

First successful nesting of Fish Crow in Ontario and Canada

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Figure 1. Range map of the Fish Crow.

Map: allaboutbirds.org;
Cornell Lab of Ornithology

Introduction

The Fish Crow (*Corvus ossifragus*) is a common resident bird of the southeastern United States and its Gulf of Mexico and Atlantic coasts from Louisiana to New York (Figure 1). It is usually found near water but uses other habitats as well. It has been spreading north in North America into the range of the widespread and very common American Crow (*C. brachyrhynchus*) (Wells and McGowan 1991). In Ontario, there have been many observations of Fish Crow in recent years, starting with a small incursion in Fort Erie area in 2012 (Cranford 2013; see Ontbirds archived postings; L. Fazio, pers. obs.). Breeding pair behaviour has been noted by me and other observers (e.g., Oakville in 2012, Cranford 2013; C. Edgecombe in Ontbirds) and Port Weller in 2016 (J. Black, pers. comm.), however, no successful nest has been recorded in Ontario before this documented record. Since 2012, counts of the Fish Crow in Ontario have usually been low, but on 7 August 2017, Josh Vandermeulen wrote: "... at least 55 Fish Crows were part of the flock" of crows that he observed at Niagara Falls on 4 August 2017 (Vandermeulen 2017).

On 20 April 2018, near the Adamson Estate (Lat: 43.562744 N, Long: 79.567977 W) in Mississauga, Ontario, I found a pair of Fish Crows that were calling to and interacting with each other, suggestive to me of pre-courtship behaviour. The previous spring (2017), I had observed a Fish Crow in this area and thought nothing of it, but as I began to be intrigued with the potential for nesting in 2018, I decided to spend more time in this area. The purpose of this paper is to document the first successful nest of Fish Crow in Ontario and Canada.

Identification

The best way to identify the Fish Crow and to distinguish it from the American Crow is by voice: the Fish Crow gives a higher pitched “uh...uh” call (McGowan 2005 but see also McGowan 2001). However, if seen well, one can combine three or more morphological differences from the American Crow to come to a reasonable identification.

- a) When calling on or near the ground, Fish Crows tend to show a ruff feathering in lower neck (throat) area (Figure 2) and tend to look shorter necked and more hunched than American Crow (Figure 3). Fish Crows have a sharp shrike-like hook at the end of the upper mandible (Figure 2). American Crows do not have this.
- b) When the primary feathers are spread and seen well (Figures 4 and 5), the length of the ninth primary feather (P9) in the Fish Crow is the same size or longer than its fifth primary (P5). This makes the wings of the Fish Crow appear more pointed. In the American Crow, P9 is markedly shorter than P5.
- c) In a relaxed sitting posture, the tail of the American Crow extends quite a bit beyond the tips of the primaries whereas in Fish Crows, the tip of the folded primary reaches almost to the end of the tail (Fazio 2018).
- d) Wing beat rate tends to be faster in Fish Crows.

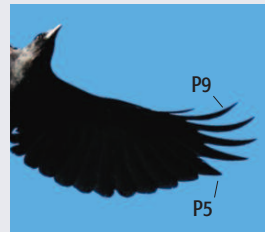


Figure 2. Female Fish Crow showing throat feathers.

Photo: Luc Fazio

Figure 3. Fish Crows have a more hunched neck, shorter legs and slender feet.

Figure 4. Fish Crows have more pointed wings than American Crows (P9 vs P5).

Left: Figure 5. Fish Crow carrying nesting materials. Note wing shape.

Photos: Gord Watts



Observations

The first successful fledging of two Fish Crows in Ontario and Canada took three nest building attempts. These occurred within 150 m of each other in the Adamson Estate area. These two pioneer Fish Crows succeeded in raising two chicks (Figure 6, 7 and 8) against many unfavourable conditions. Threatened by storms with near hurricane strength winds, attacked by other scavengers, bullied by birds at the higher level of the food chain, bothered by seemingly non-caring humans with their wedding parties and extremely noisy construction, they succeeded!

On 23 April 2018, after many courtship rituals, the pair of Fish Crows broke branches off deciduous trees (even though there were many broken branches on the ground) and started building nest #1 in a spruce tree at 45 Wenonah Drive in Mississauga. Over the next two days, while major residential construction took place nearby, the Fish Crow pair built a

Figure 6. Male and female at nest #3.

Figure 7. First nestling Fish Crow. Photos: Luc Fazio

Figure 8. Fledgling being fed by parent. Photo: Gord Watts

nest and the female, identified by her higher voice one note “uh..” (McGowan 2001), sat in it for long periods of time and was fed there by the male. They were dive-bombed by most of the local territorial passerines and had two very violent territorial disputes with American Crows and a Common Raven (*C. corax*), yet they persevered. After a particularly nasty storm blew off some of the nest material on 26 April, I saw them building another nest nearby, nest #2, at 118 Cumberland Drive in Mississauga. Here they were under heavy daily attacks from a pair of Cooper’s Hawks (*Accipiter cooperii*) that was nesting in the Adamson Estate. In one of these attacks, the male Fish Crow lost some secondary feathers, which subsequently made him easier to identify along with his gargled “Uh...Uh...Uhhrr” calls. With all this disturbance, nest #2 only lasted a few days. On 1 May 2018, the two Fish Crows started to bring sticks for a third nest building attempt, nest #3, on the tallest White Pine (*Pinus strobus*) in the Adamson Estate.

Nest #3 proved to be a success. For the next three weeks they fended off more attacks by Cooper's Hawks and Common Ravens, and were harassed by Red-winged Blackbirds (*Agelaius phoeniceus*), (Figure 9) Baltimore Orioles (*Icterus galbula*), Common Grackles (*Quiscalus quiscula*) and Blue Jays (*Cyanocitta cristata*). Near hurricane force winds with heavy rain storms and non-caring or seemingly unaware humans with their wedding festivities or noisy trail construction under the White Pine tree with the incubating nest, failed to deter the Fish Crows.

Mississauga City Hall was called to try to postpone the month-long construction of the trail and they said that they would look into it, but construction continued without detrimental effect on the success of the Fish Crow nest. By 23 May 2018, the female was definitely incubating. She would sit on the eggs for periods up to two hours before taking brief breaks. The male Fish Crow would bring her food scavenged from various sources including nestlings of local passerines (Red-winged Blackbird, Common Grackles, Baltimore Orioles, House Sparrows (*Passer domesticus*) and Mourning Dove (*Zenaida macroura*) eggs. On 28 May, I observed the female picking up an egg from the nest. It was a corvid egg, light green-blue with some dark markings. She placed it down before sliding back low into the nest. This was confirmation of a nest with at least one egg.

There was continuous incubating, feeding of the female by the male in the nest, fights with Cooper's Hawk and Common Raven day after day during the nesting period. Fish Crow chicks are altricial (naked and helpless) when they hatch; it takes many days after the 18-19 days egg incubation period before the newly hatched chicks start moving about. The nestling period can be 32-40 days (McGowan 2001; Cornell Lab of Ornithology 2019). On 20 June 2018 at 06:10, with both parents at the nest, I saw a chick poking its head out of the nest (Figure 7). Two days later, on 22 June, I briefly saw two young crows sticking their heads out of the nest.



Figure 9. Red-winged Blackbird attacks Fish Crow.

Photo: Gord Watts



Figure 10. Second Fish Crow chick. Photo: Luc Fazio



Figure 11. Female and fledged chick. Photo: Luc Fazio

Figure 12. Adult male scavenging at the Adamson Estate.

Figure 13. Fish Crow attacking Bald Eagle. Photos: Gord Watts

I was away from 24 June until 11 July. On July 12, I witnessed the parents feeding both chicks by the side of the nest. On 13 July, the larger chick came out of the nest and ‘flew’ to a branch about 2 m away; it had fledged! Unfortunately, the second chick was not as far along in the development (Figure 10). Later in the evening, a Common Raven came by the nest and the parents tried to fight it off from the nest area. Friday July 13th was the last time that I saw chick 2! Two days later, on 15 July, I watched the larger chick 1 fly to another tree. The female followed it and regurgitated food on a branch for the chick to eat. For the next two weeks, the chick stayed close to the female who would always feed it (Figure 11) and appeared to teach it skills such as branch breaking behaviour. A week passed and the male Fish Crow (Figure 12) was less visible. The female and chick had momentous fights defending themselves. A first year Bald Eagle (*Haliaeetus leucocephalus*) made the mistake of alighting on the fledgling’s favourite feeding branch, where the female regurgitated food at least once a day. Both female and the fledgling Fish Crow vehemently attacked the Bald Eagle and eventually drove it from the territory (Figure 13). They also successfully attacked and scared off Common Ravens, passing Great Blue Herons (*Ardea herodias*), Osprey (*Pandion haliaetus*) and Cooper’s Hawks. On 8 August, Gordon Watts and I found what we assumed were the juvenile Fish Crow and the female. They were sitting on top of a post in the marina at Lakefront Promenade feeding on a chicken-like corpse that had hawk-like talons. Had they taken revenge on one of the Cooper’s Hawks? Gordon and I continued our observations over the next two months and had our last observations of the female (based on higher voice and single “uh” call) and the juvenile Fish Crow on 5 October 2018. Videos are available (Fazio 2018).

Discussion

For most avian species, range expansion and colonization into new areas is a complex and intricate long term story. Even though most of the Fish Crow nest attempts close to the Canadian border were not successful in the 1980s and 1990s, there was a successful colony of Fish Crows

established at Cayuga Lake near Ithaca, New York (Wells and McGowan 1991). The colony was deemed to have been the result of a “leapfrogging range expansion pattern” as opposed to a pattern of following an oceanic or river route to new areas. This successful Ontario nest is presumed to be a rivers/lakes expansion route.

In Canada (Ontario and Quebec), there have been many extralimital vagrant records of Fish Crows but never a verifiable successful nest (James 1984; Burrell and Charlton 2015, 2016; eBird 2019). In August 2017, Josh Vandermeulen wrote on his blog that he had a pair of “recently fledged young at my house in Niagara Falls” but he continued “this sighting alone doesn’t confirm an Ontario nesting, as in theory the young birds could have been born across the river in New York” (Vandermeulen 2017). With these observations in Mississauga at Adamson Estate in 2018, we can now say with certainty that Fish Crows have successfully bred in Ontario and Canada (Burrell *et al.* 2019). Will they be back? I believe they were the vanguard of an ever-increasing invasion of Fish Crows from the south. Soon, perhaps not too far into the future, Fish Crows will be nesting in most counties on or near the shores of Lake Ontario and other lakes in the region. Let us be mindful of nesting Fish Crow presence and their pioneering adventures in Ontario and Canada (Figure 14).



First fledged Fish Crow stretches its wing.

Photo: Gord Watts

Acknowledgements

While leading Bird Hikes for The Riverwood Conservancy in Mississauga, I mentioned the possibility of Fish Crows nesting near the southeast Mississauga lakefront and enlisted the help of Gordon Watts who is a budding novice at birding/photography and lives close to the shoreline in Mississauga. Most of the events I report occurred and most of the pictures were taken in the company of Gordon Watts. I would like to thank him for his youthful enthusiasm and photographic ability while helping to keep an eye/ear on the

the Fish Crows. Thank you to Glenn Coady for sharing his observations and for his encouragement in writing this story of the pioneering population of Fish Crows. Thank you also to Garth Riley and my son, Dr. Xavier Fazio, for the many useful insights in writing this article. Thanks to all the new and old timer birders, listers, photographers, curious neighbours, etc., who came out to see and talk about this unique nesting event. Finally, many thanks to the school, Blyth Academy, on the historical Adamson Estate in Mississauga, Ontario, whose staff were very patient and welcoming to all birders/photographers who came to see the nesting Fish Crows very close to their school building. Additional information on the daily routine of the nesting and other events is available from the author (Fazio 2019).

Literature Cited

- Burrell, M.V.A. and B.N. Charlton.** 2015. Ontario Bird Records Committee report for 2014. *Ontario Birds* 33:50-81.
- Burrell, M.V.A. and B.N. Charlton.** 2016. Ontario Bird Records Committee report for 2015. *Ontario Birds* 34:148-177.
- Burrell, M.V.A., B.N. Charlton, K.G.D. Burrell, J.D. Vandermeulen, A.C. Guercio, B.A. Mann, D.A. Sutherland, P.D. Pratt and W.G. Lamond.** 2019. Ontario Bird Records Committee report for 2018. *Ontario Birds* 37:52-83.
- Cornell Lab of Ornithology.** 2019. All about birds (Fish Crow) website. https://www.allaboutbirds.org/guide/Fish_Crow/lifehistory
- Cranford, M.** 2013. Ontario Bird Records Committee report for 2012. *Ontario Birds* 31:58-85.
- eBird.** 2019. eBird: An online database of bird distribution and abundance. eBird, Ithaca, New York. Available: <http://www.ebird.org>. (Accessed: 4 July 2019).
- James, R.D.** 1984. Ontario Bird Records Committee report for 1983. *Ontario Birds* 2:53-65.
- McGowan, K.J.** 2001. Fish Crow (*Corvus ossifragus*), version 2.0, *In* The Birds of North America (A.F. Poole and F.B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bna.589>
- McGowan, K.J.** 2005. How do you tell a Fish Crow from an American Crow? <http://www.birds.cornell.edu/crows//FishCrow.htm>
- Sibley, D.A.** 2014. The Sibley Guide to Birds (2nd edition). Alfred A. Knopf. New York. 599 pp.
- Vandermeulen, J.** 2017. Personal blog: More fun with Fish Crows. 7 August 2017 <https://joshvandermeulen.blogspot.com/search?q=least+55+Fish+Crows+were+part+of+the+flock+>
- Wells, J.V. and K.J. McGowan.** 1991. Range expansion in Fish Crow (*Corvus ossifragus*) the Ithaca, NY, colony as an example. *Kingbird* 41:73-81.

Other Reference Material

- Fazio, L.** 2018. Three YouTube videos of this Fish Crow nesting, behaviour and identification are available on <https://www.youtube.com/channel/UCj9n1gb-KFo4sSvZU6-CdHA>
- Fazio, L.** 2019. Detailed log of observations of Fish Crows at Adamson Estates, Mississauga, Ontario, throughout the nesting event of 2019. Unpublished report. Mississauga, ON.
- Ontbirds**, an email server to publicize rare and unusual avian occurrences in Ontario

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