

## FIRST BREEDING RECORD OF THE DICKCISSEL IN FLORIDA

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The Dickcissel (*Spiza americana*) occurs regularly in Florida as a spring and fall migrant and as a winter resident. Prior to 1999, dates of occurrence ranged from 4 August to 18 May, with one “out of season” report at a feeder in Franklin County on 13 July 1974 (Stevenson and Anderson 1994:621). We report the discovery of breeding Dickcissels at Lake Apopka North Shore Restoration Area, Orange County, Florida, in June and July 1999. Thirteen male Dickcissels were observed, most in song (Fig. 1). At least five were paired and we discovered two nests and a female feeding fledglings.

The 5485-ha Lake Apopka North Shore Restoration Area (LAN-SRA) in Lake and Orange counties was informally known as the “Zellwood muck farms” before purchase by the St. Johns River Water Management District in 1998 and 1999. The primary purpose of public acquisition was to reduce phosphorus loading into Lake Apopka by removing the fields from agricultural production. In late summer and early fall 1998, more than 2000 ha of fields were under water, and the fields remained flooded for several months. An unexpected consequence of the flooding was a die-off of large fish-eating birds beginning in November 1998 (Pranty and Basili 1999). More than 500 birds died on-site, and preliminary analysis by the U.S. Fish and Wildlife Service (1999) indicated that the cause of the mortality was exposure to organochlorine pesticides. To prevent additional bird mortality, all fields were drained by late February 1999, and they remained unflooded through May 2002. By early summer 1999, these fallow fields had acquired a dense growth of vegetation such as dogfennel (*Eupatorium capillifolium*), pigweed (*Amaranthus* sp.), groundsel tree (*Baccharis halimifolia*), and, in places, cattails (*Typha* sp.). By June 1999, some vegetation in these fields exceeded 3 m in height.

Since August 1998, Robinson has conducted twice-weekly bird surveys of the eastern portion of LANSRA ( $n = 381$  through 27 May 2002),



**Figure 1.** Singing male Dickcissel (*Spiza americana*) at Site B, Lake Apopka North Shore Restoration Area, Orange County, Florida. The bird is singing from pigweed, a common forb in oldfields at the Restoration Area. Photograph by Harold Weatherman, 10 July 1999.

especially those areas known as Unit 1 and Unit 2. Surveys were conducted by car and on foot and covered all accessible areas (i.e., roads, dikes, and mowed areas around ditches). Surveys began from the same point around dawn, and most concluded at dusk. Observations were made with Zeiss 10 $\times$ , 40 binoculars and a Kowa TSN-4 telescope. Robinson's surveys revealed that Dickcissels (sex ratios unknown) wintered in at least three locations at LANSRA in 1998-1999, but none was found between 2 October 1999 and 30 April 2000. Singing male Dickcissels were discovered in the summers of 1999 and 2000, but we searched their territories for evidence of females and breeding activity in only 1999. Below, we describe locations, numbers, and breeding behaviors of Dickcissels observed at LANSRA, and briefly relate habitat characteristics where Dickcissels were found during the breeding seasons in 1999. Sites are designated A through E and are arranged chronologically.

**Site A.**—One pair of Dickcissels, with the male in song, was in a fallow field north of Lust Road on 31 May. This area was mowed within a few days, and the birds were not seen there again.

**Site B.**—Two singing males were in a fallow field southwest of Site A on 12 June, and a third male was found on 19 June. Females accompanied two of the males on 25 June, but no conclusive evidence of nesting was found. A female was in each territory on 26 June, while the males sang vigorously throughout the morning. During our observations, Pair 1 copulated, the female of Pair 2 chipped occasionally in response to our presence, and the female of Pair 3 carried nesting material (dried grass) three times into an area of dense forbs. After a careful search of this area on 5 July, we discovered the nest, but it was abandoned and neither adult was present. H. Weatherman (pers. comm.) watched the female of Pair 2 carry nesting material on 10 July, but did not find the nest.

**Site C.**—Two singing male Dickcissels were just south of Lust Road on 25 June. The following day, a third singing male was found, accompanied by a female that carried nesting material. After watching this pair for about an hour, we found their nest. It was built about 1 m above the ground in a 1.3 m-tall composite, and consisted of an incomplete, unlined basket of dried grass. By 5 July, considerable material had been added to the nest, but it was abandoned. We found the male (not singing) on territory, but not the female. Between 29 June and 16 July, we counted nine singing male Dickcissels in an area of about 60 ha between Lust Road and Hooper Farms Road. A singing male at Site C on 16 July was the final observation that suggested breeding of Dickcissels at LANSRA in 1999.

**Site D.**—A family of Dickcissels, consisting of a non-singing male, a female, and two fledglings, was found along Hooper Farms Road on 29 June. The female fed the young.

**Site E.**—In 2000, fields at Sites A-D, all in Unit 2, were heavily overgrown and no Dickcissels were found. However, we found Dickcissels in oldfields southeast of Interceptor Road in Unit 1. This site was 4.5-6.7 km northwest of the 1999 sites. We found eight singing males and one female between 30 April and 9 June 2000, but no Dickcissels were observed after the latter date.

Prior to our observations, Dickcissels had not been reported to breed in Florida (Robertson and Woolfenden 1992, Stevenson and Anderson 1994). However, Stevenson and Anderson (1994) suggested that Dickcissels be sought in large grain fields in northern Santa Rosa and Escambia counties in late May and early June. On 12 May 1965, Stevenson (*in* Stevenson and Anderson 1994:621) collected a female Dickcissel with a "shelled egg ready to lay" near Foley, Alabama, about 40 km west of Pensacola, Florida. On 25 June 1989, a pair of Dickcissels carrying food for young was found at Morgan, Calhoun County, Georgia, the southernmost breeding location in that state (McNair 1990). The straight-line distances from Lake Apopka, Florida, to Morgan, Georgia, is about 430 km, and to Foley, Alabama, is about 615 km.

Dickcissels are known to sporadically invade areas outside their traditional breeding range, and to attempt reproduction when conditions are suitable (Fretwell 1986). At LANSRA, the large oldfield habitat created by the drawdown was consistent with Dickcissel breeding preference (Zimmerman 1982). Because of this unique behavior of Dickcissels, observers should be alert for additional sporadic breeding attempts in large oldfields throughout much of Florida. A recent observation supports this conclusion: a male Dickcissel was found at Holey Land Wildlife Management Area, Palm Beach County, Florida, on 29 July 2001. It uttered “guttural ‘clicks’ while lightly pumping its tail” (D. LaPuma et al. *in* Pranty 2002), behavior that suggested a breeding bird (Basili, pers. obs.).

In summary, we confirmed breeding of Dickcissels in oldfield habitats at Lake Apopka North Shore Restoration Area, Orange County, Florida, in 1999, and obtained additional breeding season information in 2000. At least five of 13 males found in 1999 were paired, and the female of one pair fed two fledglings. We discovered abandoned nests in two other territories, a fourth female that carried nesting material, and a fifth pair that was observed copulating.

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