Notes

Voice of the American Crow

Introduction

Even to the casual listener, the calling of the American Crow (*Corvus brachyrhynchos*) has a certain pattern to it. Simplified, a caw is the sound most often given. Three caws in quick succession constitute the commonest bout heard. From previous observations, bouts of one to six caws comprise 91% of the crow's vocabulary. Once a bout of caws is completed, there is a silence (interbout period) generally lasting several seconds before another bout of caws is given. A lone crow may give a sequence of 12 bouts with only a slight variation: 3-3-3-3-3-3-3-3-2-3-3-3. At other times the bouts in a sequence may show more variation: 12-2-7-4-4-3-5-6-8. This interval of silence (negative space represented by the dash [-] in the above examples) is the specific aspect of the crow's speech pattern which I have investigated.

Thompson (1968) speculated that there might be a link between the counting ability of corvids and their vocal expression. Later, Thompson (1969a) remarked, "caws of different sequences have idiosyncratic elements which they share with few or any other sequences." In summary, he felt that caws, bouts, and sequences of bouts vary for one crow and between crows.

Methods

I confined my study to the period 2-30 March 1987. Using a stopwatch, I recorded the length of silence between bouts of caws from resident crows in Guelph, Wellington County. March, the month of nest-building, was suitable because crows are very active vocally on their territories. Caws were uttered by nest-builders in response to other crows passing through the area, ceremonial (pursuit) flights, and disputes over territory. In all I timed the length of 1185 silences (Figure 1).

I limited the periods of silence to a maximum of 60 seconds. Calling crows were perched on trees or rooftops. Usually two or three bouts were heard before timing began. Timing of a sequence generally ended with the crow flying off. The interbout periods for crows calling in flight were not included, but less than 20 interbout periods from crows calling while on the ground were included.

Results and Discussion

Some bias in the data collection resulted because a crow giving bouts of caws in quick succession was appreciated more than another crow giving bouts at 30-50 second intervals, especially when a pair of birds was doing so at the same time. Once this discrepancy was realized, some compensation was

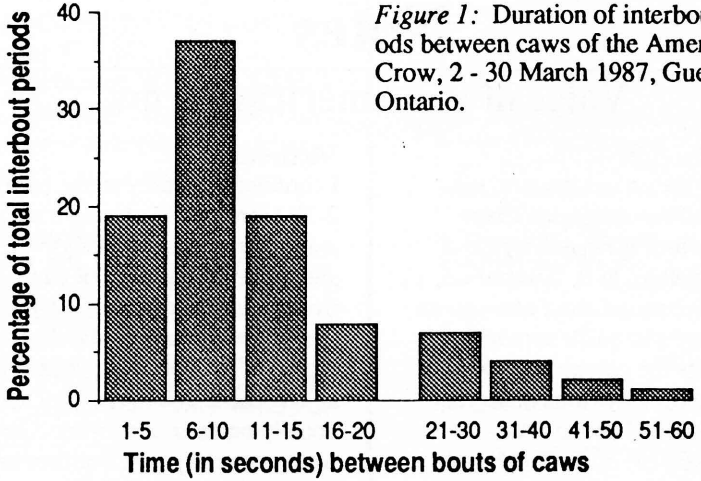

Figure 1: Duration of interbout periods between caws of the American Crow, 2 - 30 March 1987, Guelph, Ontario.

made to include the longer interbout periods.

The similarity and tone of the caws in a sequence permitted the identification of a calling crow, which assured that the full negative space was being timed. Consequently, errors resulting from cutting short the timing due to the intruding caws of another crow were minimal. As long as the crows kept their bouts and caws structured (i.e., regular), identification and timing were possible. When a territorial dispute between two or more birds began, the bouts became erratic and unstructured. When cawing in an excited manner, the crows all sounded alike, as Thompson (1969b) has pointed out. Overlapping bouts made it difficult to time the interbout periods. The data in Figure 1 are therefore based almost entirely on bouts of structured calling.

Short intervals of negative space between caws were due to the intrusion of conspecifics. It appears that the closer a crow approached to a calling bird, the shorter the period of silence between bouts of calling became. Long intervals of 40 or more seconds were generally from crows that were perched alone and engaged in another activity such as preening. The average length of time between bouts of caws recorded in this study was 12 seconds.

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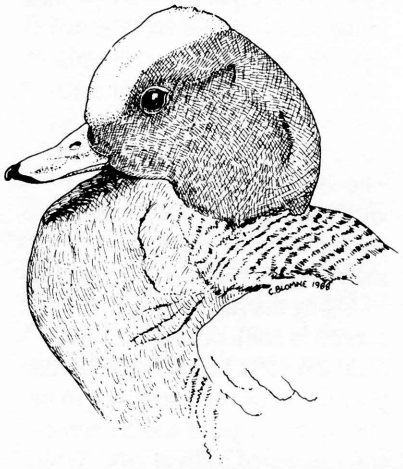
Tom Reaume, P.O. Box 39, Ballinafad, Ontario N0B 1H0

First Record of Eurasian Wigeon (*Anas penelope*) in the Sudbury District, Ontario

On 6 June 1987, a male Eurasian Wigeon (*Anas penelope*) in breeding plumage was observed swimming with a slightly smaller male American wigeon (*A. americana*) on Kelley Lake (46°27'W, 81°03'N), Sudbury District. Both male birds were dabbling in open water and were observed by the author and Gloria Blomme using 10 x 50 power binoculars. The tan coloured forehead and bright reddish head were easily discernible and offered ideal comparative opportunities with the closely associated American Wigeon. The cinnamon-buff colour of the chest and the grey sides of the Eurasian Wigeon were also noted. Several photographs of the bird were taken.



Male Eurasian Wigeon / drawing by *Chris Blomme*

The bird was seen again in the morning and evening of 7 June by the author, Chris Bell, John Lemon and Charles Whitelaw. Observations were maintained up to 17 June when the bird was no longer present. It was not subsequently seen.

There are few summer records of the Eurasian Wigeon in Ontario, with most birds appearing in the spring and fall (James *et al.* 1976; Speirs 1985). Goodwin (1979) reported three spring sightings in 1979 as the largest number since 1974. According to Weir (1987a), there was an average of five Ontario records each year from 1980 to 1986. A high count was obtained in the spring of 1987 with eight Eurasian Wigeons reported (Weir 1987b), most of them males.

The vast majority of Eurasian Wigeon records in Ontario are from the southern Great Lakes region, with scattered observations ranging north to Muskoka District and Ottawa, Ottawa-Carleton R.M. (James *et al.* 1976; Speirs 1985). The Kelley Lake bird represents the first record of Eurasian Wigeon in Sudbury District, and only the second for northern Ontario. Baillie (1954) cites a record from Fort William, Thunder Bay District, on 1 May 1954.

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Chris Blomme, Dept. of Biology, Laurentian University, Sudbury, Ontario P3E 2C6

The 1987 Loggerhead Shrike Survey

Atlas data indicate that the Loggerhead Shrike was rare in Ontario between 1981 and 1985, but also show that Ontario has the largest remaining population of the species in northeastern North America (Cadman *et al.* 1987). Because there were indications of further decline during the atlas period (e.g., Hanrahan 1987) a more detailed study of shrikes was undertaken in 1987. The goals of the project were to find as many active nesting sites as possible, to assess the 1987 population, and to lay the groundwork for further surveys to determine population trends, site fidelity, and other information that might be of value in protecting the species.

Fieldwork was undertaken by volunteer naturalists under the supervision of regional coordinators. Volunteers checked sites where shrikes had been reported previously and covered 10 x 10km atlas squares (see Cadman *et al.* 1987) containing habitat suitable for nesting shrikes.

Sixty-four volunteers spent 771 hours and travelled 11,132 km (10,758 by car or bicycle, 374 on foot) in covering 141 atlas squares. A total of 82 adult shrikes were reported from 53 sites in 34 squares. Breeding was "confirmed" at 15 sites in 11 squares, and "probable" and "possible" breeding (Cadman *et al.* 1987) were reported from 14 sites in nine squares and 24 sites in 13 squares, respectively. All birds reported were within the range defined by the atlas data, except one bird reported 80 km west of Thunder Bay. Of 145 squares with atlas data, 55 were covered during the 1987 survey and shrikes were found in 19 of these.

Using the results of the 1987 survey in conjunction with atlas data, the 1987 Loggerhead Shrike population can be estimated to be 200 birds: 71 pairs and 58 apparently unmated individuals. With no similar data for comparison, it

is not possible to determine whether these numbers represent a decline in the population since the atlas period. However, it is hoped that future surveys will help ascertain changes in shrike numbers or distribution.

Results of the survey have already been used in two projects. A researcher investigating the reason for the decline of the shrike collected data at several sites found in 1987, and the Canadian Wildlife Service is using the data on nesting locations to determine if the use of pesticides is related to the decline of the species in Ontario. Further applications will no doubt result as more information is collected.

Volunteers needed for 1988 survey

The survey is to be repeated in 1988. This year's survey will be particularly valuable in the determination of nest site fidelity. Those who participated in 1987 will be asked to continue. If you would like to take part, please contact M. Cadman, c/o Federation of Ontario Naturalists, 355 Lesmill Road, Don Mills, Ontario M3B 2W8. Volunteers determine their own level of participation. Fieldwork is required during the shrike's nesting period — April to August — but May-June is the essential period. Key areas where surveys are needed include Bruce and Grey Counties, the area between Orillia, Toronto, Kingston and Ottawa, and the Lake of the Woods area.

Acknowledgements

Sincere thanks to all participants in the 1987 survey — especially regional coordinators. Thanks also to World Wildlife Fund Canada for helping to fund the project.

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Michael D. Cadman, c/o Federation of Ontario Naturalists, 355 Lesmill Road, Don Mills, Ontario M3B 2W8

Great-tailed Grackle: New to Ontario

On Wednesday, 7 October 1987, my father, Ivan Elder, drew my attention to a large brown and black bird feeding on the ground behind my residence in Atikokan, Rainy River District. The bird was feeding with a number of Common Grackles (*Quiscalus quiscula*) and Red-winged Blackbirds (*Agelaius phoeniceus*). My first impression on noting the large size, the light yellow eye, the definite light buffy stripe over the eye and the anterior brownish buff colour grading to blackish posterially was of a giant Rusty Blackbird (*Euphagus carolinus*). I then realized I was looking at a female of either a Boat-tailed Grackle (*Q. major)* or a Great-tailed Grackle (*Q. mexicanus*). After consulting Peterson's (1980) *A Field Guide to the Birds East of the Rockies* and the National Geopgraphic Society (1983) *Field Guide to the Birds of North America*, I identified the bird as a female Great-tailed Grackle.

The bird was longer and larger than the Common Grackles it associated with. In particular, the bill and legs were noticeably strong and heavy (Figure 1). The large bill had a gentle curve throughout and little or no angle existed between the bill and forehead. The eye was light yellow and a distinct light buff line extended

Figure 1: Female Great-Tailed Grackle, 7–25 October 1987, Atikokan, Rainy River District. Photo (10 October) by *Alan Wormington.*

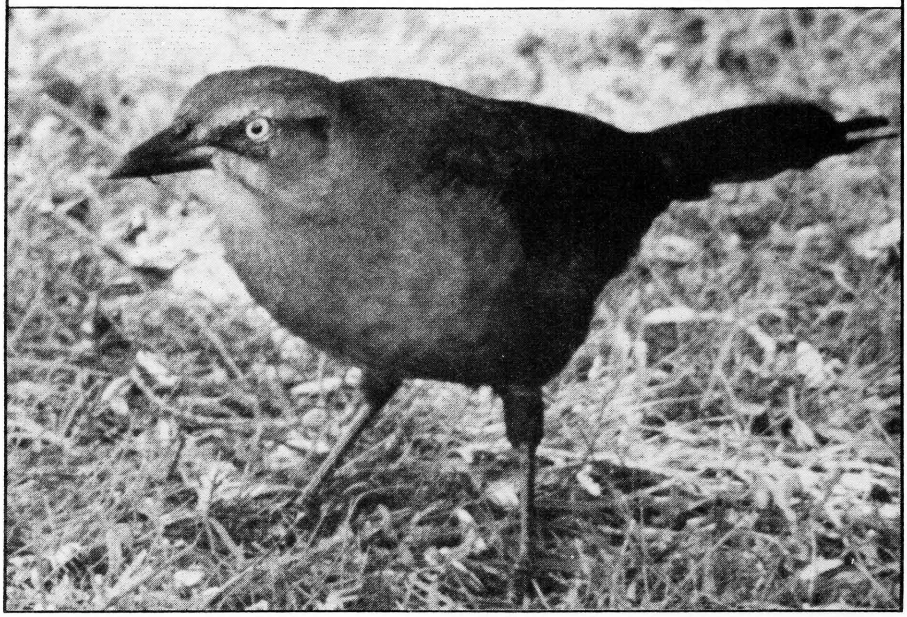

Figure 2: Female Great-Tailed Grackle, 7 -25 October 1987, Atikokan, Rainy River District. Photo (10 October) by *Alan Wormington.*

from the bill above the eye to the back of the head (Figure 1). A darkish line parallel to the light line extended from the bill through the eye. A dark malar line was quite distinct (Figure 2). The throat was light buff, grading to a warm brown on the breast and flanks. The crown was brown, grading to dark brown on the back and then to blackish on the lower back and tail. The wings were dull black. The bill and legs were black. In flight the tail was distinctly diamond-shaped, with a slightly keeled appearance (Figure 3). The bird quietly fed on the ground with other grackles and blackbirds but would respond to crowding with a threat display. It assumed an upright, stretched out posture with the bill pointing straight up, facing its opponent. The plumage was compressed and occasionally a high-pitched *"check - check - check"* call was uttered. It would immediately resume feeding after displaying and was always the winner in each encounter.

The bird was present intermittently from 7 to 25 October.

In the United States, the breeding distribution of the Great-tailed Grackle currently extends from Texas, Arizona, New Mexico, Oklahoma and southern California, north to southern Utah, southeastern Colorado and Kansas and east to Nebraska, southwestern Missouri, Arkansas and Louisiana (A.O.U. 1983).

Pruitt (1975) gives details on the separation of the Great-tailed Grackle and the Boat-tailed Grackle into two species.

Figure 3: Female Great-tailed Grackle, 7 - 25 October 1987, Atikokan, Rainy River District. Photo (10 October) by *Alan Wormington.*

Differences in habitat requirements, habits, physical characteristics and range are provided, as is the range expansion of the Great-tailed Grackle northward into Kansas by the mid-1960s.

The range expansion of the species may still be occuring. Nesting had occurred as far north as eastern Nebraska by 1977 (Faanes and Norling 1981). Its presence in Illinois is limited to one record, a bird at Jacksonville, 5-7 October 1974 (Bohlen 1978: 118). There is a single Minnesota record, 19 June 1982 at Black Dog Lake, Dakota County (Egeland 1983).

In Canada, the Great-tailed Grackle has previously been recorded twice. In May, 1979, one was recorded at Cape St. James in the Queen Charlotte Islands, British Columbia (Godfrey 1986: 554). The second record occurred on the other side of the country near Annapolis Royal, Nova Scotia; the bird was a female and was present from 17 November 1983 to 8 February 1984 (Heil 1984).

The Atikokan bird constitutes the first record of the Great-tailed Grackle for Ontario and the third for Canada.

Acknowledgements

Nick Escott of Thunder Bay was kind enough to drive to Atikokan and confirm the identification of the Great-tailed Grackle. Some background information for this paper was provided by Alan Wormington.

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

Can a Loon Judge What is Too Big To Swallow?

On the evening of 21 July 1987, about 1900h, my attention was drawn to an adult Common Loon (*Gavia immer*) on a small lake in Muskoka District, Ontario. I initially thought it was bathing and preening, but when observed through binoculars, it became apparent that the loon was trying to swallow a large fish. The fish seemed rather inactive by the time I began observing, for the loon was not holding it tightly all the time, but could be seen repeatedly bringing its head down toward the floating fish, with beak wide open. The loon never appeared to stab at the fish, but only to grasp it and probably to squeeze it tightly. This appeared vigorous, with the head of the loon partly submerging each time, but was done rather slowly and deliberately, not with a stabbing suddenness. Similar grasping behaviour was mentioned in connection with loons eating flounders on the Atlantic coast (Forbush 1925). It was suggested that squeezing had the effect of compressing or perhaps partly rolling up such flat fish, thus making it possible to swallow them.

Between bouts of grasping, the loon several times took the fish head first in its bill, and holding it nearly vertically above, tried to choke the fish down with vigorous lunges of the head. The loon then put its head down to the water and shook it side to side several times to dislodge the fish. A couple of times the loon seized the fish and dived with it. Whether this was an attempt to swallow under water, where swallowing normally occurs, could not be determined. No swallowing actions were noted immediately before or after diving.

After I had watched for five to ten minutes, the loon gave up trying, and just swam about the fish

for about another minute. When it began drifting away I approached in a canoe and found a smallmouth bass (*Micropterus dolomieui*) of 30.5cm length (fork length) floating on the surface. There were no puncture wounds in the fish, although the body had received a considerable mauling and scales were dislodged in several places on the fore part of the body. This loon was apparently fortunate that the dorsal spines of the fish did not catch in its mouth or it might have choked to death on its oversized meal as have other loons (e.g., Todd 1940).

Why would a loon try to catch a fish it could not swallow? Would an experienced loon not have some appreciation for the size of prey it could consume? A loon would ordinarily seize its prey from above (Barr 1973) and perhaps in the darkness of the evening it could not judge the size accurately. But, once caught, the bird persisted in killing and trying to swallow such a large fish, indicating that it had little appreciation of how big a fish it could swallow. This observation suggests that when hungry, loons try to catch most anything they can grasp and hold, and larger fish being faster swimmers (Bainbridge 1960; Barr 1973; Beamish 1978) are ordinarily just too fast to catch. This smallmouth bass had no obvious signs of incapacity that might have slowed it down, and it certainly tasted fine to me.

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Ross D. James, Dept. of Ornithology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6

Breeding Records of the Mourning Warbler at London, Middlesex County

Neither Saunders and Dale (1933) nor Peck and James (1987) report breeding of the Mourning Warbler (*Oporornis philadelphia*) in Middlesex County. Jarmain and Leach (1963), however, state that this species was "found nesting along Thames River near University" at London. To supplement this report, I wish to record two instances of breeding by the Mourning Warbler at London. Evidence of breeding was noted in 1962 and 1963 on

the west bank of the Thames River as it flows through the campus of the University of Western Ontario at London. In 1962, the late Norman K. Taylor saw adult Mourning Warblers, presumably members of the same pair, feeding or attending fledgling warblers (number unrecorded) on 13 and 16 July and 2 August. In 1963, on 5 July, James A. Darley saw a female Mourning Warbler carrying food to a nest containing four young warblers which, when the author saw them later on the same day, were judged to be about five days old. The outcome of this nest was not recorded.

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David M. Scott, Dept. of Zoology, University of Western Ontario, London, Ontario N6A 5B7

Book Reviews

Shorebirds: An Identification Guide to the Waders of the World. 1986. By *Peter Hayman, John Marchant* and *Tony Prater.* Houghton Mifflin Co., Boston, Mass. 412 pp., $54.85 (Cdn).

Shorebirds: An Identification Guide is an important book for birders, both in Ontario and throughout the world. No longer will we be forced to dig out arcane articles in obscure journals, or worse, try to figure out what a "winter" plumaged stint illustrated in a standard field guide really looks like. With the publication of this, the first complete review of the world's shorebirds, reliable and up-to-date information on their identification is readily available.

Shorebirds is divided into three sections. The introductory essay on shorebird identification is must reading for all birders, since the lessons that it teaches are relevant to all aspects of birding. The starting point in any identification must be a firm knowledge of the common species, and the first consideration when identifying a possible stray must be the possibility of an unusual individual of a common species. This is particularly true when dealing with shorebirds, in which complex moult and wear patterns affect appearance. "Careful, unbiased observation," the authors note, "is the key to successful identification."

The introductory essay includes a comprehensive discussion of feather topography, illustrated by some very useful drawings, fol-