prevent predation of recently fledged shrikes.

A similar behaviour is used by adults to avoid larger birds of prey. In May 1990, I observed a male Loggerhead Shrike perched on top of a hawthorn near the nest tree where the female was incubating eggs. The male called a raspy "meeg" twice in alarm, then flew down inside the hawthorn out of sight. At that moment, a Cooper's Hawk (*Accipiter cooperii*) flew over the shrikes' territory. The shrike returned to its conspicuous perch after the hawk had flown out of sight.

On another occasion in August 1991, an adult Loggerhead Shrike took cover when an American Kestrel (*Falco sparverius*) flew low over its perch site. The shrike called "meeg" once before ducking out of sight, and returned to its perch once the falcon had gone. Kestrels are common on the Carden Plain, and except for the above incident, no other interactions with shrikes were noted. These observations suggest that adult Loggerhead Shrikes also have a well-developed concealment tactic used to avoid contact with larger avian predators.

In summary, both juvenile and adult Loggerhead Shrikes exhibit well-developed concealment behaviours. This adaptation probably helps to lower the predation level of newly fledged juveniles. In adults, it may be a tactic used to avoid conflict with avian predators.

Acknowledgements

I wish to thank Amy Chabot and Wayne Harris for information on shrike behaviour. I also thank Ron Tozer and Mike Turner for their valuable comments on the first draft of this note.

Literature cited

Pittaway, R. 1991. Status of the Loggerhead Shrike on the Carden Plains. Ontario Ministry of Natural Resources, Minden, Ontario. 40 pp. + maps.

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Barred Owl and Northern Goshawk Co-occurrence

by
Doug Sadler

The author received a phone call on 12 June 1992 from Jim Dunsire, a quite experienced birder, telling of an adult Barred Owl (*Strix varia*) which dived at him along a trail in the Emily Tract, Victoria County Forest, in mid-morning. It softly screamed once, then landed in a nearby tree, where diagnostic field marks were well observed. Three fledglings were hopping about in another tree not far away. This is known behaviour for that date (Weir 1987(.

I went to the site two days later and was dive-bombed by a screaming Northern Goshawk (*Accipiter gentilis*), which landed well up in a tree not far away, and was in full visual, as well as audio, contact. There was a large nest with fresh pine branches about 10 m off the trail in the divided trunk of a tall Red Pine (*Pinus resinosa*), about 15 m up (see Godfrey 1986).

Dunsire went in to the site again on 16 June, and was attacked by the Goshawk, but found no sign of the owl. The owl was not seen again, but the adult Goshawk flew at Doug and Tony Bigg from the nest, and a downy juvenile was seen in the nest on 23 June. Two weeks later, the nestling was found sitting on a twig just above the nest.

The presence of these two predators in exactly the same locality and in the same time period seems hard to explain. One can perhaps assume that the owl family was moving through, although the behaviour indicates that this was a newly fledged family. But why did the hawk ignore it? The Northern Goshawk is notorious for its boldness in defence of its nesting territory. The Barred Owl is also known to be active by day (Bent 1937, 1938). Bent (1938) quotes the discovery in winter of the bodies of a Goshawk and a Barred Owl lying on the snow within 10 feet (3 m) of each other amidst masses of feathers and a good deal of blood. The Goshawk was dead, and frozen stiff, but the owl was still warm, though it apparently died of wounds (Bent 1937).

Literature cited

Bent, A.C. 1937. Life Histories of North American Birds of Prey. Part One. United States National Museum Bulletin 167.

Bent, A.C. 1938. Life Histories of North American Birds of Prey. Part Two. United States National Museum Bulletin 170.

Godfrey, W.E. 1986. Birds of Canada. National Museum of Natural Sciences, Ottawa, Ontario.

Weir, R.D. 1987. Barred Owl. Pp. 208-209 in Atlas of the Breeding Birds of Ontario (Cadman, M.D., P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

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OBRC Announcement

Historical Records: A Call for Submissions

by
Bob Curry

The Ontario Bird Records Committee (OBRC) originated in an attempt to validate current sight records. However, all records received, whether accepted or not, are kept on file at the Royal Ontario Museum. As these files have accumulated it has become clear that perhaps the OBRC's most important function is to provide a single repository of all documentations of rare birds within the province. This expanded role is consistent with that experienced by many other such committees in North America and worldwide (Roberson 1990).

Since the beginning, the problem of what to do with "old" records has been a thorny one. However, it becomes increasingly a problem given this expanded role. If all records are to be accumulated, how does the Committee deal with the myriad of mostly valid records for which there is little of the kind of documentation which is expected (and received) to accompany rarity reports today.

Accordingly, at the 1992 fall policy meeting, the OBRC formally approved of a definition of what constitutes a historical record. Although many birders have supported their claims of rarities with written descriptions or other documentation for more than two decades, it was decided that, for our purposes, "historical" would be defined as any previously published occurrence of a rare bird before the first OBRC Annual Report for 1982 (James 1983). It is abundantly clear that we cannot submit these records to the kind of scrutiny which present-day records must expect. Pre-1982 records with fully acceptable documentation in accordance with today's standards will be treated exactly as are new records. But what of the hundreds of rarities which have appeared in *American Birds* or its predecessor *Audubon Field Notes*, or indeed in numerous other regional and national journals? Most of these records are statements in print that the species was observed, usually with the names of the observers and little else. What we would like from these observers (or anyone who saw the birds) is at least the barest of descriptions of the circumstances and of the birds if possible, based on memory if there is nothing else. Such records (and these would constitute the vast majority of, especially, lesser rarities seen before 1982) would be filed at the ROM, added to the provincial record, summarized in the annual report and given the designation "H", for historical. In this way, it is hoped that over a reasonable time period we may be able to accumulate some documentation on almost all the rare bird occurrences in Ontario.

How should we get started on this? To illustrate with a personal example, this new definition will allow me to submit a short paragraph, based on memory, on the Wilson's Plover which spent several days on Hamilton Beach in May 1961, and which was seen by numerous observers. While there is no way that any report based on distant memory can meet modern requirements, this should suffice to have the record accepted as historical and take its rightful place as a part of the provincial avifaunal record. The Committee urges observers to submit such brief anecdotal accounts of any review list species seen before 1982. More systematically, Committee members, designates or volunteer researchers will be asked to read through back volumes of *American Birds* and *Audubon Field Notes* to compile lists of rarities which have appeared in print, and then ask for such brief reports from the observers, to the extent that they can be contacted.

This historical records policy is far from perfect. Indeed, there are those who submit that we enter troubled waters and that only records that can withstand the most rigorous scrutiny should be accepted, and that the credibility of any list of records is eroded with such records. However, it is our opinion, and of such bodies as the California Bird Records Committee (Roberson 1990), that the compilation of as complete a database as possible of rare birds in Ontario is a goal which outweighs any such criticism.

Again, we invite all observers to submit notes, however brief, on these old records.

Literature cited

James, R. D. 1983. Ontario Bird Records Committee Report for 1982. Ontario Birds 1: 7-15.

Roberson, D. 1990. North American Bird Records Committees. Birding 22: 276-284.

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Errata

In the article entitled "Green Violet-ear: First for Canada" (*Ontario Birds* 10: 86-89), note in Table 1 (page 89) that: the July 6 1990 bird from Arkansas was at Lurton, not Furton; and the reference for the October 7 1984 bird at Fort Smith, Arkansas, is *American Birds* 40: 128. Since the latter reference listed the date incorrectly as 1985, a correction is made in *American Birds* 40: 293. Finally, Nick Escott's postal code is P7B 3T9.

Book Review

Birder Extraordinaire: The Life and Legacy of James L. Baillie (1904-1970). 1992. By *Lise Anglin.* Toronto Ornithological Club and Long Point Bird Observatory, Toronto. (softcover) 143 pp. $12 (plus $2.60 postage and handling). Available from the Toronto Ornithological Club, 560 Blythwood Rd., Toronto, Ontario M4N 1B5.

This extremely interesting biography documents the life and times of one of Ontario's most influential professional ornithologists and birders. The book was jointly published by the Toronto Ornithological Club and Long Point Bird Observatory. These organizations are to be commended for supporting this important project to provide a lasting tribute to Jim Baillie.

Author Lise Anglin's personal knowledge of her subject through family connections, her background as a professional researcher, and (very importantly) her own active participation in birding have combined to make this a very well documented and insightful book. I really found it difficult to put the book down once I got into the story! Anglin based the book on extensive interviews with many of Jim's friends and colleagues, plus a thorough examination and synopsis of the incredibly detailed and complete Baillie journals and correspondence housed in the Thomas Fisher Rare Books Library at the University of Toronto.

The book covers family history and formative years, Jim's start in birding in 1920, his 48 years in the ornithology department of the Royal Ontario Museum, personal life, 39 years of writing a weekly bird column in the *Toronto Evening Telegram*, club affiliations and awards, research writings and field work, and contributions and achievements (including his successful acquisition of a Labrador Duck and Great Auk for the Museum's collection). I found it to be an objective and scholarly analysis of all aspects of Jim's life, fully documenting his many strengths and his foibles. The author's description of Baillie's unhappiness and frustrations during his last years is particularly compelling reading.

Jim Baillie's contributions and essence are extremely well summarized in the final chapter, entitled "Influence, Popularity and Greatness". I personally experienced Jim's inspiration during the 1960's, as an undergraduate at the Univeristy of Toronto, and an aspiring author doing research at the Royal Ontario Museum on a regional bird book. I felt the warmth and genuine interest of this man toward everyone who appreciated birds — a trait so well described in Anglin's portrayal.

I would strongly recommend this book to everyone interested in birds, but particularly to the legion of "post-Baillie" birders that have come

along in Ontario. It vividly presents aspects of the earlier history of birding in this province, while thoroughly introducing one of Ontario ornithology's most important mentors.

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Photo Quiz

by
Doug McRae

Answer to Photo Quiz in *Ontario Birds* 10 (3): **Brown-headed Cowbird.**

This quiz bird, a juvenile Brown-headed Cowbird, was perhaps a bit unfair. On the colour print we used, kindly submitted by avid *Ontario Birds* reader Molly Sorlie of Barrie, it is much easier to tell the species, however it becomes more difficult when converted to black-and-white. Also, it would have been a snap if we had used the other shot that Molly sent — the one showing a Song Sparrow shovelling food into this fledgling! While adult cowbirds usually don't present an identification problem, many birders seeing their first juveniles, like this one, can be quite confused.

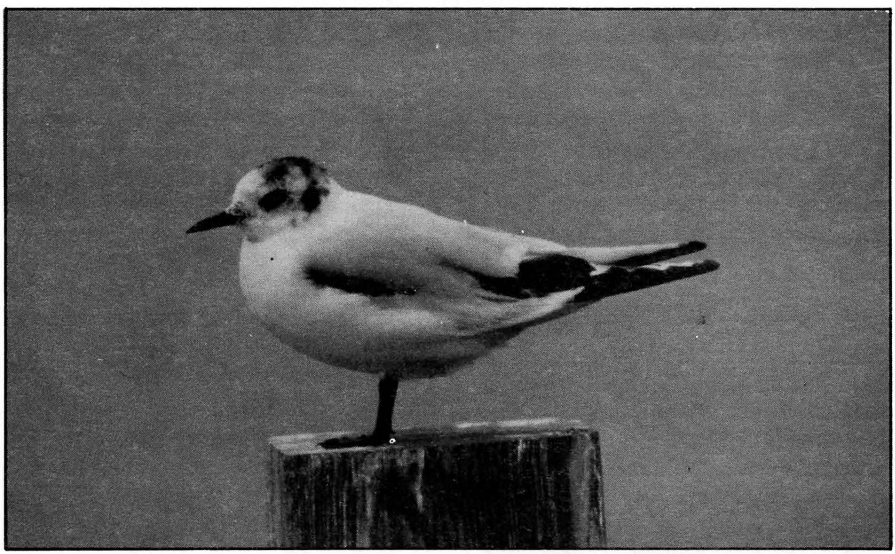
To start with, we can establish that this bird is a juvenile by several features. The most obvious indicator of age is the bill. The soft, protruding gape edge — diagnostic of young birds — is quite visible on this photo. Another feature that suggests a young bird is the "texture" of the feathers. If you look carefully you will notice that the feathers have a dull, flat, almost fuzzy look to them, unlike the glossy finish that most adult birds show. This is particularly noticeable on the feathers of the crown and flanks. A final feature that suggests this bird is a young bird is the stubby-looking tail.

In all honesty I don't know if you can distinguish this bird as a Brown-headed Cowbird, based on a black-and-white photograph, but there are several features that are helpful. The most obvious feature visible is the light scaling on the outer edges of most coverts and contour feathers. This pattern, which would be even more pronounced in a bird another week or two older, usually comes as a shock to observers unfamiliar with this age class as it is totally unlike any adult plumage. In fact, most observers seeing their first cowbird of this age are unable to come up with an identification until the adult of the host species shows up, providing a substantial clue!

Structurally speaking, especially because of the bill, this bird most

resembles a finch, grosbeak or sparrow. However, if you look carefully, the breast of this bird appears mostly dark with light edgings. This pattern is quite unlike most sparrows or finches which usually have streaked breasts. Also, most finches and sparrows at this age show distinct wingbars, lacking on this individual. This plumage feature, combined with the bill shape and the pale feather edgings certainly help to identify this bird as a Brown-headed Cowbird.

Avoid gullibility when considering the identity of our next quiz bird!



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Ontario Field Ornithologists

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

All persons interested in bird study, regardless of their level of expertise, are invited to become members of the Ontario Field Ornithologists. Membership dues are $20.00 Annual Membership or $400.00 Life Membership. All members receive *Ontario Birds*, the official publication of the Ontario Field Ornithologists. Please send memberships to: Ontario Field Ornithologists, P.O. Box 62014, Burlington Mall Postal Outlet, Burlington, Ontario L7R 4K2.

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