

Breeding Season Records of Dickcissel in the Greater Toronto Area

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Introduction

The Dickcissel (*Spiza americana*) is an abundant and obligate breeding specialist of the prairie grasslands of the American Midwest, where it has also successfully adapted to similar secondary agricultural habitats that have largely replaced much of the former natural grassland. Its core breeding range extends throughout the grasslands from southeastern South Dakota, southern Iowa, and west-central Illinois, to north-eastern Texas (Figure 1). It breeds annu-

ally in lower numbers in peripheral areas of its breeding range from eastern North Dakota, and the Lower Peninsula of Michigan, south to southern Texas and southern Louisiana (Figure 1). Beyond these areas, the Dickcissel is merely a sporadic breeder, usually as a result of erratic, drought-induced irruptions from its core range (Temple 2002).

In the nineteenth century, its range formerly expanded eastward into newly created agricultural grasslands from New England south to the Carolinas. By the beginning of the twentieth century, it had retracted westward again, as most of these farmlands were abandoned and gradually reverted to forest (Rhoads 1903).

The Dickcissel is a Neotropical migrant that winters in northern South America, concentrated principally in the llanos of central Venezuela, where its total population has been estimated to exceed six million individuals (Basili and Temple 1999).

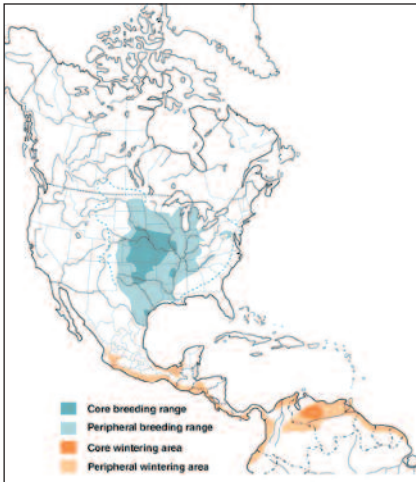


Figure 1: Breeding and wintering range of the Dickcissel. *Reproduction courtesy of The Birds of North America, Inc.*

In Ontario, the Dickcissel has traditionally been a rare and episodic breeding bird. Saunders and Dale (1933) reported that: “the Dickcissel occurred more or less frequently and regularly in the south-western counties up to 1895”, suggesting that it may have been more common in southwestern Ontario during the species’ nineteenth century period of eastward expansion. Breeding was first confirmed in Ontario when nests were discovered in Essex (1884), Elgin (1885) and Middlesex (1895) counties (Peck and James 1987). Since the beginning of the twentieth century, breeding evidence has been obtained in at least twenty-five different years, across almost every decade, and spanning the counties, regional municipalities and cities of Essex, Chatham-Kent, Lambton, Bruce, Elgin, Middle-

sex, Haldimand, Dufferin, Wellington, Niagara, Hamilton, Halton, Peel, York, Durham and Ottawa. Although breeding has been confirmed in the majority of these areas, some of these occurrences have also involved territorial males that likely remained unmated.

The purpose of this paper is to provide details of possible and confirmed breeding records of Dickcissel in the Greater Toronto Area (GTA), and to illustrate the rarity of the species in the GTA. The Greater Toronto Area is defined as the City of Toronto (formerly known as Metropolitan Toronto) and the Regional Municipalities of Halton, Peel, York and Durham and the adjacent Canadian waters of Lake Ontario.

Figure 2: Male Dickcissel at the Elgin Mills old field, Richmond Hill, York Regional Municipality, on 16 July 1988. Photo: Glenn Coady



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The Dickcissel is an exceedingly rare breeding species in the GTA. It is a very rare spring and fall migrant and winter visitant (when it has most frequently been discovered at feeders among flocks of House Sparrows — *Passer domesticus*).

The first instance of possible breeding evidence for the Dickcissel in the GTA involved an apparently unmated, territorial male, seen and heard singing in suitable alfalfa field habitat, in Streetville, Mississauga, *Peel R.M.*, by Margaret H. Mitchell on 25 May 1945 (Mitchell 1946).

Prior to 1988, there were no confirmed breeding records of Dickcissel in the GTA (Goodwin 1988). Then, on 28 June 1988, Norm Murr discovered a territorial male Dickcissel while surveying Grasshopper Sparrows (*Ammodramus saviannarum*) in the former Elgin Mills old field habitat (east of Yonge St., about 100 metres west of the Canadian National Railway line and 300 metres south of 19th Avenue, now the Harrington Park subdivision; 17 626108 4863048, NAD 1983; 43° 54' 35" N, 79° 25' 46" W) in Richmond Hill, *York R.M.* It was in an area of hawthorn (*Crataegus* sp.) scrub adjacent to the fallow field (Figure 2). The next day he observed both a singing male and an adult female there. He noted the singing male each day until 2 July 1988, when he observed both adult Dickcissels and two recently fledged young.

Both adults and two large, capably flying juveniles were seen by Harry Kerr and the author on 16 July 1988. This was the last date that any of these birds were seen. Despite a thorough search of the nearby fields and shrubs, no used Dickcissel nest was located. No Dickcissels returned to this site in 1989. This represents the first confirmed breeding record for Dickcissel in the GTA.

It is interesting to note that 1988 was a year with an extensive and prolonged drought in the core of the Dickcissel breeding range that corresponded with one of the largest summer Dickcissel irruptions noted up until that time (Temple 2002). In Ontario, this impressive irruption was likely associated with hundreds of individuals, with breeding evidence (including an unprecedented 29 nest records; Ontario Nest Records Scheme data) from at least seven counties (Weir 1988).

Bob Curry and Gary Crossman discovered a singing male Dickcissel on 25 June 1989, on the Ninth Line in Mississauga, *Peel R.M.* Although seen by many observers until 13 July 1989, no female was ever observed, and this record presumably involved an unmated male (Curry 2006).

On 8 June 2005, Donna Sheppard and Joyce LeChasseur were surveying fields, often noted for Grasshopper Sparrows, at the north end (a few hundred metres southwest of the corner of Dundas St. and Tremaine Rd.) of Bronte Creek Provincial Park, *Halton R.M.*,

when they discovered a singing male Dickcissel (Figure 3). On 11 June 2005, several observers (Terry Osborne, Ken Newcombe and Sue Suess) reported hearing two separate male Dickcissels singing in this area. Harry Kerr and Jim Griffiths noted both a male and female Dickcissel at this location on 16 June 2005 (Figures 3 and 4). These birds were subsequently observed by hundreds of birders. Neil and Shirley Macdougall observed the female (accompanied by the male) carrying nest material on 17 June 2005. A nest with four unmarked, glossy, pale blue eggs was discovered by the author on 27 June

2005 (Nest location: 17 597786 4807937, NAD 1983; 43° 25' 4.6" N, 79° 47' 31.5" W). This nest was situated 0.96 metres above the ground in a 2 metre tall hawthorn bush. The nest was primarily constructed of dried grasses and lined with a finer layer of plant fibres and rootlets. The nest had an outside diameter of 11.5 cm, an inside diameter of 6.5 cm, an outside depth of 10.0 cm, and an inside depth of 5.8 cm.



left; Figure 3: Male Dickcissel at Bronte Creek Provincial Park, *Halton Regional Municipality*, on 9 June 2005.

Photo: Ken Newcombe

above: Figure 4: Female Dickcissel at Bronte Creek Provincial Park, *Halton Regional Municipality*, on 17 June 2005.

Photo: Ken Newcombe



Figure 5: Habitat of Dickcissel territory at Bronte Creek Provincial Park, *Halton Regional Municipality*, on 28 June 2005. *Photo: Mark K. Peck*

This represents the only nest record of Dickcissel for the GTA (see Ontario Nest Record Scheme card #192001). This nest and the surrounding habitat were photographed by Mark Peck on 27-28 July 2005 (Figures 5 and 6). Mark Peck noted that the nest still contained four eggs on the evening of 2 July 2005, but by the evening of 7 July 2005, it contained two small young

and two eggs, and both adults were seen carrying food for the young (Figure 7). When the nest was found to contain two young and two eggs (still not hatched) on 10 July 2005, the remaining two eggs were collected for the Royal Ontario Museum by Mark Peck. One of these eggs was intact (and presumably infertile), while the other egg had a small nail puncture and a half-



Figure 6: Nest and eggs of Dickcissel pair at Bronte Creek Provincial Park, *Halton Regional Municipality*, on 27 June 2005. *Photo: Mark K. Peck*



Figure 7: Male Dickcissel carrying food for young at Bronte Creek Provincial Park, *Halton Regional Municipality*, on 9 July 2005. *Photo: Sandra and Frank Horvath*

developed embryo inside. Two large young were observed being fed in the nest by the female at 10:15 a.m. on 12 July 2005 by the author, but by 11:15 a.m. the nest was empty, and the female was observed taking food to the two begging young in different areas in the adjacent grasses. Both adult Dickcissels and the two juveniles were last seen at 9:00 a.m. on 16 July 2005 by Teresa Santos and the author. The used nest was collected by the author on this



Figure 8: Male Dickcissel at Uxbridge, *Durham Regional Municipality*, on 3 July 2006.

Photo: Jean Iron

date. The nest and eggs were deposited in the collections of the Royal Ontario Museum (ROM # 506934). No Dickcissels returned to this site in 2006.

A singing male Dickcissel was found on the 4th Concession (about 2.3 km. north of Ashland Rd., just north of the community of Sandford) in Uxbridge, *Durham R.M.* on (17 641718 4892548, NAD 1983; 44° 10' 20" N, 79° 13' 38" W) 2 July 2006 by Bob Yukich. This territorial male was seen by many observers near extensive fields of Timothy grass until it was last reported by Bruce Aikins on the morning of 9 July 2006. It apparently left the area as the surrounding hay fields were cut between 6-9 July 2006 (Worthington 2006). It is possible that this bird had already lost an earlier nest to hay cutting, but more likely it represented an unmated male. This bird was photographed by Jean Iron on 3 July 2006 (Figure 8).

Summary

There have been five breeding season records for Dickcissel to date in the GTA: one confirmed successful nest record from *Halton R.M.*; two possible breeding records, likely representing unmated territorial males, from *Peel R.M.*; one confirmed breeding record, where fledged young were noted, from *York R.M.*; and one possible breeding record, likely representing an unmated territorial male, from *Durham R.M.*

The lack of any records from the City of Toronto is likely due to the scarcity of suitable remaining grasslands there. Further breeding records of the Dickcissel will undoubtedly be documented within the remaining grasslands of the GTA if systematic searches of suitable habitat are undertaken during years of known Dickcissel irruptions into southern Ontario. It will be interesting to see whether ongoing climate change will exert deleterious effects on the grassland habitats in the core range of the Dickcissel in the coming decades, and whether that could serve to alter the frequency and magnitude of future irruptions.

Acknowledgements

Norm Murr and Harry Kerr provided data from their field notes regarding the breeding record at the Elgin Mills old field site. Bob Yukich provided data from his field notes on the Dickcissel record near Sandford. Roy B.H. Smith provided a data report from the database of the Toronto Ornithological Club Records Committee. Sandra and Frank Horvath, Jean Iron, Ken Newcombe and Mark Peck kindly provided photographs used to illustrate this article. Glenn Murphy of the Royal Ontario Museum prepared the nest and eggs collected from the Bronte Creek Provincial Park site. The editors of *The Birds of North America, Inc.* generously granted permission to reprint the range map from the Dickcissel account.

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