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NOTEWORTHY DISTRIBUTIONAL RECORDS OF THE PRAIRIE VOLE IN THE TEXAS AND OKLAHOMA PANHANDLES

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ABSTRACT—Previous studies have documented the presence of the prairie vole (*Microtus ochrogaster*) in the extreme northern panhandle of Texas and north-central Oklahoma, and specimens have been collected from the Oklahoma Panhandle region. In July 2000, 2 prairie voles were captured in Carson County, Texas, 80 km south of the previously reported southern range. Additionally, barn owl (*Tyto alba*) pellets collected from the northern Texas Panhandle and western Oklahoma Panhandle contained prairie vole remains. These remains represent the first records of the prairie vole in Cimarron County, Oklahoma, and Dallam and Sherman counties, Texas, and a new western limit for the prairie vole in Texas and Oklahoma. The specimens collected likely represent a recent southwestern range expansion of the prairie vole in the shortgrass prairies of the Texas and Oklahoma panhandles.

RESUMEN—Estudios previos han documentado la presencia del metorito de las praderas (*Microtus ochrogaster*) en la región noroeste extrema de Texas y el centro-norte de Oklahoma, y unos especímenes se han colectado en la franja noroeste de Oklahoma. En julio del 2000, 2 metoritos de las praderas fueron capturados en el condado de Carson, Texas, 80 km al sur de la distribución previamente reportada. Adicionalmente, regurgitados de la lechuza *Tyto alba* colectados de la región noroeste extrema de Texas y de la franja noroeste de Oklahoma contuvieron restos del metorito de las praderas. Estos restos representan los primeros registros del metorito de las praderas en los condados de Cimarron, Oklahoma, y de Dallam y Sherman, Texas, y un nuevo límite occidental para el metorito de las praderas en Texas y Oklahoma. Los especímenes colectados probablemente representan una reciente expansión distribucional hacia el sur-oeste del metorito de las praderas en las planicies de pasto corto de los extremos noroeste de Texas y de Oklahoma.

The prairie vole, *Microtus ochrogaster*, is associated with mesic grasslands throughout much of central North America. In Texas, the prairie vole (*M. o. taylori*) has been documented in the extreme northern Panhandle (Manning and Jones, 1988; Choate and Killebrew, 1991), and, on the basis of a single specimen from 1902 (*M. o. ludovicianus*), in Hardin County in southeastern Texas (Jones et al., 1988a). However, subsequent trapping attempts in the same locality in Hardin County failed to capture an-

other specimen, and Schmidly (1983) suggested that the species was extirpated from eastern Texas. Several studies have documented the presence of the prairie vole in north-central Oklahoma (Caire et al., 1989; Choate, 1989; Smith, 1992; Stangl et al., 1992), and several specimens have been collected from the Oklahoma Panhandle region (Reed and Choate, 1988; Dalquest et al., 1990).

In July 2000, 2 prairie voles were captured on the United States Department of Energy

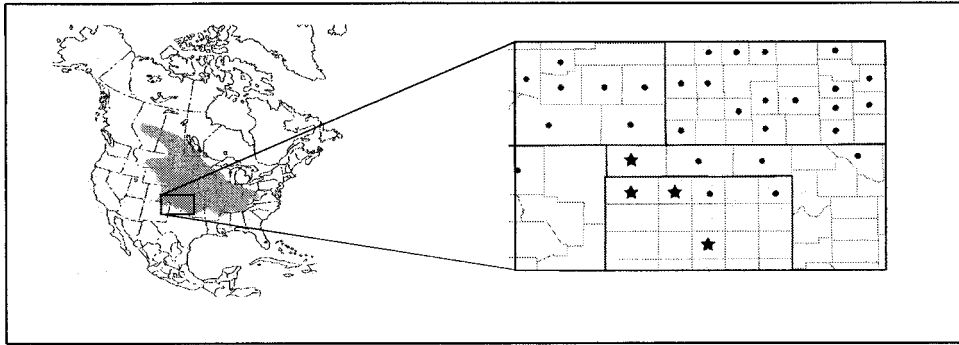


FIG. 1—Distribution of *Michrotus ochrogaster* in North America (modified from Fitzgerald et al., 1994) and map of species occurrence in neighboring areas of Colorado, Kansas, Oklahoma, Texas, and New Mexico. Circles represent counties for which literature records (Rowlett, 1972; Reed and Choate, 1988; Caire et al., 1989; Dalquest et al., 1990; Bee et al., 1991; Fitzgerald et al., 1994) exist, and stars represent counties containing locations of new records in this study.

Pantex Plant, Carson County, Texas, 24 km E of Amarillo (35°19'41"N, 101°34'38"W). The Pantex Plant is 80 km S of the southern range of the prairie vole in Texas as reported by Manning and Jones (1988). One of the voles was captured in a pitfall trap located in the center of a prairie dog town, adjacent to a mowed parcel of shortgrass prairie. The second vole was live-trapped in shortgrass prairie with vegetation 0.3 to 0.6 m tall adjacent to a playa wetland. *Reithrodontomys montanus* and *Peromyscus maniculatus* were captured in the same trapping grid. Predominant plant species at both sites were buffalo grass (*Buchloe dactyloides*) and blue grama (*Bouteloua gracilis*). Photographs were deposited in the collection of the Museum of Texas Tech University (TTU 2001–028).

Barn owl (*Tyto alba*) pellets collected in autumn 2000 from the northern Texas Panhandle and western Oklahoma Panhandle contained partial skeletons identified as prairie voles. These remains represent the first records of the prairie vole in Cimarron County, Oklahoma, and Dallam and Sherman counties, Texas. In Cimarron County, Oklahoma, 1 partial prairie vole skull was found in pellets collected in shortgrass prairie (36°30'18"N, 102°21'05"W). Pellets collected in shortgrass prairie adjacent to agricultural lands near Stratford, Sherman County, Texas (36°14'29"N, 102°07'20"W) contained 4 partial prairie vole skulls. Pellets collected from agricultural and ranching lands in Dallam County, Texas (36°27'14"N, 102°34'28"W) contained 7 partial

prairie vole skulls. Remains were tentatively assigned to the subspecies *M. o. taylori* following Hibbard and Rinker (Dalquest et al., 1990). Specimens were deposited in the collection of the Museum of Texas Tech University (TTU 2001–028).

The specimens from Carson County, Texas, represent a new southern limit of the prairie vole in Texas. Unlike previous prairie voles captured in the Texas Panhandle, these specimens were collected in playa watersheds and not in river drainages (Choate and Killebrew, 1991). Remains collected from Cimarron County, Oklahoma, and Dallam and Sherman counties, Texas, represent a new western limit for the prairie vole in Oklahoma and Texas. Because previous researchers failed to detect prairie voles in these counties (Jones et al., 1988b) and on the Pantex Plant (Packard, 1971, 1972a, 1972b) the specimens we collected likely represent a recent southwestern range expansion of prairie voles in the shortgrass prairies of the Texas and Oklahoma panhandles (Fig. 1).

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