

Nesting of the Great-tailed Grackle in Nebraska

“. . . expansion into south central Nebraska may be from the southwest rather than from central and eastern Oklahoma and Texas.”

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RANGE EXPANSION IN THE Great-tailed Grackle (*Quiscalus mexicanus*) has been reported throughout the southern Great Plains states since the mid-1920s. Pruitt (1975) described expansion in Texas beginning near Austin in 1925 and reaching Fort Worth in 1944. By 1953, reports indicated an initial movement across Oklahoma; birds were observed that year at Alva, Woods County. That expansion extended the species range 500 km in nine years.

Expansion has been noted elsewhere within its known breeding range. Phillips (1950) described the movements of *Q. m. nelsoni* and *Q. m. monsoni* northward from Mexico into Arizona and New Mexico. Within Colorado, Kingery (1972a) reported the second state record of Boat-tailed Grackle (= Great-tailed) at Durango in 1972. He speculated that it was spreading north from Farmington, New Mexico, “. . . which harbors a small population.” This seemed reasonable as the distance between the two areas is about 80 km. Later Kingery (1972b) reported a male grackle at Gunnison, Colorado in June 1972. This represented a farther northward expansion of 170 km.

The spread of Great-tailed Grackle in Oklahoma was rapid and extensive. Williams (1974) reported them as “. . . common and assumed nesting” in Nowata County, in extreme northeastern Oklahoma as of May 4, 1974. In 1976, Great-taileds were reported at Tulsa and they were present in surrounding Rogers County “in abundance” (Williams 1976). Expansion continued during the 1970s and Pruitt's (1975) map showed the range extending into south-central Kansas. Oberholser (1974) reported Great-taileds nesting in Barton County, Kansas, in 1971.

Movement of the Great-tailed Grackle into Nebraska occurred relatively recent-

ly. Rapp *et al.* (1958, with supplement through 1970) do not mention this species. The first reference was of sightings in May 1977, at Omaha and near Boys Town (Anon. 1977). The first nest record in Nebraska was obtained by B. J. Rose May 17, 1977, near Boys Town (Anon. 1977).

On June 13, 1979, the authors found the nest and eggs of Great-tailed Grackle in Buffalo County, Nebraska. The nest, eggs, and surrounding habitat were photographed (Fig. 2). The site was 5.3 km southwest of Shelton (Sec. 27, T9N, R13W). This record extends the known breeding range of Great-tailed Grackle more than 265 km from its Barton County nesting area in south-central Kansas. (Fig. 1).

There may have been two pairs nesting at this site as three males and two females were present when the nest was found. Adults were observed at this same site during June 1978. Although

nesting was suspected, neither nests nor dependent young were observed in 1978 (G. R. Lingle, *pers. comm.*).

THE HABITAT OCCUPIED by this breeding pair was a dugout pond (about 4 ha) created during the construction of nearby Interstate Highway 80. Emergent wetland vegetation consisted almost entirely of Common Cat-tail (*Typha latifolia*) which occupied about 0.6 ha. Mean height of the vegetation was 2.1 m. Surrounding uplands were predominately heavily grazed Kentucky Bluegrass (*Poa pratensis*), with Box-elder (*Acer negundo*) and willow (*Salix* sp.) the predominant trees.

The first Nebraska nest was in a clump of willow in water (Anon. 1977). Pruitt (1975) described Great-taileds' breeding habitat by stating “they prefer a golf course-like environment . . .” However, Ligon (1926) reported this species breeding in “a marshy cat-tail-

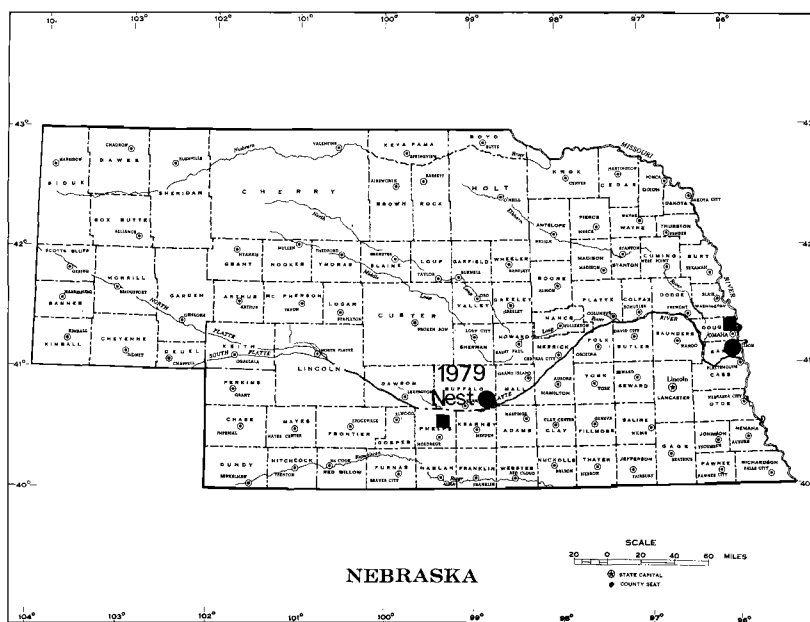


Fig. 1. Map of Nebraska showing location of 1979 Great-tailed Grackle nest.



Fig. 2. Nest site of Great-tailed Grackle, Buffalo County, Neb.

filled draw" near Carlsbad, New Mexico. Compton (1947) reported additional New Mexico nest records in "a rank growth of cat-tails." He found five Great-tailed's nests in a dense stand of cat-tail in a pond.

The Buffalo County, Nebraska, nest was attached to several cat-tail stems by unidentified grass and was 0.6 m above the water. The nest measured 110 mm x 120 mm and was 71 mm deep. It was constructed almost entirely of cat-tail and the inner cup was lined with dead Kentucky Bluegrass leaves, and mud.

Four eggs were in the nest. Mean egg length was 32.7 ± 0.95 mm, and mean width was 21.5 ± 0.57 mm. Selander (1960) reported that clutch size in *Q. m. prosopidicola* near Austin, Texas, was 3.45 ± 0.11 and that clutches of four were almost as frequent as clutches of three.

We collected an adult male from this breeding group and deposited the specimen in the Northern Prairie Wildlife Research Center collection. Measurements from this bird, compared with Phillips' (1950) measurements of two subspecies (Table 1), indicated this bird may be referable to *Q. m. monsoni*. The A.O.U. Check-list (1957) describes the breeding range of *monsoni* as southeastern Arizona, north central New Mexico, and western Texas. Comparison of ranges suggests that expansion of Great-tailed Grackle into south central Nebraska may be from the southwest rather than from central and eastern Oklahoma and Texas.

On June 14, 1979, Faanes observed one pair of Great-taileds in a wetland near Funk, Phelps County, Nebraska (Sec. 15, T6N, R17W). This site is about 33 km southwest of the Buffalo County

nest. Although no nest was observed, the pair was acting territorially, thus suggesting possible nest activity. Pairs of Great-tailed Grackles were also present at this site in 1978 (J. C. W. Bliese, *pers. comm.*).

Expansion of the range of Great-tailed Grackle is apparently occurring at a rapid pace. Early extralimital records elsewhere (*cf.* Ligon 1926, Compton 1947) consisted of birds nesting in atypical habitat (cat-tail marshes) or within a heron rookery (Williams 1973), suggesting that wet habitat types may be important for pioneering birds. Ornithologists should be aware of the continued movement of this bird in the Great Plains and should place added effort in searching for extralimital nest records.

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Table 1. Comparison of the Nebraska specimen with male *Q. m. monsoni* and *Q. m. nelsoni*. Average measurements of the two subspecies from Phillips (1950). All measurements in millimeters.

Parameter	Nebraska Specimen	<i>Quiscalus mexicanus</i>	
		<i>monsoni</i>	<i>nelsoni</i>
Wing chord	189.1	188.6 (186.4-192.0)	171.0 (164.3-177.8)
Tail	219.0	219.8 (217.0-225.0)	175.5 (166.0-185+)
Bill length from nostril	32.8	33.5 (31.8-34.8)	30.3 (29.1-31.5)
Bill depth at nostril	12.4	12.7 (12.5-12.,9)	11.6 (11.6-11.7)