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A Noteworthy Record and the Breeding Distribution of the Blue Grosbeak in North Dakota

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Abstract--The northern limit of the blue grosbeak's (*Guiraca caerulea*) breeding distribution occurs in southern North Dakota. Records of the blue grosbeak in North Dakota are uncommon. Here, I report my observation of a blue grosbeak at a site where the species was recorded 25 years earlier. A summary of the species' distribution and records in North Dakota are provided.

Key Words: blue grosbeak, *Guiraca caerulea*, distribution, North Dakota.

In North America, the blue grosbeak (*Guiraca caerulea*) reaches the northern limit of its breeding distribution in southern North Dakota (Ingold 1993). Breeding-season records of the blue grosbeak in North Dakota, however, are uncommon. Faanes and Stewart (1982) listed the blue grosbeak as a hypothetical breeder in North Dakota. To date, there are only 20 breeding-season records in North Dakota (Fig. 1; Table 1; G. B. Berkey, Minot State Univ., ND, pers. commun.), including two nesting records (Table 1, Randall and Johnson 1979). Observations of blue grosbeaks at previously reported sites are rare (Table 1). Here, I report observing a blue grosbeak at a previously reported site, 25 years after the initial observation at that same location.

On 23 June 1967, Robert E. Stewart (Stewart 1975) observed an adult male blue grosbeak in Emmons County, North Dakota, about 26 km west-southwest of Strasburg (SE1/4, Sec. 29, T130N, R78W). The bird was recorded during a study of breeding bird populations on randomly selected quarter-sections throughout North Dakota (Stewart and Kantrud 1972). This species was not recorded at this site during an earlier census on 15 May 1967. According to Stewart and Kantrud's field notes (H. A. Kantrud, Nat. Biol. Serv., unpubl. data), the blue grosbeak was observed in a "buckbrush (*Symphoricarpos occidentalis*) patch in non-use prairie." The patches of buckbrush and idle prairie were 0.3 and 4.7 ha in size, respectively. Habitat surrounding the idle prairie consisted primarily of cropland dominated by small grain. This observation was referenced by Ingold (1993) to indicate

the northernmost edge of the species' breeding range.

In 1992, I repeated Stewart and Kantrud's (1972) breeding bird survey using the original study sites and methods. On 22 June 1992, I observed a subadult, first spring, male blue grosbeak in a buckbrush patch (0.4 ha) in idle prairie (10.1 ha) at the same quarter-section as Stewart's 1967 observation (Stewart 1975). Habitat surrounding the idle prairie consisted of retired cropland enrolled in the Conservation Reserve Program and was dominated by tame grasses and legumes. As with Stewart and Kantrud (Kantrud, unpubl. data), I did not detect this species during an earlier survey of this site on 19 May 1992. The bird that I observed was singing from a small green ash (*Fraxinus pennsylvanica*) and on a nearby fencerow. I saw no evidence of breeding or the presence of females. I returned to this site in 1993 on 12 May and 22 June but did not see this species.

Although the blue grosbeak nests regularly in southern to central South Dakota (South Dakota Ornithologists' Union 1991), detailed information on the status and distribution of the blue grosbeak in North Dakota is notably sparse. In South Dakota, the blue grosbeak breeds in brushy draws and in shrubby areas along streams and rivers. In North Dakota, most blue grosbeak records occur near the Missouri River (Fig. 1). Moreover, most breeding-season records of the blue grosbeak in North Dakota are recent; 17 of the 20 observations occurred after 1954 (Table 1). Others have noted recent range expansions of the blue grosbeak elsewhere on the northern edge of the species' range (Ingold 1993 and references therein, Johnson 1993). Johnson (1993) attributed this northern range expansion to changes in climate and, more specifically, to increases in precipitation in areas beyond the species' former breeding range. The paucity of observers in North Dakota, however, also may account for the near absence of historical records of the blue grosbeak. Even in recent years, the blue grosbeak is believed to breed annually in North Dakota, but it is recorded only sporadically because of the small number of observers in North Dakota (G. B. Berkey, pers. commun.). Because there is little baseline information against which population changes can be assessed, it is difficult to determine whether these apparent changes in distribution in North Dakota are recent, or whether they are the result of increases in observers or coverage in North Dakota in recent years. Nonetheless, my observation and the repeated observations at the Double Ditch Historic Site in Burleigh County (Table 1) emphasize that blue grosbeaks are likely to be observed at a previous site.

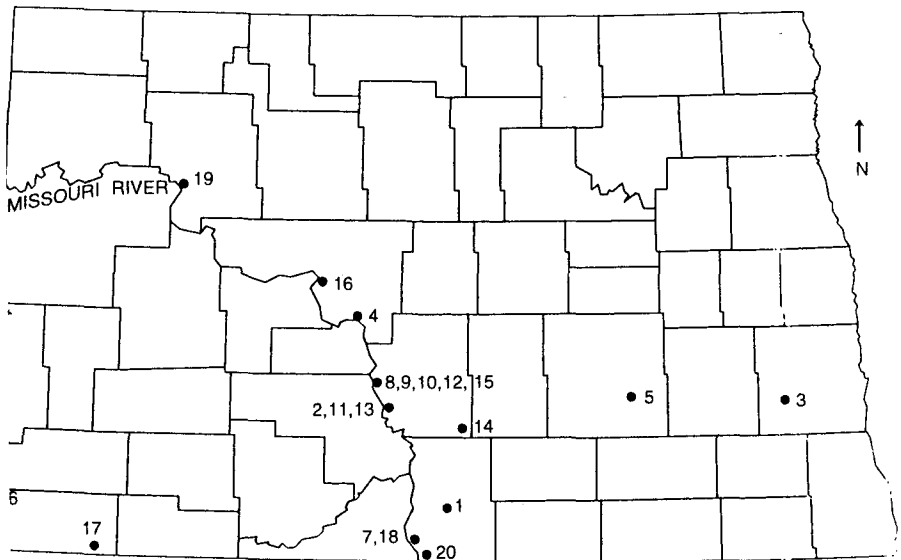


Figure 1. Distribution of breeding-season records of the blue grosbeak in North Dakota. A circle indicates the location of one or more records.

Table 1. Blue grosbeak records in North Dakota. Numbers correspond to locations on Figure 1.

| NUMBER | DATE | LOCATION | OBSERVER | OBSERVATION |
|--------|---------------------------|---|-------------------------|-----------------------------------|
| 1 | 30 May 1935 | Linton, Emmons Co. | H. Killingsstad | Singing male |
| 2 | 10 May 1953 | 4.8 km south of Bismarck, Burleigh Co. | C. W. Moses | One individual |
| 3 | 27 July 1954 | Along Maple River, 6.4 km south of Chaffee, Cass Co. | C. Knedel | One individual |
| 4 | 30 June 1964 | Washburn, McLean Co. | R. E. Stewart | Singing male |
| 5 | 27 June 1966 | 6.4 km east of Jamestown, Sullyman Co. | R. E. Stewart | Adult male |
| 6 | 28 July 1966 | Along Little Beaver Creek, Bowman Co. | R. L. Kroodsmma | Adult male |
| 7 | 23 June 1967 | 25.7 km west-southwest of Strasburg, Emmons Co. | R. E. Stewart | Adult male |
| 8 | 29 July - 9 Sept. 1979 | Double Ditch Historic Site, Burleigh Co. | A. and K. J. Johnson | Breeding pair and 3 fledglings |
| 9 | June - July 1980 | Double Ditch Historic Site, Burleigh Co. | Multiple Observers | Breeding pair |
| 10 | 30 July 1982 | Double Ditch Historic Site, Burleigh Co. | B. G. Iverson | Breeding pair and nest |

| | | | | |
|----|---------------------|--|------------------------------|-----------------------|
| 11 | 20 July 1983 | Northern city limits of Bismarck, Burleigh Co. | C. A. Faanes | One individual |
| 12 | 11 June - July 1984 | Double Ditch Historic Site, Burleigh Co. | W. A. Buresh | One individual |
| 13 | 18 May 1986 | North Dakota Capitol in Bismarck, Burleigh Co. | D. G. Disbro | One individual |
| 14 | 22 May 1988 | Long Lake National Wildlife Refuge, Burleigh Co. | K. J. Johnson | One individual |
| 15 | 7 July 1989 | Campground south of Double Ditch Historic Site, Burleigh Co. | G. B. Berkey | One individual |
| 16 | 16 July 1989 | 6.4 km south of Riverdale, Burleigh Co. | R.E. Martin and G. B. Berkey | Singing male |
| 17 | 27 July 1991 | Bowman-Haley, Bowman Co. | C. Griffiths | One individual |
| 18 | 22 June 1992 | 25.7 km west-southwest of Strasburg, Emmons Co. | L. D. Igl | Singing subadult male |
| 19 | 17 Sept. 1993 | New Town, Mountrail Co. | B. C. Houser | One individual |
| 20 | 12 June 1994 | Along US 83, 3.2 km north of state border, Emmons Co. | B. Percival | Singing male |

ACKNOWLEDGMENTS

I thank H. A. Kantrud for the use of the 1967 field notes and for his helpful editorial comments on this manuscript. Reviews by G. B. Berkey, D. A. Griffiths, D. H. Johnson, D. O. Lambeth, and J. T. Lokemoen improved an earlier draft of this manuscript. Breeding-season records of the blue grosbeak in North Dakota were provided by G. B. Berkey.

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Received 17 April 1995.

Accepted 16 June 1995.