

- Royal Ontario Museum, Toronto.
- Peck, G.K. and R.D. James. 1987. Breeding Birds of Ontario. Nidology and Distribution. Volume 2: Passerines. Life Sciences Miscellaneous Publication, Royal Ontario Museum, Toronto.
- Price, I.M. and D.V. Weseloh. 1986. Increased numbers and productivity of Double-crested Cormorants, *Phalacrocorax auritus*, on Lake Ontario. Canadian Field-Naturalist 100:474-482.
- Runtz, M. 1983. Sixth annual (1983) spring migration report. Point Pelee National Park & vicinity. Parks Canada.
- Sandilands, A. 1987. Cadwall. pp. 82-83. In Cadman, M.D., P.F.J. Eagles and F.M. Helleiner (eds.). Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo.
- Smith, V.E., J.M. Spurr, J.C. Filkins, and J.J. Jones. 1985. Organochlorine contaminants of wintering ducks foraging on Detroit River sediments. Journal of Great Lakes Research 11:231-246.
- Speirs, J.M. 1985. Birds of Ontario. Volume 2. Natural Heritage/Natural History Inc., Toronto.
- Stirrett, G. 1960. The spring birds of Point Pelee National Park Ontario with pictorial map and dates in the natural history of the park. Canada Department of Northern Affairs and National Resources, National Parks Branch, Ottawa.
- Stirrett, G.M. 1973. The spring birds of Point Pelee National Park Ontario. Revised edition. Information Canada, Ottawa.
- Struger, J., D.V. Weseloh, D.J. Hallett, and P. Mineau. 1985. Organochlorine contaminants in Herring Gull eggs from the Detroit and Niagara Rivers and Saginaw Bay (1978-1982): contaminant discriminants. Journal of Great Lakes Research 11:223-230.
- Weseloh, D.V., T.W. Custer, and B.M. Braune. 1989. Organochlorine contaminants in eggs of Common Terns from the Canadian Great Lakes, 1981. Environmental Pollution 59:141-160.
- Wormington, A. 1982. Fifth annual (1982) spring migration report. Point Pelee National Park & vicinity. Parks Canada.

## Notes

### Marsh Nesting by Common Terns (*Sterna hirundo*) in the Toronto Area

During 1988 and 1989, the Ontario Ministry of Natural Resources and the Lake Simcoe Region Conservation Authority conducted a survey of colonial nesting birds in the Toronto area. Marsh nesting by Common Terns (*Sterna hirundo*) was observed during both years of the survey. In 1988, one pair of Common Terns was observed nesting in a wetland on the shores of Lake Ontario. In 1989, four pairs were observed nesting at the same site.

Common Terns ordinarily nest on sand, gravel and pebble

beaches, sand dunes, and on islands (Cramp *et al.* 1974). Marsh nesting in Common Terns is rare and is often an indication of a shortage of more typical nesting habitat (Nickell 1966). In a study on Long Island, New York, in the 1970s, a large number of Common Terns were observed nesting in marsh habitat. The number of pairs engaged in marsh nesting usually represented a small proportion of the total number of birds nesting on Long Island (Buckley and Buckley 1980). The authors concluded that Common terns

appear to move their nest sites from marsh to beach and back depending on variations in habitat quality and availability (Buckley and Buckley 1980).

During both years of the colonial nesting bird survey, Common Terns were observed nesting in Hydro Park. This wetland is a small, 20 ha shoreline marsh on Lake Ontario adjacent to Frenchman's Bay in the Town of Pickering, Regional Municipality of Durham. The dominant vegetation communities consist of cattails (*Typha* spp.), grasses (*Gramineae* spp.) and sedges (*Cyperaceae* spp.) (Metropolitan Toronto and Region Conservation Authority 1982). The wetland surrounds an unnamed creek which flows into Frenchman's Bay. The east side of the marsh is bordered by parkland owned and managed by Ontario Hydro.

Common Terns nested in association with Black Terns (*Chlidonias niger*) in Hydro Park. The Black Terns nested in three distinct colonies on floating mats of emergent vegetation and mud flats. In 1988, one pair of Common Terns nested on an isolated mat of floating vegetation. The nest was an elaborate construction of dead cattails, much larger than Common Tern nests observed in non-marsh habitat elsewhere in the Toronto area. The nest occupied the entire surface area of vegetation visible above the water's surface. In 1989, the Common Tern colony (four pairs) was located on a sparsely

vegetated mud flat adjacent to a large area vegetated with cattails. Water depth at the colony site was approximately 0.5 m. Nests at this site were slight scrapes or depression in the substrate lined with small pieces of aquatic vegetation.

Numbers of Common Terns over much of the lower Great Lakes have declined recently (Courtney and Blokpoel 1983). Among the factors which limit population size and reproductive success of this species, the most common are displacement by gulls, human disturbance, predation and flooding. Gulls and human disturbance have forced terns to nest in marginal habitat on the mainland or in marshes, where they are more vulnerable to predators and flooding (Nisbet 1978).

Competition for suitable nesting habitat with increasing numbers of Ring-billed Gulls (*Larus delawarensis*) is having an adverse affect on Common Terns on the Eastern Headland (Leslie Street Spit), Metropolitan Toronto, and elsewhere on the Great Lakes (H. Blokpoel, pers. comm., 1989). Gulls and terns have similar nesting habitat requirements. When the Common Terns return to Lake Ontario colonies in late April, traditional nesting sites are already occupied by Ring-billed Gulls, forcing the smaller, less aggressive terns to search for new, less optimal nesting habitat (Blokpoel and Haymes 1978).

Common Terns in the Toronto area are also experiencing intense pressure from human activities, particularly from the loss of nesting habitat due to development, and from disturbance associated with recreational use of remaining area (Courtney and Blokpoel 1983).

Availability of nesting habitat is also affected by water levels. Terns on the Great Lakes have a tendency to change sites due to annual fluctuations in the water levels of the lakes. Many of the sites occupied by terns are simple, barren gravel shoals, close to water. When the water level rises, these sites are rendered useless for nesting terns.

Common Terns were first reported nesting in the Toronto area at the Toronto Island Airport in 1961 (Unpublished data, Ontario Nest Records Scheme, Royal Ontario Museum, Toronto).

Common Terns began nesting on the Eastern Headland around 1971. This colony grew quickly and by 1977 was one of the largest on the Great Lakes, numbering approximately 1500 pairs (Blokpoel and Haymes 1978). Unfortunately, since 1980, the number of Common Terns nesting on the Eastern Headland has steadily decreased to 110 pairs in 1989 (Connell and Norman 1989).

The recent occurrence of marsh nesting by Common Terns in the Toronto area is noteworthy.

Although marshes represent less optimal nesting habitat for this species, it may be all that Toronto has left to offer. The number of pairs nesting at the Eastern Headland colony has decreased dramatically over the last ten years. Perhaps the colony at Hydro Park will provide a suitable alternative site for birds displaced from the headland.

### Literature Cited

- Blokpoel, H. and G. T. Haymes.* 1978. How the birds took over Leslie Spit. *Canadian Geographic* 96:36-41.
- Buckley, P. A. and F. C. Buckley.* 1980. Population and colony site trends of Long Island waterbirds for five years in the mid-1970s. *Transactions of the Linnaean Society of New York* 9:23-56.
- Connell, S. R. and A. J. Norman.* 1989. Survey of colonial nesting birds in Maple District in 1989. Ontario Ministry of Natural Resources, Maple District Office, Maple, Ontario.
- Courtney, P. A. and H. Blokpoel.* 1983. Numbers and distribution of Common Terns on the lower Great Lakes: 1900 - 1980. *Colonial Waterbirds* 6: 107-120.
- Cramp, S. W., W. R. P. Bourne and D. Saunders.* 1974. The seabirds of Britain and Ireland. Taplinger Publishing Co., New York.
- Metropolitan Toronto and Region Conservation Authority.* 1982. Environmentally significant areas study. Downsview, Ontario.
- Nickell, W. P.* 1966. Common Terns nest on muskrat lodges and floating cattail mats. *Wilson Bulletin* 78: 123-124.
- Nisbet, I. C. T.* 1978. Population models for Common Terns in Massachusetts. *Bird-Banding* 49:50-58.
- Ontario Nest Record Scheme.* Royal Ontario Museum, Toronto, Ontario.

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## Unusual Feeding Behaviour of the Great Blue Heron

Naturalists in Ontario most frequently observe Great Blue Herons (*Ardea herodias*) at the edges of lakes, ponds and marshes. Here they hunt their most common prey of fishes (Bent 1926:108) and sometimes frogs and tadpoles. usually they stalk to within striking distance, or wait quietly for the prey to swim nearby, and then lunge at it with head and neck, grasping it in their bill. Occasionally, however, herons come upon their food in other ways. This note recounts two such instances.

The first instance occurred on 13 August 1987 on Lake Miskokway, a medium-sized lake in the District of Parry Sound. Here I observed a Caspian Tern (*Sterna caspia*) flying across the lake, and, in the same general direction but apparently not in pursuit of it, a Great Blue Heron. As the tern flew, it dropped what appeared to be a fish into the water. It made no effort to retrieve it, but as soon as the heron saw this it banked sharply, landed on the water, and seized the food. It sat duck-like on the water, which was quite deep, for several seconds before easily leaving the water with a few flaps of its wings. Bent (1926:110) cited six other instances of Great Blue herons landing on the water in a similar manner, but none concerns a case of opportunistic food-gathering

directly from the water.

A second observation of unusual foraging behaviour by a Great Blue Heron was made by the author on 25 September 1987 at Windermere Basin, Hamilton, Regional Municipality of Hamilton-Wentworth. While I was watching birds here, I noticed a hatch year Great Blue Heron picking at something on the open mudflat. Turning my telescope on it, I realized the object was a dead, completely mud-covered shorebird, which, judging by its size and build, was probably a Lesser Yellowlegs (*Tringa flavipes*). Several times the heron picked up the shorebird and attempted to swallow it. Each time it failed to swallow it, it dropped the bird, poked at it on the ground, shook it a bit, and then picked it up again. Finally, on perhaps the fourth or fifth try, it managed to get the bird down its throat. Five minutes later, when I left, the shorebird was still visible as a very large lump in the heron's esophagus. The heron did not appear to be in any discomfort.

While Audubon (as cited by Bent 1926:109) noted that the Great Blue Heron "destroys a great number of young marsh-hens, rails and other birds", the circumstances of my observation suggest that it is unlikely this heron killed the shorebird itself. For one, I had

been at this location for about 20 minutes before the heron caught my attention. If the heron had killed the bird during this time, I am sure I would have noticed the commotion. Secondly, the shorebird was extremely filthy, suggesting that it had been dead for some time. Thus the young heron either somehow managed to kill the yellowlegs on the open mudflat before my arrival, or it was feeding on carrion, which seems more likely. If the latter is true, the

observed feeding behaviour would seem to be very unusual, as neither Bent (1926) nor Palmer (1962) make mention of Great Blue Herons eating carrion.

#### Literature Cited

- Bent, A. C.* 1926. Life Histories of North American Marsh Birds. United States National Museum Bulletin 135. Washington, D.C.
- Palmer, R. S. (ed.)*. 1962. Handbook of North American Birds. Volume I. Loons through Flamingos. Yale University Press, New Haven and London.

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## Burdock as a Hazard to Golden-crowned Kinglets and Other Small Birds

At the edges of fields and in woodland openings, one can often find the common burdock (*Arctium minus*) growing. The sticky seed heads of this plant, while merely a nuisance to humans and other animals, can pose a daily hazard to small birds. In fact, in a wooded area known as Resources Road Ravine in Metropolitan Toronto, Ontario in early May of 1989, I found a female Golden-crowned Kinglet (*Regulus satrapa*) that died due to entrapment in the old seed heads of a common burdock plant (Figure 1).

A number of species have been reported caught in this way, but it is certainly not a common event. Besides Golden-crowned Kinglet, the list includes Solitary Vireo

(*Vireo solitarius*), American Goldfinch (*Carduelis tristis*), Ruby-throated Hummingbird (*Archilochus colubris*), Yellow-rumped Warbler (*Dendroica coronata*), Common Yellowthroat (*Geothlypis trichas*), Pine Siskin (*Carduelis pinus*) and Black-capped Chickadee (*Parus atricapillus*) (various authors as cited by Taylor and Cameron 1985; see also Di Labio 1986). The Ruby-throated Hummingbird is the smallest of these birds, but is not likely to be attracted to the rather insignificant flowers of the burdock, and not at all to the much stickier mature seed heads. Thus, in light of its very small size, insectivorous habit, and the fact that it often forages quite low, the Golden-crowned Kinglet would

seem to be most at risk from burdock. Correspondingly, it is the species most often reported in the literature as being caught. Indeed, Needham (1909) found "scores of them" sticking to burdocks one autumn in a partly wooded pasture near Lake Forest, Illinois. Other reports of this species being caught by burdock include Tozer and Richards (1974) near Bowmanville, Regional Municipality of Durham, in the fall of 1937, Humphreys (1975) near Waterloo, Regional Municipality of Waterloo, in late September 1974, Bowdish (1906) near Rochester, New York in 1888 and Dan Brunton (pers. comm.) near Oshawa, Regional Municipality of Durham, on 18 May 1975, although the condition of the bird indicated that it had been caught the previous fall or winter.

At the time I discovered my

specimen, I assumed that it had been caught that spring, as the body was in reasonably good shape. If this is the case it is rather unusual, as all the other reports of kinglets caught on burdock are from the fall. Two factors may be responsible for the preponderance of fall records. As hatch year birds make up a significant proportion of migrating fall Golden-crowned Kinglets, age and experience of the migrating birds may be a factor in their susceptibility. Needham (1909) noted that most of the birds he found trapped were young birds. Secondly, Dan Brunton (pers. comm.) suggests that Golden-crowned Kinglets feed lower down in the fall than in the spring, and are thus more likely to come into contact with burdock. In view of the hazard which burdock poses to small birds, naturalists should check



*Figure 1:* Female Golden-crowned Kinglet caught on common burdock plant, early May 1989, Metropolitan Toronto.

burdock clumps for possible further occurrences of such trapping.

### Acknowledgements

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### Literature Cited

*Bowditch, B.S.* 1906. Bird tragedies. *Bird Lore* 8:208.

- Di Labio, B.M.* 1986. Another victim of burdock. *Trail and Landscape* 20:29.
- Humphreys, C.* 1975. Burdock as a threat to small birds. *Canadian Field Naturalist* 89:326-327.
- Needham, J.E.* 1909. Kinglets captured by burdocks. *Bird Lore* 11:261-262.
- Taylor, R.* and *A. Cameron.* 1985. Burdock claims an avian victim. *Trail and Landscape* 19:208-211.
- Tozer, R.C.* and *J.M. Richards.* 1974. *Birds of the Oshawa-Lake Scugog Region, Ontario.* Alger Press, Oshawa.

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## Observation of a Bald Eagle Predation of Double-crested Cormorants

On 9 September 1989, Bill Smith and I were observing shorebirds and waterfowl at the Tollgate Ponds on Hamilton Harbour, Regional Municipality of Hamilton-Wentworth. The Tollgate Ponds are home to a large Double-crested Cormorant (*Phalacrocorax auritus*) and Black-crowned Night-Heron (*Nycticorax nycticorax*) colony. A stand of eastern cottonwoods (*Populus deltoides*) on the west shore of the pond provides nesting habitat for this colony. I was scanning the shore with my telescope when I spotted a large, dark raptor on the berm just to the north of the cottonwoods. At first, we thought that it might be a Golden Eagle (*Aquila chrysaetos*) because of the uniform darkness of the bird, but as it moved around, and occasionally flapped its wings,

we could see extensive white feathering on the underwing linings and axillaries. We decided that it must be a first year Bald Eagle (*Haliaeetus leucocephalus*) because of the dark belly and breast. The area that the eagle occupied is a favourite sunning and preening area for the cormorants, who had retreated *en masse* to the safety of the water. For a period of perhaps ten minutes the eagle patrolled the berm and shoreline and then flew a short distance and landed on a lower branch of one of the cottonwoods.

It is quite common, even after nesting season, to see cormorants perching on or near the nests in the cottonwoods, and as luck, or perhaps design, would have it, the eagle perched a few metres below two cormorants in the same tree.

The two cormorants appeared quite indifferent to the eagle, and for a few minutes the eagle paid them no heed. Then, without warning, the eagle took off and flew straight at the cormorants, crashing into them. Sticks, branches and nesting material fell to the ground as the eagle disappeared behind the tree. At this point I was more than a little alarmed, and expressed concern that the eagle may be sick or injured. Perhaps 30 seconds later, an injured cormorant flopped toward the shore in a desperate attempt to gain the safety of the water. The eagle flew out of the shadows and caught the cormorant at the water's edge. Neither Bill nor I had a chance to determine whether the cormorant was an adult or a juvenile, but clutching this large bird with one talon, the eagle dragged the cormorant into the shadow of the cottonwoods and with hackles raised, mantled his prey victoriously.

After a minute or so of

mantling, the eagle concentrated on the head and neck area of the cormorant, ate for a short time and then mantled the prey again. The eagle then dragged his prey back among the trees and out of sight. A few minutes later, Kevin McLaughlin and Rob Dobos happened along and we informed them of our sighting. We watched this area for a further 30 minutes but the eagle never reappeared.

Rob is a wildlife biologist and commented that he had never heard of this behaviour attributed to Bald Eagles. On 11 September 1989 Dr. Richard Knapton was the guest speaker at the Hamilton Naturalists' Club meeting. Dr. Knapton's topic was cormorants, and he mentioned to the audience that during his time spent surveying Double-crested Cormorants on Lake Winnipegosis, Manitoba, he had observed adult Bald Eagles preying on cormorant nestlings, but has not seen a fully grown cormorant attacked.

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## A Previously Unreported Breeding Colony of Common Terns

In recent years, Common Terns (*Sterna hirundo*) nesting on the lower Great Lakes have deserted some colonies and their total numbers have declined (Courtney and Blokpoel 1983; Smith *et al.* 1984). This notes describes a small, previously unreported breeding

colony of Common Terns in central Ontario which has apparently persisted for several decades. This ternery survives despite being located on a busy cottaging and fishing lake. Reasons for the survival of the colony are discussed.



In mid-May 1988, Rick Salmon (pers. comm.) of the Minden District Office of the Ontario Ministry of Natural Resources (OMNR) reported sighting terns at Head Lake along Highway 503 west of Norland in northern Victoria County. On several occasions in late May and June 1988, Ron Tozer, Doug Tozer and the author visited Head Lake. From shore we observed up to ten Common Terns fishing over the lake or resting on small rocky islands. Their presence in June suggested breeding. Along with Mike Turner, I did a follow-up survey by motor boat on 3 July 1988. We found 16 adult Common Terns and five nearly full-grown young scattered among four small islands in Digby Township in the northern part of the lake. The site was surveyed again by boat on 18 June 1989 by Mike Turner, Elizabeth Turner and the author. We located 25 adult terns and nine nests containing a total of 19 eggs (many pipping). Also found were three newly-hatched chicks hiding in low vegetation. Nests were shallow depressions thinly lined with grasses. Three terns were still present on 26 August 1989, indicating the importance of the lake to the terns throughout the summer.

According to a local resident, Aubrey Gostlin (pers. comm.), terns have nested at Head Lake for more than 40 years. Common Terns were apparently overlooked at Head Lake during the Ontario

Breeding Bird Atlas Project (Cadman *et. al.* 1987).

Surprisingly, this ternery has persisted despite the presence of over 400 cottages on Head Lake and its popularity for boating (Aubrey Gostlin, pers. comm.). This is in sharp contrast to the tern colony at Sparrow Lake, District Municipality of Muskoka, which has experienced considerable disturbance by people (Strebig 1988). Unlike the nesting island in Sparrow Lake, the nesting islands at Head Lake are not favourite landing places for fishermen and picnickers. The islands are small, with grasses, sedges, shrubs and a few small trees. They are surrounded by numerous hazardous reefs, so consequently power boaters avoid them. As well, there are many larger, well-treed islands in other parts of the lake which attract campers, fishermen and swimmers. By contrast, the small tern nesting islands are undesirable for people (pers. obs.).

Another important factor affecting the survival of the terns is the unusual nature of the lake itself. Head Lake lies at the contact zone between Precambrian (60%) and Ordovician (40%) bedrock (Ruggles and Bennett 1969). The lake is large and extremely shallow, with an area of 918.6ha and a mean depth of 3.5m (Ruggles and Bennett 1969). This nutrient-rich, warmwater lake supports an abundance of small yellow perch (*Perca flavescens*) and golden shiners

(*Notemigonus crysoleucas*) (Rick Salmon, pers. comm.). Therefore, the rare combination of safe nesting islands and abundant small fish makes Head Lake suitable for Common Terns and sets it apart from the thousands of nutrient-poor, deep, coldwater lakes on the southern part of the Canadian Shield which generally have no terns.

Since the terns are currently not threatened by human activities, the need to post the islands is not critical at this time. The nesting islands are owned by the Crown (Dave Johnson, OMNR, pers. comm.), so legal protection from human disturbance could be implemented if warranted.

#### Acknowledgements

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#### Literature cited

- Cadman, M.D., P.F.J. Eagles and F.M. Helleiner* (eds.). 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo.
- Courtney, P.A. and H. Blokpoel.* 1983. Distribution and numbers of Common Terns on the lower Great Lakes during 1900-1980: A review. *Colonial Waterbirds* 6:107-120.
- Ruggles, R.C. and M.J.T. Bennett.* 1969. Lake Survey Summary Sheet, Ontario Department of Lands and Forests.
- Smith, G.A., K. Karwowski and G. Maxwell.* 1984. The current breeding status of the Common Tern in the international sector of the St. Lawrence River, eastern Lake Ontario and Oneida Lake. *The Kingbird* 34:18-31.
- Strebig, M.* 1988. Muskoka tern colony disturbed. *Seasons* 28:13.

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## Book Reviews

*The Birds of South America: Volume I. The Oscine Passerines.* 1989. by Robert S. Ridgely and Guy Tudor. University of Texas Press, Austin, Texas. 516 pp. + xvi; 31 colour plates by Guy Tudor.

Several times in recent years this reviewer has used these columns to lament the dearth of good books on South American birds, a gaping hole in the ornithological literature which, little by little, is being plugged. When he heard that a four-volume work, written by Ridgely, one of the outstanding field ornithologists of the area, and

with pictures by Tudor, surely the best field-guide illustrator in the world today, was shortly to be published, he anticipated that this would be the ultimate book on the subject, rendering all subsequent efforts superfluous. Does the first volume in the series justify these hopes?

The answer, I think, is very