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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.

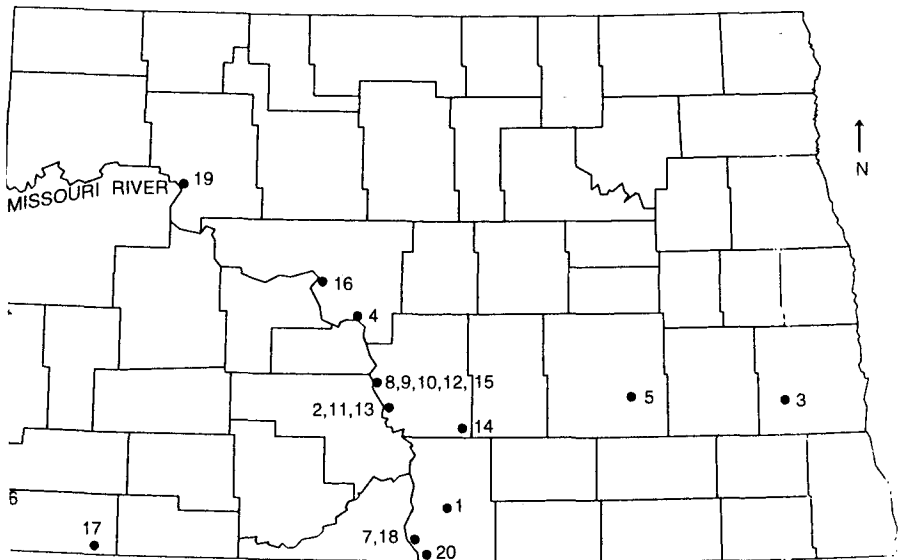


Figure 1. Distribution of breeding-season records of the blue grosbeak in North Dakota. A circle indicates the location of one or more records.

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

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LITERATURE CITED

- Faanes, C. A., and R. E. Stewart. 1982. Revised checklist of North Dakota birds. *Prairie Nat.* 14:81-92.
- Ingold, J. L. 1993. Blue grosbeak (*Guiraca caerulea*) in *The birds of North America*, No. 79 (A. Poole and F. Gill, eds.) Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
- Johnson, N. K. 1993. Pioneering and natural expansion of breeding distributions in western North American birds. Pp. 27-44 in *A century of avifaunal change in western North America* (J. R. Jehl, Jr. and N. K. Johnson, eds.) *Stud. Avian Biol.* No. 15.
- Randall, R. N., and K. J. Johnson. 1979. Blue grosbeak breeding in North Dakota. *Prairie Nat.* 11:125-126.
- South Dakota Ornithologists' Union. 1991. *The birds of South Dakota*. Northern State Univ. Press, Aberdeen, SD.
- Stewart, R. E. 1975. *Breeding birds of North Dakota*. Tri-College Center for Environmental Studies, Fargo, ND.
- Stewart, R. E., and H. A. Kantrud. 1972. Population estimates of breeding birds in North Dakota. *Auk* 89:766-788.

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